

# **NELSON MANDELA BAY MUNICIPALITY**

## **GREEN PROCUREMENT IMPLEMENTATION STRATEGY**

**(Current version)**

**PUBLIC HEALTH DIRECTORATE**

**ENVIRONMENTAL MANAGEMENT SUB-  
DIRECTORATE**

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## **EXECUTIVE SUMMARY**

*The Nelson Mandela Bay Municipality (NMBM) recognizes the need to manage natural resources more effectively and responsibly in order to ensure positive effects on our health, quality of life and even the cost of living. As a result the NMBM has embarked on developing a green procurement implementation strategy to be incorporated into the NMBM's procurement activities. Green procurement applies to the product itself, the process and production methods and the indirect furtherance of social and environmental issues.*

*In South Africa, policies for green public procurement are yet to be widely defined and implemented in the public sector. As the need for environmental preservation is well understood, a number of local authorities, e.g. Tshwane and Cape Town, have developed environmental management policies where green procurement is emphasised and encouraged. A number of initiatives have been developed or drafted for the various government levels in South Africa, the actual implementation of these is still uncertain.*

*There are a number of basic assumptions that the project team have used in the project. These are:*

- *The programme starts at a broad level but develops in more detail, up to a point where more detail will make the plan more difficult to implement.*
- *The plan must be an added value exercise for companies.*
- *The plan must be good value for money.*
- *The plan must not require onerous administration to implement.*
- *The programme and plan must be transparent in its application.*

*The NMBM's Environmental Policy (October 2004) and the NMBM's Supply Chain Management Policy (Version 2, March 2009) was reviewed in order to determine the most applicable area for the addition of green procurement criteria.*

*The approach which is being undertaken for the NMBM Green Procurement Strategy is the Supplier Approach whereby the suppliers will be encouraged to evaluate their environmental performance and thereby being awarded a Green Certificate.*

*A list of drivers and specifications has been developed for incorporation into the green procurement specifications for suppliers. These drivers are the main categories under which suppliers will be reviewed. A preliminary list of receivers (supplier categories) has been developed. A further analysis has been undertaken on the criteria that are important to the NMBM dependent on the sector.*

*The legal opinion and input is limited to addressing any possible obstacles or impact pertaining to the legislative and regulatory environment in which the NMBM's proposals will operate. In this regard the NMBM's proposed Green Procurement Strategy will comply with the legislative and regulatory requirements.*

*The approach followed in this strategy is to make the process the least onerous on companies, and thus all information that will be needed to be supplied is readily available, and if need be, independently verifiable.*

*The implementation of the strategy will need to be conducted in phased approach. The training aspects goes hand in hand with the implementation plan, as each aspect of implementation will require some form or training.*

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## ADDENDA

Addendum A: South African Case Studies

Addendum B: Examples of Environmental Questionnaires

Addendum C: Public Participation Documents

Addendum D: Implementation Budget and Schedule

## 1. INTRODUCTION

The Government of South Africa is committed to good governance and the elevation of previously marginalised communities. Such communities are most vulnerable to changes in the environment (i.e. climate change, loss of biodiversity and exploitation of natural resources). Recent events (e.g. energy shortages that resulted in load shedding, change in weather patterns and water shortages) have shown the impact of unsustainable utilisation of natural resources on civil society.

In order to make these activities more effective, more sustainable production and consumption practices must become common practice. Government is the largest buyer of goods and services in the country (11-15 % of the national GDP and 20% of the GGP of NMBM is spent on public purchasing) (DEAT, 2008; NMBM, 2009). With such significant market power, government is in prime position to promote environmentally-friendly products and business activities through public procurement policies that encourage development and diffusion of environmentally sound goods and services (World Summit on Sustainable Development, 2002).

The Nelson Mandela Bay Municipality (NMBM) recognizes the need to manage natural resources more effectively and responsibly in order to ensure positive effects on our health, quality of life and even the cost of living. As a result the NMBM has embarked on developing a green procurement implementation strategy to be incorporated into the NMBM's procurement activities. Green procurement applies to the product itself, the process and production methods and the indirect furtherance of social and environmental issues.

### 1.1 DEFINITION

Sustainable Procurement is the process in which organisations buy supplies or services by taking into account: the best value for money (price, quality, availability, functionality); environmental aspects over the entire life cycle of products; and social aspects (issues such as poverty eradication, labour conditions, human rights) (DEAT, 2008).

Green Procurement is limited only to the environmental aspects of procurement (DEAT 2008).



Due to the significant social criteria of the Broad Based Black Economic Empowerment (BBBEE) Act and the Preferential Procurement Policy Framework Act aimed at eradicating the legacy of apartheid already engrained in the procurement process it would be appropriate in the South African context to refer to sustainable procurement (DEAT, 2008).

## 2. LITERATURE REVIEW

Green procurement has been successfully implemented at various levels across the globe brought about by a range of driving forces. Thus, existing literature is immense, some of which has already been reviewed as part of the feasibility study undertaken by SAB&T Business Innovations Group on behalf of the NMBM (NMBM, 2009a). It is not the intention to repeat this literature review but to rather summarize the key findings and add to it focusing on:

- the approach used by other government departments, companies, countries, etc.,
- the level at which these strategies have been implemented; and
- the look and feel of the end product.

The literature review conducted by SAB&T Business Innovations Group focused mainly on international conferences and treaties that support the need for the green procurement policy highlighting the UN Conference in Stockholm where the need for preservation and enhancement of the human environment was acknowledged as early as 1972. More specific agreements (i.e. the Kyoto protocol that commits to specific targets aimed at reducing Greenhouse Gas Emission (GHG) and the Plan of Implementation that came out of World Summit on Sustainable Development held in Johannesburg in 2002 that specifically mentions green public procurement) were also summarised in the feasibility report. Additional information was also provided on how green procurement is addressed in developed countries, namely the United Kingdom, European Union, North America and Sweden (NMBM, 2009a).

The feasibility study briefly looked at the South African national legal framework in terms of the National Environmental Management Act, 1998 (NEMA) and the Municipal Systems Act, 2000 (NMBM, 2009a).

Many of the developed countries (e.g. Canada, Japan, United Kingdom, Sweden, Austria, Finland, Denmark, Germany, Cyprus, France and the Netherlands) and

multinational companies (e.g. Interface Incorporated, Sharp Corporation) have adopted green procurement successfully, showing improvements in environmental impacts as well as economic savings based on the life-cycle approach. In turn, the benefits to technology advancements have made products greener, more accessible and more affordable.

A number of South African companies have included green procurement and environmental considerations and through this have improved their efficiency resulting in cost savings. Refer to Addendum A for the South African case studies that showcase the cost savings experienced.

## **2.1 SOUTH AFRICAN LEGAL FRAMEWORK**

The following sections expand on the South Africa regulatory framework in relation to green procurement:

### **2.1.1 Public Procurement**

The Public Finance Management Act, 1999 (Act 1 of 1999) is the overarching framework governing public sector procurement in South Africa at national and provincial level (Hanks, Davies & Perera, 2008). The Act states that “fair, equitable, transparent, competitive and cost effective” procurement system must be maintained. In 2003 the Supply Chain Management Policy was released to streamline individual functions and consider the full chain of events from sourcing to use and disposal of products (Hanks, Davies & Perera, 2008). The Municipal Finance Management Act, 2003 (Act 56 of 2003) governs supply chain management at local government level (Hanks, Davies & Perera, 2008).

### **2.1.2 Social Procurement**

The Preferential Procurement Policy Framework Act, 2000 (Act 5 of 2000) gives effect to government’s priority of empowering historically disadvantaged persons and SMMEs (Hanks, Davies & Perera, 2008).

### **2.1.3 Environmental Procurement**

The Department of Environmental Affairs (DEA) has developed acts and policies covering a wide range of issues related to sustainable development that supports green procurement.

The Constitution of the Republic of South Africa, 1996 (Act 108 of 1996) makes provision in the Bill of Rights for the protection of the environment for the benefit of present and future generation through the prevention of pollution and ecological degradation, the promotion of conservation and securing ecological sustainable development while promoting economic and social development (Hanks, Davies & Perera, 2008). The National Environmental Management Act is the overall environmental management framework in South Africa. The use of NEMA to support procurement is limited to goods and services that may significantly affect the environment through its lifecycle (production, use and disposal) (Hanks, Davies & Perera, 2008).

Other enabling acts and relevant policies include (*inter alia*) (Hanks, Davies & Perera, 2008):

- National Environmental Management: Waste Management Act, 2008 (Act 59 of 2008),
- Hazardous Substances Act, 1973 (Act 15 of 1973),
- Consumer Protection Act, 2008 (Act 68 of 2008)
- Energy Efficiency Strategy for the Republic of South Africa, 2005,
- National Climate Change Response Strategy, 2004,
- White Paper on the Energy Policy of the Republic of South Africa, 1998
- White Paper on Integrated Pollution and Waste Management in South Africa, 2000,
- Draft Green Paper on the Consumer Policy Framework, 2004
- White Paper on Environmental Management Policy, 1998

These policies range from the control and monitoring of the utilisation of natural resources to the handling and management of industrial and other waste products. While national legislation makes extensive reference to the need for “sustainable development”, green public procurement policies have not been initiated and implemented decisively in the country (NMBM, 2009a).

Initial steps were undertaken by national government with the Green Paper on Public Sector Procurement Reform in 1997 (Hanks, Davies & Perera, 2008). This green paper states that:

*“Organs of State can encourage their suppliers, service providers and contractors to behave in an environmentally friendly way by integrating their concern for the*

*environment with their procurement activities. Organs of State should implement policy which will influence the behaviour of vendors to:*

- *comply with all environmental legislation;*
- *offer less environmentally damaging products and services; and*
- *develop products from recycled materials.*

*Procurement policy may require vendors to provide proof of their commitment to environmental protection. This may take the form of statements on the steps companies are taking to reduce their impact on their environment, or alternatively to demonstrate that they are not in breach of any statutory requirements relating to the environment.”*

The green paper also provides proposals for how these concepts can be considered in supply chain management decisions (Hanks, Davies & Perera, 2008).

*“Organs of State should:*

- *buy only from vendors who are in compliance with all environmentally-related legislation;*
- *promote environmental awareness amongst suppliers, service providers and contractors;*
- *favour procurement of less environmentally damaging products;*
- *discriminate in favour of products made from recycled materials,*
- *require that suppliers limit packaging to the minimum necessary to protect the items supplied;*
- *favour products which provide information about their effect on the environment;*
- *develop the environmental awareness of government officials;*
- *develop and maintain a database of vendors in which information relating to their environmental conduct is retained;*
- *develop and promote a code of conduct for vendors; and develop a policy with respect to the use of products containing asbestos.*

*Suppliers, service providers and contractors should:*

- *comply with the requirements of all environmental legislation;*
- *require that their suppliers and sub-contractors in turn comply with all environmental legislation;*
- *consider the environmental impact of their products over their full life cycle from ‘cradle to grave’;*

- *minimise the use of energy, non-renewable resources, hazardous chemicals and toxic substances;*
- *maximise the use of recycled materials;*
- *minimise the production of waste;*
- *dispose of all wastes in an environmentally responsible manner; and*
- *not offer products or packaging containing CFCs, HCFCs, halons, carbon tetrachloride and other ozone depleting substances.”*

Although no further development has occurred with regards to this green paper, progress has been made with regards to waste through the promulgation of the National Environmental Management: Waste Act (No. 59 of 2008).

