

Presents:

PAVING THE WAY FOR RECYCLING

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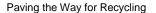






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1. EXECUTIVE SUMMARY

1.1 Project Description

Waste management and recycling in particular have been highlighted by the Namibian Government as important focal areas for the sustainable management of natural resources.

Currently, most waste in Namibia either ends up in landfills or is burnt. Both these approaches fail to realise the value in waste that can and should be harnessed, and in addition to the economic opportunity cost of not recycling, these practices also have adverse environmental impacts.

This study was done to:

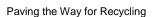
- a) build a foundation to assess the extent of recycling in Namibia and the associated issues,
- b) and to develop a strategic way forward, to guide the RNF in leading an informed, coordinated, and strategic approach to recycling.

1.2 The Competitive Landscape of Recycling

Namibia's Recycling Profile:

- Namibia has a population of approximately 2.1m
- Average waste of 0.6kg per rural person daily
- Average waste of 3kg per urban person daily
- Total 3000 tonnes daily
- Windhoek citizens produce 2.7kg waste per day = 870 tonnes daily
- Windhoek and surrounds accounts for approximately 15% of the country's population.







- Rent-A-Drum processes 60 tonnes per day in its Material Recovery Facility (MRF) which is located in Windhoek – reflecting a 6.9% recovery rate.
- Outside the capital, low volumes of recyclables, wide dispersion, and high transport costs, make waste recycling neither viable, nor profitmaking.

While Government has made reference to recycling being an "income generating opportunity for the grass roots population", the reality which is demonstrated by the figures above, is that many collection and recycling endeavours are not sustainable, and are therefore short lived.

1.3 Technical & Operating Requirements

Despite numerous attempts by some RNF members to support recycling initiatives in various locations throughout the country, these have not succeeded in becoming sustainable for various reasons.

Key factors negatively impacting on recycling initiatives outside of Windhoek:

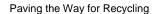
Scale:

 Given the large size of the country in the context of its relatively small and sparse population, significant transport costs are incurred before adequate volumes of recyclables are collected;

Capital:

- Small scale operators do not have the resources required to generate adequate scale and volume to make their operation viable;
- Cash flow shortages resulting from cross-border charges often cause small operators to cease operation;







Lack of collection space / containment facilities for recyclables;

Skill:

- Lack of knowledge and experience in the complexities of recycling
- Inadequate safety measures

Transport:

- Transport costs to neighbouring countries are expensive, and influenced constantly by fluctuating fuel prices.
- Long-distance transporters experience difficulties in accessing collection sites (dump sites); and
- Transporters struggle to upload heavy loads such as glass in the absence of lifting equipment

Market:

 Income in the recycling industry is dictated by businesses located outside Namibia. The value of paper, plastics, metals and glass for recycling are set on international markets.

Buy-back centres as a key opportunity

- Should buy-back centres be established in key locations throughout Namibia, collectors and entrepreneurs in the cycling industry could have access to immediate payment, therefore be relieved of cash flow challenges, while being spared from cross-border and other handling expenses;
- Buy-back centres will allow for higher volume collection, and ensure containment of recyclables in a safe location;
- Staff working in buy-back centres could be trained in the management of collection centres, including the establishment of and adherence to health and safety requirements, handling procedures and the like;





Paving the Way for Recycling

• Buy-back centres also allow more access to "Green Jobs" – employment opportunities, and would therefore be in line with Government's policy on employment creation.

GREEN JOBS:

In defining "Green Jobs", the International Labour Organisation (ILO) states the following:

"By engaging governments, workers and employers as active agents of change, the ILO promotes the greening of enterprises, workplace practices and the labour market as a whole. These efforts create decent employment opportunities, enhance resource efficiency and build low-carbon sustainable societies.

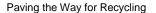
Also, "Jobs are green when they help reduce negative environmental impact ultimately leading to environmentally, economically and socially sustainable enterprises and economies."

At a workshop on Green Jobs, the following statement made by Gys Louw, the Managing Director of Rent-A-Drum and also a member of the Recycle Namibia Forum, highlights the opportunity that exists for Green Jobs in Namibia:

"Waste generation is a human condition and municipal waste management should therefore ideally form part of any developing country's environmental priorities. The days of business as usual are over. Climate change and its impact on the world is palpable and it is ultimately the poor that will suffer.

Thousands of jobs could be created, if only infrastructure, logistics and decent work conditions – the current limiting factors - were overcome. This is not impossible to achieve – as long as the funding is there. However the reality is that funds, policy and skills are lacking."







1.4 Financial Projections

The financial viability of all levels of recycling operations depends heavily on volumes of recyclables collected. In order to achieve greater volumes within the ambits of Namibia's relative small population, it is essential to create awareness and appetite for recycling, as well as establish systems that make recycling more accessible to all. The opportunity that lies in converting the *throw away culture* largely prevalent in Namibia, into a culture of Reducing, Re-using and Recycling where the value of recyclables and responsible waste management is embraced, is therefore great.

One initiative by the Recycle Namibia Forum to achieve this shift, is the establishment of the Schools Recycling Competition, which aims to engage the youth in recycling by offering incentives and further support.