#### **2.1.4 Provincial and Local Government**

In South Africa, policies for green public procurement are yet to be widely defined and implemented in the public sector. As the need for environmental preservation is well understood, a number of local authorities, e.g. Tshwane and Cape Town, have developed environmental management policies where green procurement is emphasised and encouraged (NMBM, 2009a).

The City of Tshwane has developed the Tshwane Integrated Environmental Policy (TIEP) with the aim of, inter alia, implementing environmentally sustainable procurement policies. This policy is aimed at ensuring that all the departments of the municipality take the environment into consideration in carrying out their respective roles and responsibilities. Such consideration includes the identification and implementation of green policies in procurement activities (NMBM, 2009a).

Table 2.1 below further illustrates the state of green procurement in provincial and local government according to the survey undertaken by the International Institute for Sustainable Development (Hanks, Davies & Perera, 2008):

**Table 2.1: 2008 State of GPP in Provincial and Local Government (Hanks, Davies & Perera, 2008)**

2008 State	Provincial Government	Local Government
Green public procurement policy developed or under development	Western Cape	Tshwane Nelson Mandela Bay Municipality
Other (environmental) policies related to or influencing procurement	Mpumalanga Kwa-Zulu Natal	Ekurhuleni Metro eThekweni Municipality
No environmental criteria or guidelines considered in procurement decisions, but other environmental initiatives related to GPP	Limpopo Eastern Cape Gauteng	City of Cape Town

The Tlokwe (Potchefstroom) City Council, with the assistance of the North West University's Centre for Environmental Management, has also amended their procurement policy to take into consideration green procurement as well as the development of green buildings (Tlokwe (Potchefstroom) City Council website and North West University website).

Although it can be seen that a number of initiatives have been developed or drafted for the various government levels in South Africa, the actual implementation of these is still uncertain. Reasons given in the report are (Hanks, Davies & Perera, 2008):

- Capacity constraints
- Support from National level government
- Conflicts between Environmental goals and cost focused Procurement goals
- Environmental awareness of procurement personnel

### 2.1.5 Current Procurement Criteria

Based on a survey undertaken International Institute for Sustainable Development (IISD), the following criteria were identified as key to decision making in the procurement process (in order of importance) (Hanks, Davies & Perera, 2008):

1. Price
2. Black Economic Empowerment (BEE)
3. Quality
4. Functionality/Reliability
5. Compliance
6. Demand Management
7. Reputation

However, the key criteria may change in importance depending on the 80/20 or 90/10 rule, which is linked to the value of the contract (Hanks, Davies & Perera, 2008). Either 80 or 90 points are given to price, functionality and quality while either 20 or 10 points are used for the BEE score. It was noted in the study that some officials interviewed viewed the 80 or 90 points for price only.

The preferential procurement policy, which encourages BEE in procurement, was seen as both positive and negative (Hanks, Davies & Perera, 2008):

- Positive
  - Upliftment of previously disadvantaged individuals
  - Promotes socio-economic objectives through their buying power
- Negative
  - Ineffective – price still outweighs BEE
  - Capability to deliver, slower delivery
  - Cash flow problems
  - Conflicts with quality
  - Cost premium
  - Underperformance – difficult to manage
  - Fraud (no auditing)
  - Slow procurement process

### **2.1.6 Lessons Learnt from the Implementation of the Preferential Public Procurement (PPP) in South Africa**

Training was provided to the head personnel of the provinces and municipalities allowing them to explore and fully understand the implications of the new criteria for procurement decisions (Hanks, Davies & Perera, 2008). The head personnel then facilitated all relevant staff in the province/ municipality dealing with procurement. There was good support to effectively implement the policy. However, based on the comments of the interviewees there seems inadequate follow up support was provided as there was a clear lack of understanding of the policy. This approach has also led to inconsistencies in the interpretation of the PPP. This is also a perceived lack of effective monitoring of the impact of the PPP. If effective monitoring was taking place these misconceptions would have been identified and corrected early in the implementation (Hanks, Davies & Perera, 2008).

### **2.1.7 State of South African Initiatives**

A number of initiatives have been established in South Africa that are related to sustainable procurement. Eco-Labeling is emerging (for example product labels such as the Honey Badger-friendly label, the Carbon Standard and the Biodiversity and Wine Initiative and sector labels such as GreenStaySA (accommodation), Cape Green (building products and services), Forest Stewardship Council (sustainable forest products), Marine Stewardship Council (sustainable fisheries) and the DME's energy efficiency rating), however, due to a lack of South Africa standards, European standards are being used by some retailers (Hanks, Davies & Perera, 2008). Eco-labelling is a great measure to certify environmental claims and makes identifying environmentally responsible products easier.

Other organisations that play a role in promoting and/or supporting sustainable procurement include (Hanks, Davies & Perera, 2008):

- ICLEI (International Association of Local Governments for Sustainable Development)
- Environmental Goods and Services Forum (EGS)
- National Business Initiative (NBI)
- National Cleaner Production Centre (NCPC)
- Sustainable Energy Africa (SEA)
- Institute for Waste Management South Africa (IWMSA)
- Green Building Council South Africa
- Green Space



- Urban Sprout
- Enviropaedia

## 2.2 INTERNATIONAL LESSONS

The feasibility study (NMBM, 2009a) highlights green procurement practices in the United Kingdom (UK), European Union (EU) and North America motivating that green procurement is a feasible opportunity for the NMBM. The following looks in more detail as to how it works in these countries and what lessons can be learnt from these processes.

### 2.2.1 Steps for Implementation of Green Procurement

Buying Green (2004), a handbook on environmental public procurement, for the EU advises the following steps are required to implement green procurement:

1. Consider which products, services or works are the most suitable on the basis both of their environmental impact and of other factors, such as the information you have, what is on the market, the technologies available, costs and visibility.
2. Identify your needs and express them appropriately.
3. Draw up clear and precise technical specifications, using environmental factors where possible (pass/fail conditions).
4. Consider environmental performances, such as the use of raw materials, sustainable production methods (where relevant for the end product or service), energy efficiency, renewable energies, emissions, waste, 'recyclability' and dangerous chemicals.
5. Establish selection criteria on the basis of the exhaustive list of criteria mentioned in the public procurement directives. Where appropriate include environmental criteria to prove technical capacity to perform the contract.
6. Inform potential suppliers, service providers or contractors that they can use environmental management schemes and declarations to prove compliance with the criteria.
7. Establish award criteria: where the criteria of the 'economically most advantageous tender' is chosen, insert relevant environmental criteria either as a benchmark to compare green offers with each other (in the case where the technical specifications define the contract as being green) or as a way of introducing an environmental element (in the case where the technical

specifications define the contract in a 'neutral' way) and giving it a certain weighting. Included in this step is the consideration of life-cycle costing.

8. Use contract performance clauses as a way of setting relevant extra environmental conditions in addition to the green contract.

## 2.2.2 Including Environmental Criteria in Tendering Process

Member states of the European Union (EU) are obliged to respect the principles of the European Commission Treaty regarding procurement no matter what the size of the contract is. The EU member states may also include environmental criteria into the tender documents as long as the below principles are followed. The most relevant procurement principles of the European Commission Treaty are (Procura+ Manual, 2007):

- The principle of freedom of movement of goods;
- The principle of freedom to provide services;
- The principle of non-discrimination;
- The principle of equal treatment;
- The principle of proportionality; and
- The principle of transparency.

The procurement directives of the European Commission define clearly where and how environmental/green criteria can be introduced into tender documents. This involves the following (Procura+ Manual, 2007):

### 1. *Subject matter of the contract*

If environmental considerations are to be taken into account in a procurement process, the most direct way of doing so is by stating it in the subject matter. If environmental requirements are to be included in the tender then this needs to be included in the subject matter so that the process is completely transparent. The exact environmental requirements will have to be defined in the technical specifications or award criteria but introducing it in the subject-matter of the contract clearly states to potential bidders the intention of the contracting authority to buy green.

For example one can state that it is the intention to purchase “*energy efficient computers*”, however one could not state the intention to purchase “*Energy Star*”

*certified computers*” as this would be discriminating and not giving equal treatment to all proposals due to specific certification. An example of a green contract would be *“Contract for the supply of recycled paper for writing, printing and copying purposes.”*

## 2. *The technical specifications for the product/work/service*

This includes measurable technical specifications that the product/service must fulfil once the subject matter of the contract has been defined. Technical specifications can be defined in terms of the following:

### a) Environmental technical standards and eco-label criteria

This is a common approach used within the EU and several technical specifications have been developed to assist EU countries, for example the European Committee for Standardisation. Each reference should be accompanied by the words ‘or equivalent’ as the procurer may not reject a bidder who can prove that the product or service meets the standards mentioned in an equivalent manner. Additional criteria may also be used to those defined in the standards on the provision that these criteria are not discriminatory. Eco-labels may also be used as an environmental criteria however specific eco-labels may not be stipulated for a product. Eco-labels may be used to prove compliance although other means of demonstration should also be allowed.

For example *“certified Blue Angel paper”* should not be used but rather the criteria used for that eco-label. *The paper must: contain at least 80% of post-consumer waste recycled paper; be totally chlorine free; durability > 100 years, according to ISO 9706, DIN 6738 or equivalent; compatibility with machinery meeting DIN 19309, AFNORQ11-013 or equivalent; products carrying the Blue Angel label will be deemed to comply, as will other acceptable means of proof.*

### b) Performance or functional requirements

In this approach more scope is given for market creativity and as a result technical specifications do not need to be expressed in too much detail. Additional care needs to be taken in this approach as the options available can vary considerably and the specifications need to be clear enough to allow a proper and justifiable evaluation.

For example *“Indoor air conditions in a building: inside temperature between 18 - 22°C during winter and 26 - 28°C during summer and a relative humidity of 50%”*. Thus the bidder may choose any method for achieving the requirement without having to follow very specific technical specifications for heating/cooling systems that could be used.

c) Production and process methods

Contracting authorities may also set criteria based on specific materials to be or not to be included in the products to be purchased as well as the process and production method of the products.

For example the following criteria could be used: *“Paper is produced without the use of chlorine”* or *“Electricity is generated from renewable sources”*.

d) Use of variants

When the award criterion is used the most economically advantageous offer, the contracting authorities may ask bidders to submit “variants”. This allows for the comparison of products meeting different sets of technical specifications using the same evaluation criteria. This approach would be used when the contracting authorities are not sure whether the services/works/products wanting to be purchased are available on the market or if there is uncertainty regarding quality or price. The use of variants must be indicated in the published tender.

Variants can be used as follows: The minimum (non-environmental) requirements of the product/service are set and represented as Variant 1, the “neutral” offer. Additional environmental specifications (as well as the minimum requirements from Variant 1) are set for the product/service to be purchased and this is represented as Variant 2, the “green” offer. Offers that only fulfil at least the minimum requirements are taken into consideration. The bids can then be compared between conventional solutions and environmentally friendly options based on the same set of award criteria.

### 3. *The selection criteria for candidates*

The selection criteria that a public authority can specify in tenders are threefold, exclusion criteria; technical capacity criteria and financial capacity criteria. However

only in exclusion criteria and technical capacity criteria can environmental aspects be included.

a) Exclusion criteria

Exclusion criteria can be included in the tenders including environmental criteria (a list of exclusion criteria are provided in the European Union procurement directives). For example, the company has been condemned for environmental crimes, as long as this is considered by the national law as a reason for incapacity or prohibition to contract with public entities due to grave professional misconduct.

b) Technical capacity criteria

Environmental selection criteria can only be used if specific environmental experience is needed to fulfil the contract. This would only apply to certain service and works contracts that would have a relatively high potential environmental impact during the delivery of the contract. For example a list of similar environmental services carried out by the company.

An additional criterion that could be considered is environmental management systems (EMS). If the specific management measures required are also covered by the bidder's own EMS (e.g. ISO14001) this could be used as a simple form of proof. Other forms of proof that these management systems are in place should also be accepted.

#### *4. The contract award criteria*

There are two methods of awarding a contract, namely lowest price and most economically advantageous offer. In the "lowest price" method the final decision is based solely upon the price of the bids and if no environmental criteria were defined in the previous stages then these criteria cannot be included in this stage. If this method will be used for awarding contracts then environmental criteria needs to be introduced in the technical specifications.

In the "most economically advantageous offer" other award criteria can be taken into account along with the price. Environmental characteristics may then be included as an award criterion and should be based on the following: related to subject matter; objectively quantifiable; weighted in relation to the other award criteria and clearly defined in the tender documents to guarantee transparency.

Introduction of environmental criteria in the award phase is beneficiary if there is uncertainty regarding the availability or cost of the more environmentally friendly product/service and it indicates that preference is towards 'greener' products. Environmental award criteria may also be used even in circumstances where environmental minimum standards have been included in the specifications as this provides an opportunity to reward even better performance.

For example for contracting of a computer leasing service the technical specification could specify a certain energy consumption level and in the award criteria preference would be given to equipment that consumes even less energy.

Furthermore the "life-cycle costs" of a product/service should rather be taken into account rather than the price for the product/service. Thus the purchase price as well as the usage costs, maintenance costs and final disposal costs are also taken into account.

#### *5. The contract performance clauses*

Environmental criteria may also be included in the contract performance clauses and would need to be set out clearly in the call for tenders and clearly related to the performance of the contract.

For example "*products shall be delivered in bulk instead of individual units*", "*the contractor must use reusable containers when delivering products*" and "*the contractor must collect the packaging materials and used products supplied for recycling or reuse*".

### **2.2.3 Implementation Approaches for Green Procurement**

The Procura+ Manual (2007) for the EU identified three approaches to the implementation for green procurement. These approaches include the: comprehensive approach, simplified approach and mixed approached.

The comprehensive approach is the most comprehensive and time-consuming and involves conducting a baseline inventory for all procurement activities. The baseline survey results will assist in the selection of the most useful groups and departments to begin the implementation with. This may be a challenging activity for larger

authorities and thus the other two approaches are recommended in such a situation.

The simplified approach is the most straightforward and involves making the decision on products/services and departments from the start of the process. The survey is then limited in the baseline inventory to only these areas. This approach may also be taken where specific products/services need to be focused upon first due to other policies informing the process (e.g. reductions in CO<sub>2</sub> emissions).

The mixed approach involves a combination of the above two approaches. An initial decision is taken on which products/services and departments may be appropriate for green procurement and the baseline inventory survey is then carried out for this range. A further decision is made on which of the products/services and departments surveyed should be focused on in the implementation of the green procurement.

The decision on which and how many products/service groups to focus on, will depend on a number of factors. These could include the following:

- Level of skills and resources available for implementation;
- Local environmental/social priorities;
- The budgetary importance of certain product/service groups;
- The commitment levels of different departments within the authority; and
- National market availability of appropriate alternative products/services at a competitive price.

Procura+ has selected the following groups due to high budgetary importance, large potential environmental/social benefits and the availability of competitive alternatives on the market:

- Buses;
- Cleaning and maintenance products and services;
- Green electricity;
- Food and catering services;
- IT equipment; and
- Building construction/renovation.

The Procura+ participants are required to implement sustainable procurement for at least one of the above six product groups.

The baseline inventory is an important preparatory stage to implementation of a green procurement policy and is recommended to be divided into the following two components:

- A survey of the organisational arrangements for the procurement activities covered, departments involved and in what manner.
- The procurement scorecard involves the collection of data on the quantities of a particular service/product currently purchased, purchase price, together with any environmental/social criteria already used. The scorecard also forms the basis of the continuous monitoring activities.

The baseline inventory assists in making well-informed decisions, setting realistic targets, establishment of a baseline for the measurement of progress in green procurement and to reveal opportunities for improving the overall efficiency of management practices.

Clearly communicated targets are important in providing strong political support to those responsible for the implementation. The targets demonstrate the commitment to the general public and provide a framework for measuring progress. The most effect targets include: product specific, measurable, time-bound and challenging yet realistic.

An action plan should then be formulated and this plan is a concise, clear document tailored to the specific needs and purchasing practices. All employees involved in all stages of the procurement process should have access to this plan. The action plan should contain the following:

- The political commitment made, including the targets set;
- A description of the assigned responsibilities;
- A description of the implementation measures and procedures;
- Relevant progress indicators; and
- A timeframe.



Progress on the implementation should be monitored and results reported upon. The monitoring process assesses whether the targets previously set have been achieved, identifies any problems encountered and develops solutions. The results can also be communicated to the general public.

## 2.3 BARRIERS AND CHALLENGES IN GREEN PROCUREMENT

The following section highlights the barriers (and challenges) that can be expected when implementing a green procurement policy as well as possible measures to overcome these barriers. These barriers were experienced in the European Union (LEAP, Toolkit C), identified through BSD Global and the International Institute of Sustainable Development report on Sustainable Public Procurement in South Africa (Hanks, Davies & Perera, 2008):

### 1. *Lack of a Green Procurement Policy*

A policy stating the organisation's position on green procurement is vital to provide clear aims and objectives and to act as a driver for all those working within the organisation. Without a policy a universal approach cannot be achieved, as there is no focus or guidance for people on what they should be doing and why they should be doing it.

For an organization to implement a green procurement programme, it must have commitment from all levels, including senior management and purchasing agents. A policy statement outlining the corporate commitment to green procurement can assist the process.

The following table (Table 2.2) identifies specific barriers and possible solutions to overcome these barriers:

**Table 2.2: Green Procurement Policy**

<b>Barriers</b>
No aims at an individual or municipal level to procure green products/ services or works.
No organisation procurement policy strongly promoting / enforcing environmental performance of products, services or works procured.
Lack of a strategic focus at an organisational level for how green procurement

should be implemented.
Little or no guidance at an operational level on how to implement policies that are in place.
No (or insufficient) resources dedicated to green procurement.
Lack of communication on the policy – a policy can be a key driver but people must understand it and know what is required of them.
Conflict with the preferential procurement policy and the perceived impact on SMMEs.
No clear driver (responsible department) as to who should drive the process of developing green procurement.
Political conditions can influence the requirements in a green procurement policy, e.g. cooperation
Lack of support of national government through changes to policy frameworks (i.e. the supply chain management regulations).
Lack of legal mandate
<b>Possible Solutions</b>
Develop a formal green procurement policy, either as a stand-alone document or as part of the main procurement policy that is adopted at the organisation level. This is one of the key ways to overcome barriers to green procurement, as it will provide clear aims and objectives for the organisation. Regular review of the policy will ensure it remains relevant and realistic.
When developing the policy it is important to gain top-level buy-in to ensure enforcement across the organisation. It is also important to gain lower level buy-in, particular of those that would be directly involved in implementing the policy, to increase interest and awareness.
Once a policy has been developed a senior manager needs to act as a champion for the policy to ensure it remains high profile, that there is clear leadership and that it is driven forward.

## 2. Lack of Awareness

Information and awareness is vital to ensure all those within an organisation understand what they need to do, why they need to do it, how they need to do it and where they can access guidance. This can assist with change management and increase commitment within the organisation. If clear information is not available or

not actively imparted then it is very difficult to expect people to effectively implement green procurement.

Many organizations are unfamiliar with the concept of green procurement or with the options available to them. For an organization to participate, it must have an understanding of concepts, vocabulary and terms.

Table 2.3 identifies specific barriers and possible solutions to overcome these barriers:

**Table 2.3: Internal Awareness**

<b>Barriers</b>
Lack of promotion within the organisation of green procurement, its benefits and external drivers.
Lack of awareness among persons responsible for procurement of why environmental products should be considered for specification (i.e. lack of management buy-in).
Lack of interest from clients, staff, project team members in improving environmental performance.
Lack of information on green products available and the environmental aspects of these products.
Lack of available information on incentives and sanctions for green procurement.
Lack of information on rules and regulations i.e. what can or cannot be specified without contravening regulations for competitive procurement.
Lack of information on how to procure green products, works or services (specifications drawn up traditionally rather than on the basis of need).
Lack of internal data on which products, goods or services are to be purchased green and which are not.
Poor perception of recycled and/or green products i.e. too expensive, poorer quality.
Buyer inertia.
Unwillingness/fear to change.
Information overload.
Ignorance of green procurement principles

Lack of awareness of green procurement principles amongst suppliers.
<b>Possible Solutions</b>
Assign responsibilities for implementing the policy, outline those that are accountable for the policy and identify those that must be informed of the policy to ensure there is a clear focus for internal awareness raising.
Develop a programme of training/knowledge sharing for all employees to promote and raise awareness on green procurement, its benefits and external drivers, to increase interest. Have specific training for employees with responsibility for choosing goods, and for employees who vet contracts.
Hold one-off workshops and seminars for intensive awareness raising throughout the organisation on the organisation's position, policy and strategy for green procurement. These should be aimed at staff of all levels involved in procurement and environmental management.
Issue regular bulletins / reminders on what products, goods or services are to be purchased green and which are not.
Develop a series of educational programmes to continually improve market awareness and keep up with the latest developments in green products and services.
Hold tailor-made training to educate end-users on the quality and performance of green products.
Hold training for product specifiers on the Green Purchasing Market to raise awareness of what can or cannot be specified without contravening the regulations for competitive procurement, and how to draw up specifications for green products.