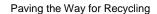
During the 2013 Schools Recycling Competition the winning school, St Paul's College, was rewarded N\$4 676 for collecting 18 tons of recyclables, thus a revenue of approximately 25c per kg.

In order to achieve scale, Namibian recyclers incur significant transport costs to bring recyclables from various locations in the country to Windhoek. Thereafter, as the closest market for most recyclables is South Africa, Namibian recyclers are not only subject to South African market prices for recyclables, but also the transport costs emanating from long distance transport to South Africa.

Other factors influencing income from recyclables:

- ➤ Contamination: The income for recycled materials from dumpsites or other locations that cause contamination is reduced. Ideally, a culture and systems should be created to facilitate the collection of postconsumer packaging materials – so that such items are clean, separated, and achieve higher prices;
- ➤ Lack of volume: Low volumes in both rural and urban areas with a low recycling habit, results in a lack of income, and render recycling initiatives unsustainable. For smaller operations such as SME's their fixed monthly costs without a comparative monthly income, creates financial difficulties and does not allow them to get out of the starting blocks.







Lobbying with Government, public sector institutions, local and municipal authorities, to convey that waste is not just a cost factor, but can be an incomegenerating activity, and is an important environmental activity, will in future be a focus of the RNF.



PHOTO ABOVE: LEARNERS OF THE WINDHOEK INTERNATIONAL SCHOOL PARTICIPATING IN THE 2013 SCHOOLS RECYCLING COMPETITION







1.5 Findings

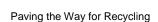
- At present, recycling initiatives are concentrated in Windhoek, Swakopmund/Walvis Bay (coast) and in Ondangwa/Oshakati in the north. Thus, due to lack of infrastructure, collection and containment facilities, transport challenges and general awareness, recycling efforts in the majority of the country remain a challenge.
- 2. Transporting recyclables from centres outside of those listed above, is expensive and thus uneconomical.
- 3. Currently, only a limited spectrum of recyclables is collected, which include: Glass, paper, tins/used beverage containers, paper and various plastics. There is a need to expand oil recycling solutions and find recycling solutions for batteries, light bulbs, tyres and oil.

1.6 Recommendations

The following opportunities have been identified and it is herewith recommended that:

- 1. The RNF identifies and engages strategic partners to support its initiatives as per the RNF Strategic Framework
- 2. The RNF influences debate and stimulates interest in recycling by:
- Direct engagement with learners by orchestrating their participation in the Schools Recycling Competition;
- b. The development of Information and education material which is applicable to Namibia
- c. Interesting news and engagement on recycling through:
 - i. the RNF Website;
 - ii. RNF Facebook site;
 - iii. talks on local radio stations;

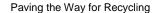






- iv. participation at public platforms such as Expos
- v. participation in relevant platforms such as the Beverages Forum and Environmental Tax Forums
- 3. The RNF Facilitating pairing, networking and information sharing between local authorities to speed up transformation in waste management by local authorities.
- 4. The RNF lobby for municipalities / local authorities to commit to better waste management practices and seek ways of increasing recoveries in their areas be it through source separation and collection (like Windhoek, the coast and in the north) or the establishment of collection centres, or recovery from landfill sites in an organised fashion.
- 5. The RNF lobbies with government to find suitable solution for items not adequately recycled such as batteries, light bulbs and tyres, including policy reform where necessary to encourage producing countries to repatriate these post-consumer waste products.







2. INTRODUCTION

2.1 The Recycle Namibia Forum

The Recycle Namibia Forum (RNF) was established in 2008, when a group of individuals and organisations joined forces on a voluntary basis to promote and facilitate recycling in Namibia.

It was constituted as an Association Not for Gain at its Inaugural Meeting on 7 June 2011.

Mission: To make Namibia the country in Africa that achieves the highest

success in promoting the 3 R's of Recycling, Reusing and Reducing.

Vision: To successfully implement projects that raise awareness, and change

the behaviour of Namibians to embrace the 3 R's.

Purpose: To be a non-political, and non-profit making organisation with the

purpose to promote the 3 R's through projects and networking with all

relevant stakeholders.

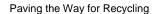
Means: To create a platform for coordination of the 3 R initiatives in Namibia

by sharing information on relevant projects undertaken by members / stakeholders and finding opportunities for cooperation between members / stake holders, where such opportunities would further the

objectives of the RNF.

While the RNF started off as a voluntary organisation to pool resources and efforts amongst like-minded organisations and individuals, the activities of the RNF through projects such as the Schools Recycling Competition, highlighted the opportunity for the RNF to fulfil the role as the lead organisation promoting not only recycling awareness, but also lobbying and engagement to remove current barriers to greater recycling success in Namibia.







2.2 Paving the Way for Recycling in Namibia

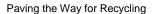
For the RNF to drive strategic initiatives that would pave the way for greater successes with regard to recycling in Namibia, it became apparent that an assessment of the current situation was essential in identifying the opportunity for positive change.

This was made possible with the grant of the EIF, to conduct the study titled Paving the Way for Recycling in Namibia, Project Grant 0006/2012.