### **3. Poor Supply Market**

A good supply market of green products and services is a key requirement to implementing green procurement. Without suitable suppliers an organisation cannot actively select to procure green options.

There is a perception that green products are more expensive than conventional alternatives. This is true in some cases, particularly where development costs are reflected in the price; however, often there is no significant difference. The real problem may simply be that products are being ordered in small quantities, or are not available locally.

Sometimes a green product may have a higher up-front purchase price, but will cost less over its lifetime. For example, a non-toxic alternative to a toxic product will cost less to transport, store, handle, and discard. This non-toxic alternative will require fewer permits, less training for staff, and the consequences of an accident will be greatly reduced. Similarly, a product that uses less packaging and that is easily recyclable or reusable will carry a lower disposal cost.

Frequently, local distributors do not stock green products, or else they stock only small quantities. This can lead to delays in obtaining the product. Increasing market demand will help to overcome this obstacle.

The following table (Table 2.4) identifies specific barriers and possible solutions to overcome these barriers:

**Table 2.4: Supply Market**

<b>Barriers</b>
High prices of recycled products.
Lack of green products available.
Lack of suppliers of green materials and services.
Lack of liaison between organisations and suppliers to improve environmental quality of products and services.
Lack of promotion of green products by suppliers to demonstrate quality / comparability with conventional products.
Suppliers viewing products with environmental attributes as niche and trying to charge more.
Suppliers not taking requests seriously enough.
Negative market perception of local authorities as a customer (e.g. local authorities have a reputation for being late payers) meaning suppliers feel that contracts are not worth tendering for.
Too much bureaucracy in the procurement process puts tenderers off.
Not enough lead time given to gather information.
<b>Possible Solutions</b>
Focus on one or two areas first, for example recycled content of paper or timber procurement. The areas can be identified through a formal risk assessment or

through internal discussions, but this will allow a step-by-step approach to be taken.
Undertake internal market research to understand the market place and what it has to offer.
Organisations should work more closely with suppliers to improve the quality of green products.
Buyers, environmental experts and end-users should work together on the development of specifications.
Suppliers should be encouraged to promote their green products to demonstrate their quality and performance in comparison with conventional products.
Initial pricing of green products has been high due to traditional low demand. Internal compliance through enforcement of green procurement policies and better management of maverick spend will increase the demand for green products thus decreasing the price.
High prices can also be addressed through the use of business cases to elected members to outline the whole life cost of environmental good and services.

**4. Lack of Innovation**

As green procurement is relatively new to many organisations, innovative and proactive measures can be needed to kick-start its implementation.

Another barrier to green purchasing can be simply a lack of acceptable alternatives to the present product. For example, a few years ago in the furniture manufacturing industry, the use of water-based finishes as an alternative to solvent-based ones was impeded by the fact that water-based finishes presented technical difficulties which were costly to overcome, and were of lower quality. Growing demand will stimulate the development of new and better 'green' products.

Table 2.5 identifies specific barriers and possible solutions to overcome these barriers:

**Table 2.5: Innovation**

<b>Barriers</b>
Buyers hesitant to use unproven products / materials.
Not much innovation in partnering for green procurement activities.

No measures in the green procurement policy to introduce innovation.
Lack of awareness.
Lack of acceptable alternatives.
No identification of green alternatives.
<b>Possible Solutions</b>
Working groups should be developed to investigate new products and keep up to date with latest developments.
Build research / keeping up to date with new products into employees' training requirements through appraisal systems and Continuing Professional Development.
Encourage suppliers to offer free samples/trials of new products to encourage innovation amongst buyers.
Start to think about long term, partnership contracts – for example waste management sectors.
Investigate joint tendering with other organisations to gain better prices for green products and services.
Investigate grant funding for new initiatives.
Learn and share knowledge between purchasers by networking.

### **5. Lack of Regulation / Enforcement**

Change in behaviour can be difficult to achieve in organisations. Enforcement and regulation is a key way of ensuring that new policies and initiatives are adhered to, and ensuring that green procurement can be implemented.

It is important that suppliers be asked to provide the environmental specifications of the products they are offering. Purchasers, in the same way, must clearly define their needs and requirements.

'We've always done it this way' can be a difficult mentality to overcome. There may also be existing relationships between purchasers and suppliers that make it difficult to switch to alternatives. Additional barriers that have been highlighted by public sector organisations relate to the changing of behaviour within the purchasing departments to using the full life-cycle cost of the product or service and not just the purchase price and the increase risk of theft of more durable longer lasting products.

The following table (Table 2.6) identifies specific barriers and possible solutions to overcome these barriers:

**Table 2.6: Regulation / Enforcement**

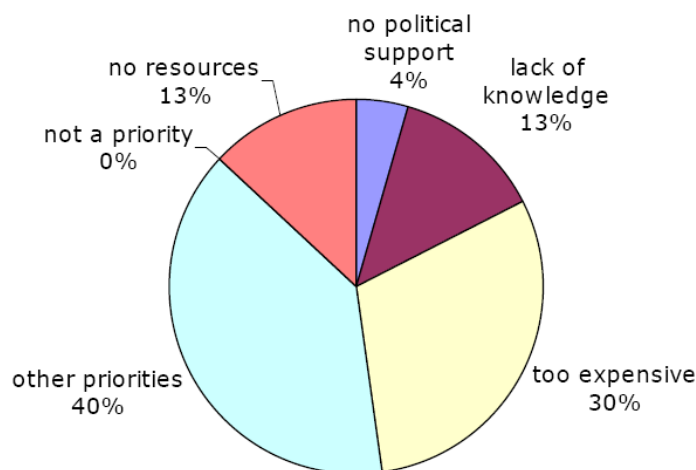
<b>Barriers</b>
No enforcement and measurement of the procurement policy.
No internal rules on how to procure green products, goods or services.
No verification of green products.
End-users buying off contract where only an environmental option is included on a corporate contract because they do not want to use environmental products/materials.
Failure of buyers to choose green products even when available and when all specifications have been met.
Devolved purchasing structure.
Burden on procurement.
Lack of awareness of departments as to the availability of centralised contracts.
Conflict with the preferential procurement policy.
Life cycle cost of a product will never win a tender where the most points are allocated to price.
Fraudulent activities (e.g. unverified claims) occurring when no auditing systems are in place.
Ignorance of GPP principles.
Slow procurement process.
No clear driver (responsible department) as to who should drive the process of developing green procurement.
Ineffective enforcement as price still outweighs green products.
Lack of expertise.
Lack of legal mandate
<b>Possible Solutions</b>
Give buyers power to enforce the use of green products through approved internal rules and procurement strategies/policies. Build monitoring procedures into the green procurement policy. It will be necessary to consider what evidence it is



possible to obtain when defining any specific green materials / products in the policy, and train relevant staff on what that evidence should look like.
Use an e-procurement system to prevent off-contract spends by always making the system default to the environmental product, removing alternative non-environmental options to ensure buyers can only select green products and services, or provide a pre green-filtered catalogue for staff e.g. for stationery. Have the uptake of environmental materials as a Key Performance Indicator in the contract to monitor performance in this area, and include requirements for reporting on this performance in the contract award.
Develop a systematic procedure for contract monitoring to collate internal information and report on progress towards implementing policies.
Environmental criteria to be added in tender contracts.

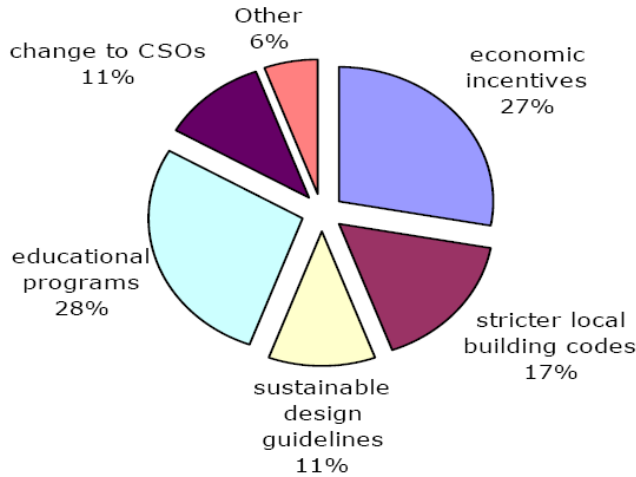
The following represents an example of what can occur in an organisation. Organisation A has a fairly advanced policy and a good supply market but there is little internal awareness on green procurement, very little innovation and little enforcement. Priority areas for change are likely to be improving internal awareness and improving enforcement. Once awareness is increased it will be easier to introduce innovation.

The following figure (Figure 2.1) shows the identified barriers encountered to green procurement within LEAP organisations as well as members of the London Contracts and Suppliers Group.



**Figure 2.1: Organisational barriers encountered to Green Procurement**

Figure 2.2 represents the different actions identified by the LEAP organizations as well as members of the London Contracts and Suppliers Group for easier incorporation of green procurement into their organizations.



**Figure 2.2: Actions for easier incorporation of green procurement**

### 3. BASIC ASSUMPTIONS

Green procurement is set within the context of achieving value for money. It requires the integration of environmental performance considerations into the procurement process including planning, acquisition, use and disposal. In this context, value for money includes the consideration of many factors such as cost, performance, availability, quality and environmental performance. Green procurement also requires an understanding of the environmental aspects and potential impacts and costs, associated with the life cycle assessment of goods and services being acquired. In addition, the supporting administrative processes and procurement methods can also offer opportunities to reduce the environmental impacts of government operations (Canadian Government, 2009).

There are a number of basic assumptions that the project team have used in the project. These are:

- The programme starts at a broad level but develops in more detail, up to a point where more detail will make the plan more difficult to implement.
- The plan must be an added value exercise for companies.
- The plan must be good value for money.
- The plan must not require onerous administration to implement.

- The programme and plan must be transparent in its application.

The procurement strategy needs to be in touch with the ability of the suppliers to deliver. Great care must be taken to ensure that a combination of programmes is in place to ensure that the implementation plan is realistic. For example, it defeats the purpose of an affirmative action policy if the supplier is not able to conform to the requirements of a green procurement policy because of antiquated technology which does not achieve the energy conservation requirements. It is thus important that the implementation plan also recognises the various funding mechanisms that are available to suppliers in order to meet 'green targets'. An example would be the provision of waste collection services which involve a materials recovery facility to minimise waste but which has the opportunity to access incentive funding from **the dti** as part of the new SMME Development Programme for the Recycling Industry.

The Green Procurement Policy must also be sensitive to social upliftment needs. It is not simply the case of writing into effect a policy that does not underpin the concept of the government's Accelerated and Shared Growth Initiative for South Africa (ASGISA) Programme. It will be necessary to think wider than the normal process to ensure that the basic concepts of poverty alleviation and job creation are not lost along the way. To do this one must understand the principles of economic development. Business development in the current economic climate is under severe pressure. The effect of the credit pressures is seen on a daily basis and many people, unfortunately at the lower end of the economic scale, are losing their jobs. It thus becomes an important criterion that any procurement policy also reflects these needs.

## 4. PROPOSED AMENDMENTS TO POLICIES

### 4.1 ENVIRONMENTAL POLICY

The NMBM's Environmental Policy (October 2004) was reviewed in order to determine the most applicable area for the addition of green procurement criteria. During this review it was found that reference is made in the Environmental Policy to:

- "promoting and delivering environmentally sustainable activities and services within the Nelson Mandela Metropolitan area and areas over which the municipality can be reasonably expected to have an influence;
- sustainable and efficient use of natural resources and raw materials; and

- the Municipality shall ensure via the procurement procedures that all contractors and suppliers are made aware and comply with the EMS Policy and requirements”.

The Environmental Policy also indicates an Environmental Management System (EMS) for the NMBM. In many cases the EMS and the green procurement strategy can be linked together. The EMS should therefore also incorporate clearer guidelines on the NMBM's green procurement strategy.

The above extracts can be interpreted to refer to sustainable (green) purchasing activities, however as the Environmental Policy does not specifically refer to green procurement the following is recommended to be added as indicated in *italics*:

1. In order to ensure an understanding of the term green procurement, the term needs to be added to the glossary.

*Green (sustainable) procurement can be defined as systematically integrating environmental and social considerations into all procurement activities. It is a system or procedure where environmental considerations are taken into account within the procurement process.*

2. Within the Environmental Policy Statement an additional paragraph is recommended to be added, prior to the listing of the principles, regarding green procurement and the NMBM's position thereof.

*The NMBM aims to reduce any harmful effects on the environment caused by its activities, products and services through the adoption of environmentally sound procurement policies and practices.*

3. A number of principles have been included in the Environmental Policy Statement in order for the NMBM to meet its environmental obligations. An additional principle should be added to reflect the commitment of the NMBM to green procurement.

*Implementation of green procurement practices into the supply chain management and to promote environmental responsibility and performance of suppliers.*

## 4.2 SUPPLY CHAIN POLICY

The NMBM's Supply Chain Management Policy (Version 2, March 2009) was reviewed in order to determine the most applicable areas for the addition of green procurement criteria. The intention is to add an environmental dimension to the decision-making process. The standard purchasing criteria of price, quality and availability remain and the environmental impacts of a good or service procured can be seen as part of the "quality" criterion.

The following presents the areas and recommended amendments and/or inclusions (*in Italics*) to the policy:

### Section 11 – System of acquisition management

*(5) The incorporation of environmental considerations to be included in the acquisition process and to form a component of the bid specification.*

### Section 14 – Lists of accredited prospective providers:

*(c) specify the listing criteria for accredited prospective providers, this criteria to include the environmental performance of registered and prospective suppliers.*

### Section 27 – Bid specification committees

#### (2) Specifications –

*(i) Environmental considerations are to be given equal weighting along with other aspects when selecting preferred suppliers and goods. While paying due regard to price and quality, the specifications must encourage the purchasing of goods and services that will have the least possible impact on the environment during their life cycles.*

### Annexure "A" –

#### Section 2 – Application

*2.4 Promotes the inclusion of environmental performance and considerations into the selection of products and suppliers.*

Furthermore, the preference point system may also be considered to be amended to include one (1) point in respect of the environmental performance of any tenderer or bidder.

## 5. GREEN PROCUREMENT STRATEGY APPROACH

There are two main approaches which can be followed regarding the green procurement strategy for the NMBM, namely the Supplier Approach or Product and Service Approach. The Supplier Approach focuses on the suppliers and their environmental performance through the supplier registration. This approach seeks ways to rate companies and suppliers according to their overall environmental performance, typically using questionnaires and outside audits and rating systems, e.g. Environmental Management Systems, and the awarding of a green certificate. The Product and Service Approach focuses on including environmental specifications into tender documents (e.g. stipulating in a tender for paper supplies that the paper has to have a certain recycled percentage). This approach also uses tools of life-cycle analysis and total cost analysis to attach an environmental rating to a proposed purchase.

The approach which is being undertaken for the NMBM Green Procurement Strategy is the Supplier Approach whereby the suppliers will be encouraged to evaluate their environmental performance and thereby being awarded a Green Certificate. This will include additional requirements in the registration process of suppliers onto the NMBM supplier database through Quadrem / Tradeworld. Thereafter the NMBM can consider the inclusion of environmental specifications into tender documents which will result from combining the two approaches.

From a further review of green procurement strategies and policies undertaken by other countries, it is noted that that these countries follow mainly a Product Approach. However a few countries incorporate both approaches whereby suppliers are required to complete environmental questionnaires and are encouraged to develop environmental policies. The environmental questionnaires can vary in detail from a straightforward 'scoring sheet' to a more detailed and comprehensive questionnaire. Refer to Addendum A for examples of environmental questionnaires.

As a result, the ideal green procurement strategy should ultimately incorporate both approaches.

## 5.1 IDENTIFIED DRIVERS AND INDICATORS

A list of drivers and specifications has been developed for incorporation into the green procurement specifications for suppliers. These drivers are the main categories under which suppliers will be reviewed.

### 5.1.1 Waste

#### ***Indicator***

Why is waste important as a driver for Green Procurement? Generation of waste and the inappropriate management of this waste can result in a threat to health and undesirable environmental impacts.

Adverse health effects related to poor waste management can come about as follows:

- Landfill sites can be the possible cause of birth defects, cancers and respiratory illnesses including asthma.
- Waste incinerators emissions may contain dioxins which can result in the possible increase in cancers, birth defects and respiratory illnesses including asthma.
- Composting and Materials Recycling Facilities (MRFs) can give rise to possible exposures to micro-organisms and odours, and lung diseases like bronchitis.

Adverse environmental effects of waste management could include:

- Emissions from municipal solid waste processes might affect acid rain or global warming.
- Plant life near landfill sites might be affected by landfill gas or water contaminated by waste, if these are allowed to escape from a site.
- Odours or noise from municipal solid waste facilities can be problematic.

#### ***Measure: Percentage Waste Recycled***

Various measures for indicating the impact of Green procurement on waste management were considered. It is proposed to use *Percentage Waste Recycled* as the indicator for Green Procurement. The rationale for choosing this measure was that *Waste Generation* is not feasible as an indicator since it does not quantitatively indicate the impact of green procurement. Therefore, *Percentage Recycled* is proposed the best measure of waste management within companies.

Companies will have to provide documented proof of recycling. For example, the percentage waste recycled versus total waste collected.

### ***Specification***

The target for Medium and Large companies is proposed to be 100% recycling within 3 years. This will give companies an opportunity to quantify their wastes, develop markets for recycling and put the practice in place.

## **5.1.2 Water**

### ***Indicator***

Potable water supply in the Nelson Mandela Bay Municipality is under severe stress. No substantial rainfall is expected in drought stricken Nelson Mandela Bay before September 2010. The water supply could run out in October and in some areas by July. Churchill Dam was only 22.8% full in January 2010. In light of worsening water woes tough new water restrictions were introduced from February 2010. The watering of plants by any means using municipal water will be prohibited, as will the filling of pools. Target reductions will be 20% for domestic consumers and 25% for commercial and industrial. Consideration is being given to declaring the city a disaster area. In the light of the aforementioned critical water shortage situation, it is proposed that consumption of potable water by industries be utilized as a driver for Green Procurement.

### ***Measure***

It is further proposed that the company's water bills are used as an independent verifiable measure of potable water consumption. The bills are generated by the Municipality and are thus readily available. Water consumption is measured continuously by water meters and monitored on a monthly basis by the municipality and daily by the industries.

### ***Specification:***

It is proposed that water consumption be reduced by 5% per annum until the industry minimum water consumption standard (litre/kg of product) is attained.



### 5.1.3 Consumables

#### *Indicator*

It is proposed that Environmental Toxicity be used as the indicator for the Green Procurement of consumables. When industries purchase consumables, as part of a green procurement policy the majority of standard office consumables (pens, staplers, peripheral paper products including: notepads, envelopes, folders, and post-it notes) must possess verifiable environmental benefits over conventional office products. All letter and legal sized copy a printing paper must contain 100% post Consumer Waste (PCW). In addition, where appropriate the consumables should be recyclable. Furthermore the industry suppliers must supply adequate reusable kitchenware and refrain from purchasing any Styrofoam cups, disposable cutlery, dishware, etc.

#### *Measure*

It is proposed that a certificate of environmental non-toxicity required for all consumables purchased by industry, or for hazardous chemicals - proof that the least toxic chemical has been selected, and when disposed of is detoxified or disposed of to a hazardous waste landfill site.

#### *Specification*

The industries need to present certificates of environmental non-toxicity for all consumables purchased, and/or where toxic consumables are used their material safety data sheets and records of disposal to toxic waste sites be presented monthly.

### 5.1.4 Chemicals

#### *Indicator*

It is proposed that Environmental Toxicity be used as the indicator for the Green Procurement of chemicals. Chemicals are widely recognised to be important to health and modern lifestyles. Their continued use is essential positively impact the quality of human life. The types of chemicals used in industry include, reagents, catalysts, solvents, acids and bases, intermediates, surfactants, colours and flavourings. Many legal requirements have been introduced into international legislation over the years to protect people and the environment from the potential adverse effects of exposure to hazardous chemicals. Significant reductions in pollution from major industrial sources have been made, basic information on the

public health and environmental hazards of many chemicals placed on the market for use in manufacturing processes and in everyday products.

Chemicals are being researched and developing cleaner and greener chemicals for global industrial use. A chemistry platform has been created, but distinct industrial applications, targeting the textile, paper and hair treatment and antimicrobial markets. Applications are targeted to be less harmful to people and the environment than current market products but with the same or improved performance.

When industries purchase chemicals, as part of a green procurement policy the majority of chemicals, will be non-toxic to the environment. Where this is not possible, the toxic chemical will be carefully used and disposed of to a hazardous chemical waste disposal facility. The common cleaning chemicals will be environmentally friendly. Where hazardous chemicals have to be used, the least hazardous chemical will be used. When these are disposed of they will be detoxified, e.g. hydrochloric acid waste needs to be disposed of it will be neutralized with a weak base, say, sodium carbonate. In the case of toxic waste, e.g. pesticides, these will be encapsulated and disposed of at a hazardous waste landfill site, or incinerated.