While Namibia is generally regarded as a clean country, it became apparent that data and information on recycling was very limited and fragmented, and that, despite the enactment of the Environmental Management Act, Act No. 7, 2007 as per Government Gazette of 27 December 2007, waste management, and in particular recycling, was not yet high on the agenda of most stakeholders.

The opportunity to create buy-in and awareness of, and to have all relevant stakeholders embrace recycling as a key pillar of sustainable waste management, is therefore great.







3. PLAYERS IN THE RECYCLING INDUSTRY IN NAMIBIA

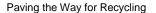
With recycling perceived as a means of generating income at grass roots level, many recycling and collecting operations crop up around the country on a regular basis.

For reasons described above, many of these are not sustainable and close down after a short period of time.

The following table of current 'players in the industry' is therefore not comprehensive, but a snap shot of the main players who have been involved either as a result of the nature of their business being manufacturing and using packaging materials, or as recyclers, collectors, or involved in or supporting recycling in Namibia.

- * Definitions of 'Type'
- Full recycler: adds value to the commodity through collection, in depth sorting, bailing and transporting recyclables to manufacturers of new products, mainly in South Africa;
- Collector / recycler also named 'buy back centre': mostly SME businesses
 that collect and sort into main product categories only, sometimes operating
 from municipal dump- / landfill sites;
- Waste management: waste collectors at municipal levels, sometimes operators of dump- / landfill sites, sometimes sorting recyclables;
- **Scrap metal**: collects and processes metals, often including recycling used beverage cans;
- **Manufacturer:** produces new products out of recycled materials in Namibia it is only the case with plastics of certain kinds (i.e. not PET).







Players in the Industry Name Area of operation **Type** Rent-A-Drum Windhoek, Walvis Bay, Full recycler Swakopmund, Oshakati Facilitates UBC collection all over Collect-a-Can Office in Windhoek, Namibia **EnviroFill** Windhoek Waste management KleenTek Namibia Windhoek Waste management & collector / recycler African Bottle Exchange Windhoek SME glass collector / recycler Services Dresselhaus Scrap Windhoek, Oshakati, Scrap metal & collector / Swakopmund recycler Wilco Recycling Rehoboth, Ondangwa, Full recycler Oshikango Ivosha Trading Lüderitz Collector / recycler SBH Recyclers Tsumeb Collector / recycler Madren Recyclers Keetmanshoop Collector / recycler



Rehoboth

several municipal

dumpsites in the South

Southern Waste

Removal

Management & Refuse

Southern Recyclers

Waste managenent & collector /

recycler

Collector / recycler



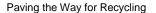
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Makalani Scrap Metal	Ondangwa	Scrap metal & UBC collector
Technocrats Recycling	Oshakati area, Opuwo	Collector / recycler
Namibia Polymere Recyclers	Okahandja	Manufacturer of recycled raw plastic products (granulate)
Fatima Plastics	Oshikango	Manufacturers of plastic household products & collector of plastic for recycling
E-Waste @ Transworld Cargo	Windhoek	Collector & recycler of e- waste
Namibia Breweries Ltd	Distribution centres all over Namibia	Facilitates collection of used beverage containers
SA Breweries & Coca Cola Namibia	a Distribution centres all over Namibia	Facilitates collection of used beverage containers



PHOTOGRAPH ILLUSTRATING COLLECTION OF RECYCLABLES AT SWAKOPMUND LANDFILL SITE, GREEN JOBS: A SUNDGREN







4. DATA ON RECYCLING IN NAMIBIA

Currently Namibia does not have national statistics or centralised data on recycling, and the information that is available is very limited and fragmented. Applying international models and assumptions is also problematic as Namibia is very unique in terms of its population distribution, high income disparity, and large differences between consumption and waste patterns in urban and rural areas.

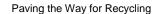
To illustrate this, one could apply the internationally accepted assumptions that urban citizens produce between 1.2 to 3 kg of waste per day, and that rural citizens produce about half of this amount. The World Bank also estimates that sub-Saharan Africa produces between 0.6 kg and 4.5 kg of waste respectively at low and high income levels. This assumption applied to Namibia's population of just more than 2.1 million, assuming an average of 0.6 kg of waste per person in rural areas and 3 kg per person in urban areas, would translate into an average of 3 000 tons of waste being produced in Namibia daily.

However, according to the City of Windhoek Solid Waste Management department, it is estimated that every Windhoek citizen produces approximately 2.7 kg of waste per day, totalling 870 tons of waste per day.

Recycling in the City of Windhoek has grown with the roll-out of Rent-A-Drum's Clear Bag system whereby recyclables are separated from waste by households, into clear bags, which are collected by Rent-A-Drum weekly within the City of Windhoek. The recyclables are then further sorted at the Rent-A-Drum Material Recovery Facility (MRF) into various categories from where they are contained / bailed and sent to South Africa for recycling. According to Rent-A-Drum, 60 tons of recyclables are collected daily, which would translate into a recovery rate in the City of Windhoek of 6.9 %.

During 2013, the University of Namibia, the Finnish Embassy and Rent-A-Drum conducted an on-site landfill survey of types of waste, volumes, and frequency of such volumes in the northern and coastal high density population areas of Namibia. Up to 60% of Namibians live in the northern areas, while just 7.1% live in the coastal areas. The study was conducted by recording the amounts of waste entering the landfill / dumpsites and determining the composition.







The amount of recyclables entering the landfill by area:

Туре	Swakop / Arandis/Henties Bay (kg)	Walvis Bay (kg)	Ondangwa/Osha kati/ Ongwediva (kg)
Bags	30245	30065	9247
Bottles (PET)	9873	8194	2778
Caps	734	693	189
Hard	9632	10725	3427
Al cans	2752	3223	1954
Tins	4883	3585	1062
Other metal	1732	1567	1532
Glass	22730	28709	17959
Carton	33781	36361	17894
Tetrapak	289	0	1400
Paper	32393	30005	12935
Total	149000	153000	70400

The research indicates the following:

- > Approximately 150 tons of recyclables enter landfills in both Walvis Bay and other coastal towns;
- ➤ In northern Namibia, about 70 tons of recyclables enter landfills every week;







- ➤ Up to 50% of all waste entering landfills is composed of recyclables. However, a large part of these recyclables is contaminated or wet, therefore the actual share of recyclable materials is smaller;
- ➤ Walvis Bay and the northern towns have very similar composition of waste, with carton, soft plastic, paper and bottles representing the largest part;
- ➤ Where glass is the 4th biggest component at the coast, in northern areas it is the largest component along with carton, followed by paper and soft plastic.
- A large part of the Walvis Bay landfill is polluted with heavy fuel oil (HFO). The dumping of HFO is illegal, but it appears to be the normal and accepted way of HFO disposal.

Conditions at the landfills also pose challenges:

- > at the coast the strong winds blow open previously covered landfills;
- where landfills are not fenced in, litter is blown into the desert;
- hazardous conditions (toxic fumes) for workers at landfills where waste is burned due to lack of protective gear;
- > Goats and cattle entering the landfill and feeding on the waste.



ABOVE PHOTO: THE ARANDIS DUMPSITE HAS NO FENCE SO THE WASTE IS BLOWN BY THE WIND INTO THE SURROUNDING AREA (A.SUNDGREN)





Paving the Way for Recycling



ABOVE PHOTO: PONDS OF USED OIL AT WALVIS BAY LANDFILL (A.SUNDGREN)



ABOVE PHOTO: BURNING WASTE AT ONDANGWA LANDFILL (A.ALSINS)



BAILED CANS READY FOR TRANSPORT - PHOTOGRAPH COURTESY RENT-A-DRUM



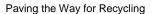


Paving the Way for Recycling

Collect-a-Can Namibia recorded the following statistics on the recovery of used beverage containers during 2012 (UBC):

Month of 2012	tons
January	34,680
February	144,780
March	85,300
April	62,420
May	104,080
June	84,900
July	88,040
August	180,260
September	56,420
October	161,600
November	74,340
December	105,080
<u>2012 total</u>	1,181,900







5. OBSTACLES AND OPPORTUNITIES ON RECYCLING IN NAMIBIA

During 2012, the RNF conducted a survey amongst recycling entities, municipalities and town councils which are involved in recycling. (Appendix 1 attached).

The response rate on the completion and submission of the questionnaire varied with high participation from the private sector, and a much lower response rate from the municipalities.

SURVEY FINDINGS

The results on the key questions were as follows:

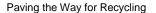
Collection:

- The majority of the entities collected only glass and tin cans;
- A few more offered shredding of paper, but few indicated how the shredded paper is then processed further.

Contracts to collect:

- Most collectors collect their recyclables at municipal dump sites and at retail businesses around town; however they do not have official contracts, but rely on verbal agreements;
- The hospitality industry was not specifically mentioned as a collection point.







Your views on the potential of recycling in your area:

 In all categories of recyclables, the potential for increased recycling successes were mentioned.

Your outlook on business development-: Challenges and Obstacles:

- Transport and Logistics
- Machinery predominantly balers
- Volumes Access to more sources of recyclables
- Training of staff

Additional infrastructure you would need to develop your business?

- Infrastructure that allows proper access,
- weather resistant storing venue.

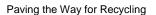
Additional business opportunities in recycling & waste management?

- To extend recycling to include all categories of recyclables (paper and plastic);
- Inclusion of hazardous household materials (chemicals, paint, etc).

Is your business currently viable – covering your costs or making a profit?

- Most businesses indicated that they barely cover their costs;
- All believe that with more effort, it could become viable.







In your view, what is/should be the role of the RNF in the recycling sector?

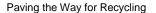
- All replies : creating awareness;
- Other suggestions: lobbying and networking

What kind of support by an organisation such as the RNF would be beneficial to your business?