### ***Measure***

It is proposed that a certificate of environmental non-toxicity required for all chemicals purchased by industry, or for hazardous chemicals - proof that the least toxic has been selected, and when disposed of is detoxified or disposed of to a hazardous waste landfill.

### ***Specification***

The industries need to present certificates of environmental non-toxicity for all chemicals purchased, and or where toxic chemicals are used their material safety data sheets and records of disposal to toxic waste sites.

## **5.1.5 Electricity**

### ***Indicator***

South Africa is gripped in an energy crisis. The blackouts of 2008 clearly demonstrated that consumption outstripped generation. Calls were made by both

Government and Eskom that consumers needed to review their use of electricity and to conserve where possible. This provided the initiative for a range of products that could be used by the consumer to reduce use. Some examples include:

- Eskom's subsidy scheme to install solar water heaters in residential properties.
- The push by both government and Eskom for all users to switch to low energy light bulbs.

The NMBM has taken a number of these conservation options on board and have included them in their Integrated Development Plan:

- During 2010, all street lights will be converted to low energy consumption bulbs.
- During 2010 all traffic lights will be converted to low energy lights and a pilot scheme for solar power for traffic lights will be rolled out.

### ***Measure***

It is proposed that the company's electricity bills are used as an independent verifiable measure of energy consumption. The bills are generated by the Municipality and are thus readily available. Electricity consumption is measured continuously by meters and monitored on a monthly basis by the municipality.

### ***Specification:***

It is proposed that energy consumption be reduced by 10% per annum until the industry minimum use is attained.

## **5.1.6 Transport**

### ***Indicator***

In terms of emissions that are responsible for climate change, transport and electricity generation are almost on par. Globally electricity generation emits 33% of greenhouse gases and transport 28%. In terms of green procurement therefore, actions that could reduce energy consumption should be matched to actions that can reduce emissions from transport.

Transport is a key factor in the South African economy, and this means that it is unlikely that a green procurement policy could do much more than optimise fuel

consumption. Certainly route optimisation could reduce the distances travelled, but it is almost impossible to investigate each company's route network. The basis therefore must be on the achievement of the most efficient use of fuel in the vehicle fleet. Excessive fuel consumption is influenced by many factors, some of which include:

- driving style;
- vehicle maintenance; and
- excessive speed.

While a measure of each of these is almost impossible to verify, an overall optimisation of fuel use can be achieved by comparing the motor manufacturer's guideline consumption for the urban cycle with actual consumption. Actual consumption can be verified by using the same information that is required by SARS, i.e. the vehicle log book. As part of the company's business expense account, vehicle maintenance records are also prepared, included fuel purchased per vehicle. Thus it would be possible to independently verify the overall consumption of fuel per kilometre travelled from information as supplied to SARS.

### ***Measure***

It is proposed that the company's fleet details are supplied, along with the manufacturer's guideline consumption for the urban cycle for that vehicle, and an annual average fuel consumption for the vehicle. The information required is not additional to that already required by SARS.

### ***Specification:***

It is proposed that fuel consumption matches manufacturer's guideline consumption immediately.

## **5.1.7 Raw Materials**

### ***Indicator***

Suppliers to the NMBM fall into two main categories:

- suppliers of products manufactured by themselves; and
- suppliers of products that are manufactured by third parties.

For those suppliers that buy in readymade products, it is difficult to assess whether a manufacturer in the USA applies the same principles of material management as envisaged in South Africa.

However, for suppliers that manufacture products themselves, whether it be a chemical or a road, it is possible to determine if the raw materials have been obtained from proper sources. The measure for this is the adherence of the material supplier to all the legal and permit conditions as required by South Africa legislation.

Thus it would be possible for NMBMM to verify these requirements on the production of a valid permit or license. Examples include:

- the Mining Permit for a supplier of aggregate material;
- the annual performance certificate for a chemical company's stack emissions to the relevant authority.

### ***Measure***

It is proposed that the company supply copies of the appropriate permits and licenses for their suppliers.

### ***Specification:***

The industries need to present certificates of permits and licenses for all materials purchased immediately.

## **5.1.8 Emissions to Air**

### ***Indicator***

Emissions to air would focus on two areas for manufacturing industries, namely:

- CO<sub>2</sub> emissions
- Chlorofluorocarbons (CFCs) and Persistent Organic Pollutants (POPs)

Air and/or stack emissions from manufacturing industries are regulated by the National Environment Management: Air Quality Act, No 39 of 2004 and as a result these industries are required to limit the emissions produced within the regulated

frames. As a result the emissions report required to be produced to the authorities would be a means to verify compliance with the associated permit.

With the exception of DDT, POP Pesticides are no longer permitted to be imported, manufactured, formulated, sold or used within South Africa.

### **Measure**

It is proposed that the company supply copies of the appropriate license for their manufacturing plant.

### **Specification:**

The industries need to present licenses for all stack emissions immediately and actual emissions must match or improve on license conditions.

The annual performance certificate for a chemical company's stack emissions to the relevant authority.

## **5.2 IDENTIFIED RECEIVERS**

A preliminary list of receivers (supplier categories) has been developed. A further analysis has been undertaken on the criteria that are important to the NMBM dependent on the sector.

**Table 5.1: Supplier categories**

<b>Sector</b>	<b>Size</b>	<b>Impact</b>
<i>Products</i>		
- Capital	1 - Rand	2 - Specification
- Consumables	2 - Rand	1 - Specification
<i>Services</i>		
- Financial	2 -Big / Medium / SMME	1 - Specification
- Service	2- Big / Medium / SMME	1 - Specification
- Support	2 - Big / Medium / SMME	1 - Specification

The above table (Table 5.1) indicates the following:

- Suppliers fall into two main categories, Products and Services.
- Product suppliers can be further broken down into capital products and consumables.
- Services suppliers can be further broken down into Financial, Bulk and Support Services.

For the NMBM the following aspects are the key drivers in procurement:

- For capital products, the costs is the prime variable with specifications second.
- For consumables, the specification is the prime variable and the costs secondary.
- For services, the specification is the prime variable with the size of the company being secondary.

The various sub-categories still require further development but conceptually these would be:

- Financial Services – banks, loans, collection agencies.
- Bulk Services – waste management, water management, roads, electricity supply.
- Support services – IT support, electricians, plumbers, consultants.

The Quadrem Tradeworld supplier database has five (5) main categories for suppliers wherein the suppliers are grouped. These include:

- Construction and Engineering
- Education and Training
- Goods and Services
- Legal Services
- Professional Services

## 6. GREEN PROCUREMENT REGISTRATION PROCESS

Companies with the following certification will be automatically awarded a Green Certificate from the NMBM:

- ISO14001 certification
- EMS recognised certification, e.g. EMAS

Companies that do not have the above certification will need to complete the green procurement register or scorecard in order to receive a Green Certificate from the NMBM.

### 6.1 GREEN PROCUREMENT REGISTER

The following table (Table 6.1) identifies which sectors would be required to register for which driver. It can be seen that with the exception of some financial and support services, all suppliers will need to be registered on the NMBM database for all 9 drivers.

**Table 6.1: Identified sectors for registration**

Supplier Sector	Waste	Electricity	Transportation	Consumables	Chemicals	Emissions to air	Water	Raw Materials
<b>Construction &amp; Engineering</b>								
Capital								
Buildings								
Infrastructure								
<b>Education &amp; Training</b>								
All services								
<b>Goods &amp; Services</b>								
Consumables								
Cleaning materials								
Paper								



Supplier Sector	Waste	Electricity	Transportation	Consumables	Chemicals	Emissions to air	Water	Raw Materials
Ink cartridges								
Financial								
Banks								
Collection agencies								
Loans								
Capital								
IT Equipment								
Vehicles								
<b>Professional Services</b>								
Bulk service								
Waste								
Water								
Roads								
Electricity								
Support services								
IT								
Electricians								
Plumbers								
Consultants								
Catering								
Landscaping								
Accommodation facilities								
<b>Legal Services</b>								
All services								

## 6.2 PROPOSED GREEN PROCUREMENT REGISTRATION / SCORECARD

The registration process is the main activity for suppliers in order to receive a Green Certificate from the NMBM. The following is a draft green procurement registration / scorecard (Table 6.2) that may be used for the Green Certificate registration process.

**Table 6.2: Proposed green procurement registration scorecard**

<b>NMBM GREEN CERTIFICATE APPLICATION AND REGISTRATION</b>			
<b>Company Name:</b>			
<b>Street Address:</b>			
<b>Postal Address:</b>			
<b>Contact Person / Environmental Manager:</b>			
<b>Telephone:</b>		<b>Fax:</b>	
<b>Email:</b>			
<b>Section 1</b>			
<b>Sector Category</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
Construction & Engineering			Indicate in the appropriate column which sector category the business falls within.
Education & Training			
Goods & Services			
Professional Services			
Legal Services			
<b>Section 2</b>			
<b>Environmental Certification</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
ISO 14001 certified			If yes, include a copy of the certification. If no, complete section 3.
EMS certified (e.g. EMAS)			
NMBM certified	New	Renewal	Complete section 3
<b>Section 3</b>			
<b>Waste</b>			
<b>Current % of waste recycled:</b>			

Target % of waste to be recycled:	
<b>Electricity</b>	
Current % electricity usage:	
Target % reduction in electricity usage:	
<b>Transportation</b>	
Fleet management system:	
Vehicles maintained / fuel rate:	
<b>Consumables</b>	
Environmental non-toxicity certificates:	
<b>Chemicals</b>	
Environmental non-toxicity certificates:	
<b>Emissions to air</b>	
Emissions report:	
<b>Water</b>	
Current water usage:	
Target % reduction in water usage:	
<b>Raw materials</b>	
Supplier permits (e.g. mining permit for gravel)	

## 7. LEGISLATIVE ASSESSMENT

A legislative assessment regarding the green procurement strategy was undertaken by Shakenovsky Nysschen Attorneys (2010). The assessment included the Constitution of South Africa, the Preferential Procurement System, financial legislation, environmental legislation as well as legislation of the NMBM.

### 7.1 CONSTITUTIONAL PROVISIONS

The cornerstone of our democratic and transparent society is the constitution of the Republic of South Africa, 1966 (Act 108 of 1996) ("the Constitution") and any Green Procurement Strategy must comply with the provisions thereof and principles contained therein.

Section 152 of the Constitution deals with the objectives of Local Government and provides that:

- “(1) The objects of Local Government are –*
- (a) to provide democratic and accountable government for local communities;*
  - (b) to ensure the provision of services to communities in a sustainable manner;*
  - (c) to promote social and economic development;*
  - (d) to promote a safe and healthy environment; and*
  - (e) to encourage the involvement of communities and community organisations in the matters of local government.*
- (2) A Municipality must strive, within its financial and administrative capacity, to achieve the objects set out in subsection (1).”*

There are no prohibitions in Section 152 regarding a Green Procurement Policy and/or a Green Procurement registration process. Rather one of the objectives of Local Government is specifically to promote a safe and healthy environment, which is consistent and compatible with Green Procurement.