- Financial support for purchasing of equipment;
- Seed funding

Training of staff has a financial implication in that it needs to be an on-going exercise, coupled with a usually high staff turn-over at this employment level.
Trained staff will be able to improve the price achieved for recyclables by thorough and correct sorting of items.
With bailers being mentioned as the type of machinery needed by nearly all respondents, the RNF should investigate:
□ the possibility of mobile bailers being shared by collectors / recyclers in a region;
□ in conjunction with UNAM / PolyTechnic, look into the design of manually operated hydraulic bailers that can bail UBC as well as paper and plastics.
From the consumer side, pressure for the recycling of problem items such as dry batteries, tyres and CFL light bulbs is increasing steadily.
Awareness of the dangers of dumping household problem waste is increasing in Windhoek and the coastal towns







6. INVESTIGATING POSSIBLE PILOT PROJECTS

6.1 Regional pilot projects

One of the tasks included in the project was to define and to investigate opportunities for possible pilot projects to set up recycling centres in smaller communities in Namibia.

Such pilot projects can prove invaluable to determine the sustainability and viability of such operations.

Yet it is crucial to carefully select the sites for such pilot projects to ensure that they are operational for the duration of the project. Failure of a pilot project could cause disillusion in the region for a considerable period of time.

The criteria developed for the selection of the pilot project took into consideration the following:

Geographical location:

Not on main routes, yet with reasonable transport connections;

One in the northern parts of Namibia:

Where population density is good, but awareness of waste management is lacking;

Rundu was targeted due to the distance and also for having the reputation as one of the less clean towns in Namibia. Recycling efforts have already been introduced in this town.







• One in the southern parts of Namibia

Where the opportunities for viable transport logistics are negligible as empty trucks usually do not travel in the direction of Windhoek;

The Sossusvlei area was selected for this region for two main reasons:

- there is no direct link to any tarred main roads, yet has reasonably well maintained gravel roads;
- > it is a tourism focus area.

One in the eastern parts of Namibia

The objective in the east is to define an area that has a reasonable population density to ensure reasonable volumes:

Gobabis was selected for this region as there are no other communities in that region where population density would make such a project viable;

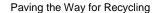
Transport logistics are difficult as empty trucks do not travel in the direction of Windhoek.

One at the coast

Henties Bay was the choice due to the following factors:

- ➤ The RNF partnered with the Global United Football Club (GUFC) Environmental Programme to place recycling stands in Henties Bay in 2012
- ➤ In 2013, Henties Bay was the focus of the GUFC activities with the Henties Bay Municipality as their main partner
- ➤ the Henties Bay School is a participant in the Schools Recycling Competition (SRC).
- ➤ An active Tourism Information Office which has already requested support for recycling from the RNF.







6.2 Pilot Project : Sossusvlei Area

The only field visit conducted during this study was to the Sossusvlei Area which has a rather high density of tourism accommodation facilities along the greater part bordering the Namib Naukluft Park.

With Sossusvlei being one of the premier tourism spots in Namibia, this area receives a large number of visitors all year round.

In June 2013, a large part of the Namib Naukluft Park - aptly named the Namib Sand Sea - was declared a **World Heritage Site**, thus giving this area additional international positive exposure. It can be expected that the interest in this World Heritage Site will attract substantially more visitors in the years to come.

Another reason why a tourism destination was selected as a pilot project is due to the requests for recycling support from various tourism operations throughout the country.

The majority of accommodation facilities in the Sossusvlei area are already separating waste, taking predominantly glass, tin cans and sometimes plastic back to Windhoek for recycling. Some of the tourism operators in this area even take all their waste back to Windhoek.

Additionally some utilise the delivery service of several wholesalers or retail businesses offering door to door delivery, and which then assist by allowing certain recyclables to be loaded onto their now empty trucks to go back to Windhoek.

The most difficult objective to solve is the location of such a collection centre. There are only two locations that are suitable, namely Sesriem (at the entrance to Sossusvlei) and the small town of Solitaire.

Due to health as well as safety and security aspects, land owners in these areas have expressed concern about the idea of having a recycling centre on their land.







Recommendations

There are some positive activities in this area which may support the establishment of a collection centre and overcome the NIMBY (Not in My Back Yard) obstacle.

> NAM-PLACE

The aim of the Namibia Protected Landscape Conservation Areas Initiative (NAM-PLACE) is to establish Protected Landscape Conservation Areas which ensure that land uses adjacent to existing Protected Areas, are compatible with biodiversity conservation objectives, and corridors are established to sustain the viability of wildlife populations.

In conjunction with the Gobabeb Desert Research Institute, NAM-PLACE - with tourism players in the area being members of Greater Sossusvlei–Namib Landscape (GSNL) - is looking at waste management.

> Gondwana Group

The Gondwana Group, owner of a number of lodges in Namibia, is trying to facilitate the development of a collection centre in the area.

During the course of this year (2014), the Gondwana Group will be partnering with the Global United Football Club's (GUFC) "Kick for the Environment" campaign to promote recycling.

> NWR (Namibia Wildlife Resorts)

NWR is already active in the Sesriem/Sossusvlei area. They have partnered with Rent-A-Drum and Namibia Breweries, two RNF members for support.







It is therefore recommended that:

The RNF seeks cooperation with the NAM-PLACE's GSNL group to bring forward the pilot project of a collection centre in a tourism area in southern Namibia.



*Notes on this field visit are available under: Appendix2-Notes-Field-Visit-Pilot-Sossusvlei20130621







7. RNF MEMBERSHIP

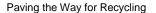
Presently, the RNF boasts an impressive membership, which positions it ideally to become the Namibian focal point for recycling.

Six new members have joined in the period under review, whilst another two have indicated their interest.

An active membership drive is envisaged for 2014, to bring on board a wider spectrum of industries active in recycling efforts, thus enhancing the opportunity for sharing expertise and skills, and the possibilities of networking.

Current members of the RNF include the Ohlthaver & List Group of Companies, Mpact Corrugated, Rent-A-Drum, Collect-a-Can, City of Windhoek, Plastic Packaging, SAPPI, The Document Warehouse, The Glass Recycling Company, Lori Ink & Accessories as well as partners such as the Namibian Environmental Wildlife Society (NEWS).







8. WORKSHOPS

As part of the EIF grant 'Paving the Way for Recycling,' two workshops were held with stakeholders of the food and beverage industry, the retail sector, the recycling industry as well as concerned officials of Government and Local Authorities.

On 20 February 2012, the Ministry of Finance invited the industry to present a proposal on an 'environmental levy' for certain types of food & beverage containers.

The proposal was not well-accepted by the industry as it targeted only certain types of containers for beverages.

The Minister, although stating that environmental taxes are common practice in most countries of the world, encouraged the industry to come up with their own proposals on the matter.

The RNF voiced its concerns on the negative influence such an environmental levy might have on the already successfully implemented recycling activities in the country. It was confirmed in February 2014 that environmental levies will only be applicable to tyres, incandescent bulbs and vehicles (carbon tax).

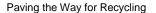
However, it is expected that levies on beverage containers and plastics bags will be on the agenda again for the 2015/16 budget year.

See relevant attached documents:

*Original proposal by the Ministry of Finance: Appendix 4-schedule Environmental Levy and Carbon Emission tax proposal 20 Feb 2012

*Comments of the RNF to the Ministry of Finance: Appendix 5-MoF- Comments Enviro Tax-20120411







Workshop 1: Deposit on packaging containers

On 27 September 2012, the RNF invited industry players to a workshop to discuss the proposal of a deposit system on all packaging containers – an idea which was also investigated by the Department of Environmental Affairs in the Ministry of Environment and Tourism.

The conclusions of this workshop were:

- 1. The deposit system is not a viable option in addressing the primary need of government in terms of revenue generation, nor their secondary need around job creation.
- 2. A task team has been constituted to develop various models to present a proposal to government that would provide the revenue stream that government is looking for.
- 3. In addition to proposing revenue streams for government, the industry still needs to develop a proposal that would grow recycling as well as jobs. This requires support from all participants and proposals were invited.

*Full notes on this workshop: Appendix 6-Notes-20120927-Deposit-workshopfinal

The above mentioned work group was formed, and met on several occasions to work on a proposal for the Ministry of Finance.

The Industry Team consists of representatives from the Namibia Manufacturer's Association (NMA), Team Namibia, Rent-a-Drum, Plastic Packaging and Polymer Recyclers Namibia, Coca-Cola Namibia Bottling Company, the Ohlthaver & List Group of Companies with affected subsidiaries Namibia Breweries Limited, Namibia Dairies and retailer Model Pick n Pay as well as the Namibia Recycling Forum.

The Industry team members have set themselves the objective that any alternative proposal for environmental levies/taxes should take into consideration the impact, whether positive or negative, on:







- the environment (as the levies are directed for this cause)
- Government
- local manufacturers and industry
- consumers
- existing jobs
- industry expansion and job creation (in line with Vision 2030 and NDP4 objectives),
- administration of the tax/levy system

The team considered a number of alternatives and these can be summarized as follows:

- Proposal 1: Carbon emissions approach
- Proposal 2: Deposit System
- Proposal 3: Extended Industry Responsibility with set environmental Target (no levies)
- Proposal 4: Environmental Levy (E-levy) at Import/Source with exemptions
- Proposal 5: Environmental Levy similar to VAT
- Proposal 6: Reduce rate of levies and broaden packaging / product range
- Proposal 7: Increase in VAT
- Proposal 8: Environmental Levy on Gross Profit which is refundable if proof of environmental investment/support can be given (similar to Namibia Training Authority Levy)

The team also appointed an independent economist (IJG Securities) to report on the impact of the proposal.

The Team decided on a proposal that entails an Extended Industry Responsibility with set Environmental Targets and forwarded this proposal to the Ministry of Finance in February of 2013.





Paving the Way for Recycling

This proposal has the main objective of creating an industry forum (an Environmental Council) that will have the responsibility for national recycling of glass, cans and plastic containers. It is also the intention to include all packaging/product types and not beverage containers only.

*Full submission to the MoF: Appendix7-20130221 Environmental Levies report

*More information on this proposal can be obtained from Mr Erwin Stegmann of O&L, erwin.stegmann@olfitra.com.na

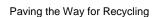
Workshop 2: Stakeholder Round Table Workshop

During August, the RNF invited stakeholders from the private sector, and tertiary education institutions to a stakeholder round table workshop on the theme: *Waste Management & Recycling, Reusing, Reducing*

Some of the stakeholders were requested to give short presentations on the following subjects:

- Options of reducing waste volumes to dump sites;
- the Environmental Management Act (EMA) and landfill / dump site regulations;
- Household problem waste (not presented as participant could not attend);
- Waste management obstacles of small municipalities (not presented as participant could not attend);
- Waste management & recycling in remote tourism areas;
- Enviro Tax: Outcomes of industry submission to Ministry of Finance;
- Cost of landfill site to municipalities
- Collect Co a Private Sector Solution?