Section 217 (1) of the Constitution provides the point of departure for procurement and determines that: -

- “1(1) When an organ of state in the national, provincial or local sphere of government, or any other institution identified in national legislation, contracts for goods or services, it must do so in accordance with a system which is fair, equitable, transparent, competitive and cost-effective.*
- (2) Subsection (1) does not prevent the organs of state or institutions referred to in that subsection from implementing a procurement policy providing for:-*
- (a) categories of preference in the allocation of contracts; and*
  - (b) the protection or advancement of persons, or categories of persons, disadvantaged by unfair discrimination.*

- (3) *National legislation must prescribe a framework within which the policy referred to in subsection (2) may be implemented.”*

Sections 215 to 219 of the Constitution further require that the National Treasury introduce uniform norms and standards within Government to ensure transparency and expenditure control measures, which should include best practices related to procurement and provisioning systems.

Section 24 of the Constitution stipulates that :-

*“Everyone has the right –*

- (a) to an environment that is not harmful to their health or well-being; and*
- (b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that –*
  - (i) prevent pollution and ecological degradation;*
  - (ii) promote conservation; and*
  - (iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.”*

As a result there are no constitutional provisions preventing the implementation of a Green Procurement Strategy or a Green Procurement registration process.

## **7.2 ENABLING LEGISLATION FOR A PREFERENTIAL PROCUREMENT SYSTEM**

Section 217 (3) of the Constitution confers an obligation for National Legislation to prescribe a framework providing for preferential procurement

The Preferential Procurement Policy Framework Act, 2000 (Act 5 of 2000) gives effect to Government’s priority of empowering historically disadvantaged persons. This Act and its accompanying Regulations were promulgated to prescribe a framework for a Preferential Procurement System and incorporate the 80/20 and 90/10 preference point systems.

Neither this Act nor the Regulations there under place limitations on Green Procurement or a registration process in terms of a Green Procurement Policy.

### **7.3 FINANCIAL ENABLING LEGISLATION**

The Public Finance Management Act, 1999 (Act 1 of 1999 as amended by Act 29 of 1999) ("PFMA") was promulgated to regulate financial management in the National and Provincial spheres of Government. This is to ensure that all revenue, expenditure, assets and liabilities of those Governments are managed efficiently and effectively.

The relevant provisions in this Act pertaining to Green Procurement are found in Section 76(4)(3) which provides that the National Treasury may make regulations or issue instructions applicable to all institutions concerning the determination of a framework for an appropriate procurement and provisioning system which is fair, equitable, transparent, competitive and cost-effective.

In 2003 the National Treasury released the Supply Chain Management Policy and this policy applies to the acquisition and disposal of all goods, services, construction and road works and immovable property of all constitutional institutions, public entities, national and provincial departments, trading entities, municipalities and municipal entities and all school governing bodies.

In terms of the PFMA as well as the Supply Chain Management Policy the responsibility for Supply Chain's Management is placed on the Accounting Officer and in the case of municipalities on the Municipal Manager.

The Supply Chain Management Policy and the framework issued in terms thereof, determine specific norms and standards for Supply Chain Management and the objectives of this Policy are, amongst others, to create a common understanding in interpretation of Government's preferential procurement policy objectives and to promote consistency in respect of Supply Chain Policy and other related policy initiatives in Government.

Nothing contained in the PFMA or in the Supply Chain Management Policy indicates that a Green Procurement Policy or registration process in terms of a

Green Procurement Policy will be in contravention of any of the provisions of the Act or policy.

#### **7.4 LOCAL GOVERNMENT: MUNICIPAL FINANCE MANAGEMENT ACT**

The purpose and intent of and with the Municipal Finance Management Act, 2003 (Act 56 of 2003) (MFMA) is stated as follows in the preamble thereto :-

*“To secure sound and sustainable management of the financial affairs of municipalities and other institutions in the local sphere of Government; to establish treasury norms and standards for the local sphere of Government; and to provide for matters connected therewith.”*

Chapter 11 of the MFMA deals with goods and services and Part 1 of Chapter 11 with Supply Chain Management.

Section 111 of the MFMA makes it compulsory for each municipal entity to have and implement a Supply Chain Management Policy. Section 115 of the Act provides that the Accounting Officer of a Municipality or municipal entity must implement the Supply Chain Management Policy and must take all reasonable steps to ensure that proper mechanisms and separation of duties in the Supply Chain Management System are in place to minimise the likelihood of fraud, corruption, favouritism and unfair and irregular practices.

Section 112 sets out a whole list of requirements that must at least be covered by a Supply Chain Management Policy. Of importance in this regard, is that the policy should include the range of Supply Chain Management processes that municipalities and municipal entities may use, including tenders, quotations, auctions and other types of competitive bidding, and that they may use a particular type of process as well as the screening processes and security clearances for prospective contractors on tenders or other bids above a prescribed value. The requirements also provide for barring of certain categories of people, the invalidation of recommendations or decisions that were unlawfully or improperly made, taken or influenced and contract management and dispute settling procedures. It is also stipulated that the regulatory framework for municipal Supply Chain Management must be fair, equitable, transparent, competitive and cost-effective.

This regulatory framework is prescribed in Chapter 2 of the regulations (i.e. the Local Government: Municipal Finance Management Act 2003, Municipal Supply Chain Management Regulations published in Government Notice 868 of 2005). From a perusal of these regulations it is clear these regulations are only giving effect to the requirements stipulated in Section 112 of the the MFMA Act.

Once again there is nothing provided in terms of the MFMA or its regulations that will prohibit the implementation of a Green Procurement Policy or Green Procurement registration process.

## **7.5 LOCAL GOVERNMENT: MUNICIPAL SYSTEMS ACT**

It is also necessary to consider some of the provisions of the Local Government: Municipal Systems Act, 2000 (Act No. 32 of 2000) (“LGMSA”).

Section 76 of the LGMSA provides for the provision of Municipality services through internal as well as external mechanisms. It stipulates that, if a service is provided through an external mechanism, it must be done through a service delivery agreement and the municipality must select the service provider through selection processes which :

1. are competitive, fair, transparent, equitable and cost-effective;
2. allow all prospective service providers to have equal and simultaneous access to information relevant to the bidding process;
3. minimise the possibility of fraud and corruption;
4. make the municipality accountable to the local community about progress with selecting a service provider and the reasons for any decision in this regard; and
5. takes into account the need to promote the empowerment of small emerging enterprises. (Section 83 of the LGMSA).

Section 83 also provides that a Municipality may determine a preference for categories of service providers in order to advance the interest of persons disadvantaged by unfair discrimination, as long as the manner in which such preference is exercised does not compromise or limit the quality, coverage, cost and developmental impact of the services. Such a selection process must be



competitive, fair, transparent, equitable and cost-effective, and may be provided for in other applicable national legislation.

Although there are no obvious reasons why a Green Procurement Policy and registration process will not be in accordance with the Municipal Systems Act, careful consideration should be given to the requirements for competitive bidding as set out in Section 83 and specifically the requirement to make the Municipality accountable to the local community about progress with selecting service providers and the reasons for any decision in that regard.

## **7.6 ENVIRONMENTAL LEGISLATION**

Legislation pertaining to Environmental Policies and Management is abundant and all these pieces of legislation require local government to develop and implement policies to enforce effective environmental management.

The critical shortages in energy, water and landfill sites, as well as irreparable harm from pollution and the threat of climate change, require that Government departments in all spheres of Government roll out legislation to regulate the use of limited resources and to protect the environment from further degradation. In this regard the most important piece of legislation is the National Environmental Management Act, 1998 (Act No. 107 of 1998).

### **7.6.1 National Environmental Management Act**

The National Environmental Management Act (“NEMA”) provides the general framework within which environmental management and implementation plans must be formulated and implemented. It specifically requires that development must be socially, environmentally and economically sustainable taking into consideration all relevant factors.

NEMA is a comprehensive piece of legislation that gives effect to the constitutionally guaranteed right to a healthy living and working environment and provides legal power to prevent or limit environmental degradation by the activities of all spheres of government as well as the private sector.

NEMA does not address sustainable procurement or Green Procurement, but clearly supports and encourages any initiative to improve the environment and to regulate and manage environmental matters. It follows that a Green Procurement Policy and Registration process will not *per se* be in contravention of NEMA.

### **7.6.2 Environment Conservation Act**

The objectives of the Environment Conservation Act, 1989 (Act No. 73 of 1989) are to reduce potential negative environmental impacts of activities related to development and to promote sustainable development.

The Act set out procedures for environmental impact assessments that must be complied with before certain economic activities can commence.

### **7.6.3 National Environmental Management: Waste Act**

The National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) is a comprehensive piece of legislation dealing with the reduction, re-use, recycling and recovery of waste and all waste management activities. It places a huge responsibility on Municipalities to exercise its executive authority to deliver waste management services and to properly prepare for waste management.

There is nothing contained in this Act that will limit a Green Procurement Policy and this Act illustrates the important role of local Governments in enforcing Environmental Law and policies.

## **7.7 OTHER LEGISLATION AND POLICY DOCUMENTS**

The following pieces of legislation and policy documents were also considered:-

1. Hazardous Substances Act, 1973 (Act 15 of 1973);
2. National Environmental Management: Air Quality Act, 2004 (Act 39 of 2004);
3. White Paper on Environmental Management Policy for South Africa, Department of Environmental Affairs and Tourism, May 1998;
4. White Paper on the Energy Policy of the Republic of South Africa, 1998;

5. White Paper on Integrated Pollution and Waste Management for South Africa, March 2000;
6. A National Climate Change Response Strategy for South Africa, September 2004;
7. Draft Green Paper on the Consumer Policy Framework, September 2004; and
8. Consumer Protection Act, 2008 (Act 68 of 2008).

There is no indication in any of the mentioned pieces of legislation and reports that the contents of the strategy will not be in accordance with the statutory requirements or regulatory framework.

From the perusal of all the mentioned legislation and policy documents, it is clear that there are no over-arching policies that specifically promote the need for Green Procurement. Most of the guidelines and policies reviewed focus strongly on strategic planning and are clear and to the point, but the “How to Do” Guidelines for South African policies are few and far between. Departmental Guidelines vary a lot in detail, from being highly prescriptive to tremendously vague.

Some of the other shortcomings that became clear in reviewing these policy documents are:-

1. inter-departmental and inter-governmental co-operation is often mentioned, but little thought is given to how this should work in practice;
2. it is unclear how much buy-in or input has been obtained from the different spheres of government and other government departments when these guidelines and policies were drawn up;
3. policies and the way they are being implemented are not audited. Most policies move slowly and do not always keep up to date with international experience.