The workshop was followed by round table discussions on the following suggestions to the RNF:

- Use modern communication, including social networks, to get the message on the 3R's to the general public;
- Encourage local authorities to motivate society to adapt to recycling practices by implementing systems such as the Clear Bag or the 2nd bin;
- Attach a monetary value to recycling, i.e. by charging a deposit. (Deposit systems present logistical problems, specifically in remote areas it is seen as a nuisance to take an item back – proven by low bottle returns);
- Get the 3R into formal and informal education systems; (this could be problematic due to an already overloaded curriculum);
- Efforts are made via extra-curricular activities in environmental education, i.e. through the Regional Centre for Expertise (RCE) that promotes and supports the setting up of Environmental Clubs in schools;
- Change the way we teach? How to successfully address the problem of attitude?
- Making use of municipals/town councils such as has been done by Swakopmund Municipality with exhibitions in their public areas, involving 'green ambassadors' in informal settlement areas;
- Encourage the media to publish articles on environmental matters, and to extend special advertising rates to support the initiatives;

Awareness / Roles the RNF can / should play:

- Talk about added value of the 3R's on a sublime level;
- Encourage local authorities to brand their municipalities;
- Implement a competition where municipalities compete against each other
- In all levels of business and administration promote the 3 R's



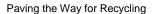




- Funding of activities: approach the Prime Minister's Office which has access to donor funding.
- RNF should develop a RNF Charter as matter of priority.
- The EIF to volunteer their office as a communication channel to the office of the Environmental Commissioner, and the RNF to utilise this extensively.
- NGO support through EIF, i.e. currently the following projects are on the table:
- a 3 month study on e-Waste;
- o study with following project on the recycling of tyres.
- Get the plan of the Extended Producer responsibility rolling with the right partners.
- Find ways of 'give and take' when talking to Government.
- Look for people who have good interaction with Government (i.e. Sven Thieme).
- Ensure that private sector talks with ONE common voice.
- Close the gap of linkage to the tertiary education by inviting the right faculties on the Board of the RNF;
- Encourage the corporate / business world to promote eco awareness amongst their staff.
- Get involved in tourism through a sector targeted awareness campaign.

*Please see: APPENDIX8-Notes-Stakeholder-Roundtabel-Workshop20130801







9. AWARENESS: BROCHURES/MANUALS

An integral part of the grant by the EIF was to develop three brochures or Powerpoint Presentations.

The following documents are added as appendix as well as attachments (in PDF, and MS Publisher and Power Point formats).

These presentations have also been set up in such a manner that presentations can also be given where no IT facilities are available.

- > Setting up of a Collection Centre
- ➤ Tips for Schools Recycling Competition
- The Three R's and I

*See Appendix 9, 10, 11







10. STRATEGIC FRAMEWORK - THE YEAR AHEAD

With increased resources with the appointment of a fulltime Coordinator, the year ahead is looking positive. The following are key elements of the RNF Strategic Framework:

A. Strategic Alignment

To actively liaise and build relationships with the relevant ministries within Namibia, as well as with other stakeholders such as the Environmental Investment Fund, SA Plastics, manufacturers and other uses of packaging materials, the Polytechnic of Namibia, and the Finnish Embassy so as to:

- Establish a strong network of partners so that the RNF has support for its efforts, be it working with municipalities to facilitate information sharing and better waste management, or lobbying for policy reform to facilitate recycling;
- 2) Increase our knowledge pool and ensure we have access to information that allows us to lead dialogue, drive education and awareness, and effect positive change;
- 3) Gain partners that will participate in and support our efforts to increase recycling in Namibia.

B. Information, Education and Awareness

The following are key components in our drive to provide information, create awareness, and educate Namibians about the benefits of recycling

1) Website

A website which will be hosted at www.rnf.com.na is currently under construction and is expected to go live at the end of April 2014. The main objective of the site is to serve as an easy point of reference and access for those who want to know more about the forum and its activities, or who may wish to connect with the RNF. Another key objective with the site is to ensure easy access to all who seek information, presentations or materials related to recycling, particularly in the Namibian context.







The site architecture is as follows:

Home

About us

- a. About RNF
- b. History of RNF and Mission, Vision, Values
- **Gallery** reflecting photographs of events, activities, etc.

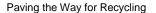
Media

- a) Articles on the RNF and its activities which have appeared in the local media;
- b) Public notices appropriate information on environmental tax / laws

Members

- a. Members info and logos
- b. Fees and how to join
- **Projects** past and information on future projects to encourage participation
 - Schools Recycling Project
- Contact Us







2) Social Media / Facebook

The new Facebook site https://www.facebook.com/recyclenamibia?ref=br_tf was established in February 2014 and currently has more than 170 likes.

Information on RNF activities, recycling and environmental matters are posted on a regular basis. Schools participating in our Recycling Competition have also been invited to post photographs/information on their recycling efforts and environmental clubs to our page.

Given the popularity of social media, we hope to involve and keep the younger generation interested by means of a lively and interactive Facebook page.

It is envisaged to fully utilise the benefits of this free marketing tool to carry our message of the three R's to the community and general public.

C. Schools Recycling Competition

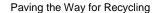
The annual Schools Recycling Competition is the most visible "Face of the RNF" for the general public. Not only is competition stiff amongst schools that are keen to win the top prize, but it also serves as a starting point for environmental clubs and associations at school level.

Since this project encourages involvement and participation of the youth, it is the perfect platform to create awareness and spread the importance of the 3 R's.

In the coming year, it is envisaged to actively be involved with this project, by visiting schools on a regular basis, hosting information and environmental education sessions, and encouraging more schools to participate.

During the past competition year, 52 schools participated, whilst a further 3 schools have already applied to be considered for the 2014/15 competition.







D. Expos / Shows

Where possible, the RNF will participate and encourage involvement at Expos such as the Tourism Expo in June 2014, as well as smaller expos/shows around the country. The RNF will also utilise public platforms such as radio talk shows to promote the general concept of recycling, while also sharing useful information that will enable the public to better understand what facilities and opportunities are available to support recycling.

All efforts will be made to not only inform the public about recycling efforts and activities, but to demonstrate to them what role they as individuals / organisations can play, and what they can do within their own communities to support the 3 R's.



PHOTO ABOVE: PUBLIC PLATFORMS SUCH AS THE TOURISM TRADE FORUM CREATE ARE EFFECTIVE IN GENERATING PUBLIC AWARENESS ON RECYCLING



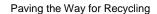


Paving the Way for Recycling

E. Data collection

Notwithstanding that the RNF would neither have the mandate nor the means to collect all national data on recycling, the RNF will still employ all efforts to gather data from all stakeholders willing to provide appropriate and relevant data. Data from the schools recycling competition, RNF members such as Collect-a-Can, The Glass Recycling Company, and Rent-A-Drum, will be gathered and collated to establish some baseline data and trends on recycling in Namibia.







11. CONCLUSION

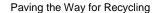
Despite the implementation of the Environmental Management Act, there is still a large vacuum in general awareness about recycling, limited access to facilities that support recycling, and inadequate support at National level, to fully harness the opportunity that exists within Namibia, to enhance sustainability through recycling. Local authorities require support to upscale their efforts in waste management and recycling, and the general public need not only to be made aware of recycling and the benefits thereof, but need easy access to make it easier for them to change from the current "throwing away" culture to one that embraces recycling. National Policies and strategies are required to remove obstacles to recycling for commodities such as light bulbs and batteries, and overcome transport challenges, while appropriate funding and investment is required to establish collection centres and other infrastructure that supports recycling.

While recycling in Namibia is still in its infancy, and has faced numerous constraints and challenges, the opportunities to considerably increase recycling within Namibia are significant. As a result of the funding and support by the EIF, as well as with the contribution of the members of the Recycle Namibia Forum, a number of exciting initiatives have been identified in the RNF Strategic Framework, and will be driven as a means of creating positive change.

An exciting year is ahead, and the RNF is looking forward to facing the challenges, and engaging stakeholders in our efforts. We are confident that the structures have been put in place to drive the activities of the Forum, and to support the RNF in advancing its mission of making Namibia the country in Africa that achieves the highest success in promoting the 3 R's of Recycling, Reusing and Reducing, while pursuing our vision whereby we implement projects that raise awareness, and change the behaviour of Namibians to embrace the 3 R's.

The RNF members sincerely thank the Environmental Investment Fund for their support.







12. LIST OF APPENDICES

Appendix 1: Survey amongst recycling entities, municipalities and town councils.

Appendix 2 Notes on Field Visit Pilot Project, Sossusvlei (2013-6-21)

Appendix 3: Requirements to Set up an Entrepreneur in Recycling

Appendix 4: Original proposal by Ministry of Finance – Environmental Levy and Carbon Emission tax proposal – 20 February 2012

Appendix 5: Comments by RNF to the Ministry of Finance on the proposed environmental tax.

Appendix 6: Workshop on deposit system on packaging containers - 27

September

2012

Appendix 7: Full submission to Ministry of Finance on Environmental levies - 21 February 2013

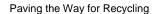
Appendix 8: Notes on Stakeholders' Round table workshop - 1 August 2013

Appendix 9: Setting up of a Collection Centre

Appendix 10:Tips for Schools Recycling Competition

Appendix 11:The Three R's and I







13. SOURCES

- Results of Namibia 2011 Census
- Data from Rent-a-Drum
- Report: Analysis of qualities and quantities of waste and recyclables in the Namibian Towns (Swakopmund, Walvis Bay, Henties Bay, Arandis, Ondangwa, Oshakati and Ongwediva), Rent-A-Drum, Polytechnic and Finnish Embassy, Molok, 2013.
- Mr Erwin Stegmann of O&L, erwin.stegmann@olfitra.com.na
- Gondwana Lodges
- Various survey participants: RNF Members, Municipalities