Provincial legislation from the Eastern Cape Government was also reviewed and from what could be gathered there are no provincial legislation dealing with environmental management or with any policies pertaining to Green Procurement specifically.

## **7.8 LOCAL GOVERNMENT: NELSON MANDELA BAY MUNICIPALITY**

The executive and legislative authority of a municipality is exercised by the Council of the municipality and the Council takes all the decisions of the municipality (Section 11(1) of the Local Government: Municipal Systems Act, 2000).

Section 11(3) of the Local Government: Municipal Systems Act, 2000 stipulates how a municipality exercises its legislative or executive authority and included herein are, amongst others, the following :-

1. developing and adopting policies, plans, strategies and programs, including setting targets for delivery;
2. promoting and undertaking development;
3. implementing applicable national and provincial legislation and its by-laws;
4. providing municipal services to the local community, or appointing appropriate service providers and monitoring and regulating those services;
5. preparing, approving and implementing budgets;
6. monitoring the impact and effectiveness of any services, policies, programs or plans;
7. promoting a safe and healthy environment; and
8. passing by-laws and taking decisions on any of the above-mentioned matters.

By-laws are made by decisions taken by a municipal Council in accordance with the rules and orders of the Council and with a supporting vote of a majority of its members (Section 12 of the Municipal Systems Act).

A municipality must compile and maintain a compilation of all its by-laws and this compilation is known as the municipal code.

## **7.9 MUNICIPAL CODE OF NELSON MANDELA BAY MUNICIPALITY**

The by-laws for the NMBM included in the municipal code were also perused. These included, amongst others, the Air Pollution Control by-law, Customer Care and Revenue Management by-law, Disaster Management by-law; Fire Safety by-law, Municipal Health by-law and Waste Disposal by-law.

There is nothing contained in any of these by-laws that, in our view, prohibit a Green Procurement policy or the contents of client's strategy document.

## 7.10 POLICIES

The following policies pertain to environmental and procurement matters. The first policy is the Environmental Policy for the Nelson Mandela Metropolitan Municipality, dated October 2004 and the second is the Supply Chain Management Policy. The Supply Chain Management Policy was adopted by the municipal Council in its present and revised form on 26 March 2009.

These two policies form part of a total of 45 policies adopted by the NMBM, but are clearly the only policies that have a direct relevance in and impact on client's strategy document.

The recommended additions to both policies (Section 4 of this report) provide correctly for the inclusion of a Green Procurement strategy.

What is however of great importance is that the Supply Chain Management Policy provides, in Section 3 thereof, for the manner in which and the procedure to be followed to amend the Supply Chain Management Policy. According to this section the accounting officer must at least annually review the implementation of the policy and when the officer considers it necessary, submit proposals for the amendment of the policy to the Council. This provides a great opportunity for the NMBM to include the strategy and proposed amendments when the annual review is undertaken.

The Supply Chain Management policies and Environmental policies of both Johannesburg and Cape Town municipalities were perused with the view to comparing same with the policies of NMBM. These policies are very much in line with the policies of NMBM and it is interesting to note that none of these policies provide for a Green Procurement strategy or registration process in terms of such procurement.

With regards to implementing the strategy, it is clear that the NMBM will have to ensure that policies are amended to provide for Green Procurement. The legislative environment places an obligation on the NMBM to ensure that their activities regarding environmental management and protection are current and commits the

NMBM to sustainable development and the upholding of environmental rights enshrined in Section 24 of the Constitution.

### **7.11 GO GREEN CAMPAIGN**

As part of its commitment and obligation towards conserving and protecting the environment, the NMBM also launched a Go Green Campaign aimed at ensuring the effective and responsible use and management of natural resources. This campaign consists of a number of initiatives taken by the NMBM in emphasising and recognising the need to manage our natural resources more effectively and responsibly.

This initiative or campaign can also afford the NMBM with an opportunity to promote the principles of Green Procurement with the officials and decision makers of the NMBM.

### **7.12 ENVIRONMENTAL LEGAL REGISTER**

The NMBM published a tremendously helpful Environmental Legal Register (“the Register”) for the Nelson Mandela Bay Municipality 2009/2010. The purpose of this publication is set out as follows in the document :-

*“The objective of this document is to provide guidance to municipal officials regarding the environmental legislation that may be applicable during the normal execution of their duties.”*

It is stated in the document that the register is not a compendium of all environmental legislation, but the register includes a summary of the main environmental legislation and Bills published before 30 June 2009. This document is regarded as important for the following reasons :-

1. It shows an intent on the part of the NMBM that it is serious about the impact and implementations of environmental legislation.
2. It summarises the main environmental legislation as it applies to the activities, products and services of the NMBM.

3. It refers municipality officials and users of the register to the Public Health Directorate, Environmental Management Sub-Directorate for assistance regarding the interpretation of legislation.
4. There is nothing contained in this summary of environmental legislation that will prohibit the implementation of the Green Procurement Policy or a registration process to give effect to Green Procurement policies.

### **7.13 LEGAL REMARKS**

Green Procurement targets are fast becoming a very important instrument around the world for companies and Public Section Organisations to unlock sustainable value in their Supply Chains. Several governments are in the process or have already implemented recommendations to achieve Green Procurement targets. These recommendations include :-

1. drawing up clear and precise technical specifications for procurement, using environmental factors where possible;
2. considering which products or services are the most suitable on the basis both of their environmental impact and factors such as the information available to organisations, what products are on the market, technologies available, costs and disability;
3. establishing selection criteria for Green Procurement; and
4. using contract performance clauses as a way of setting additional environment conditions in contracts.

The international trend towards Green Procurement will most definitely soon become a relevant factor in procurement policies in South Africa. In this regard the NMBM's strategy is a plausible (and laudable) effort to set the process in motion and will ensure that the NMBM will be at the forefront of developments in this regard.

The implementation of Green Procurement Policies and the criteria according to which implementation will take place, will surely have to meet stakeholder expectations and will need to be sustainable, profitable, in line with complex market expectations and at the same time also ensure the participation of previously disadvantaged people, all of which are definitively dealt with in this strategy.

The NMBM will be faced with very many challenges in achieving its goal to implement an effective Green Procurement Strategy and the NMBM is fully aware of these challenges.

The NMBM's strategy document and Green Procurement proposals are breaking uncharted territory.

The legal opinion and input is limited to addressing any possible obstacles or impact pertaining to the legislative and regulatory environment in which the NMBM's proposals will operate. In this regard the NMBM's proposed Green Procurement Strategy will comply with the legislative and regulatory requirements.

## **8. ECONOMIC ASSESSMENT**

A macro-economic assessment would only be able to be completed once the baseline information from companies has been received as part of the registration process.

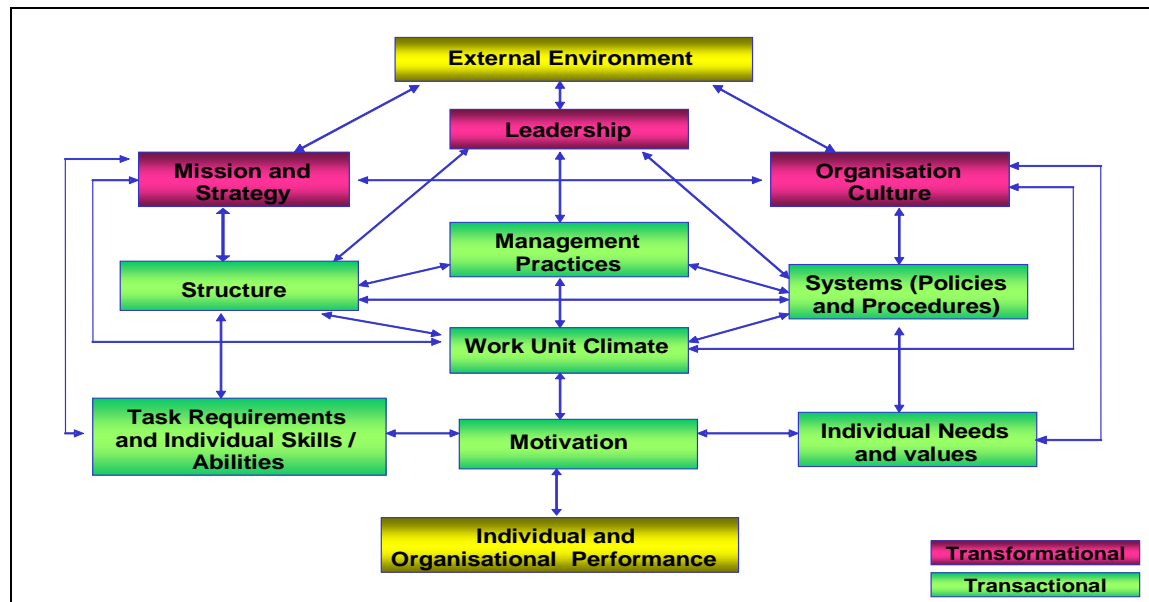
However a preliminary view was undertaken on companies (throughout South Africa) that have been proactive in implementing green procurement. This was conducted as part of the initial public participation process undertaken. Case studies were included in the Background Information Document (BID) which presented a variety of businesses (small, medium and large) of how cost savings were achieved by improving efficiency within their operations and the implementation of greener actions. Refer to Addendum A for a copy of the case studies.

## **9. HUMAN RESOURCES**

### **9.1 HUMAN RESOURCES MODEL**

The structure of an organisation is the arrangement of functions and people into specific areas and levels of responsibility, authority, and relationships to ensure the effective implementation of strategy. An organisation's structure is a key determinant of organisational effectiveness but cannot be viewed in isolation from other variables – see Burke Litwin Model of Organisational Change.





**Figure 9.1: The Burke Litwin Model**

From an organizational change perspective, it is important to recognize that the mission and strategy, leadership and culture (see red/pink blocks) carry more weight and have more impact on the organisation than any of the other transactional factors (see green blocks), including the organisation's structure. The structure, as mentioned above, is essentially required to implement the organisation's mission and strategy but is dependent on many factors including the leadership style and management practices that are prevalent at any given point in time; the policies and procedures that have been adopted; as well as the task requirements (including business processes) and individual skills needs.

#### Application of the Burke Litwin Model to NMBM:

In order to be successful the department must have the following:

- A clear mission and strategy.
- Strong leadership.
- A culture in the department that supports the mission and the leadership.

Since "structure follows strategy" and "form follows function" it is useful to view strategies and functions from the perspective of an organisation's **change** and **sustained** agendas. An organisation's change agenda usually arises from an analysis of external opportunities and threats and internal strengths and weaknesses. Certain unique skills are often required to implement this agenda – these may be very different from the skills sets that are needed to implement the

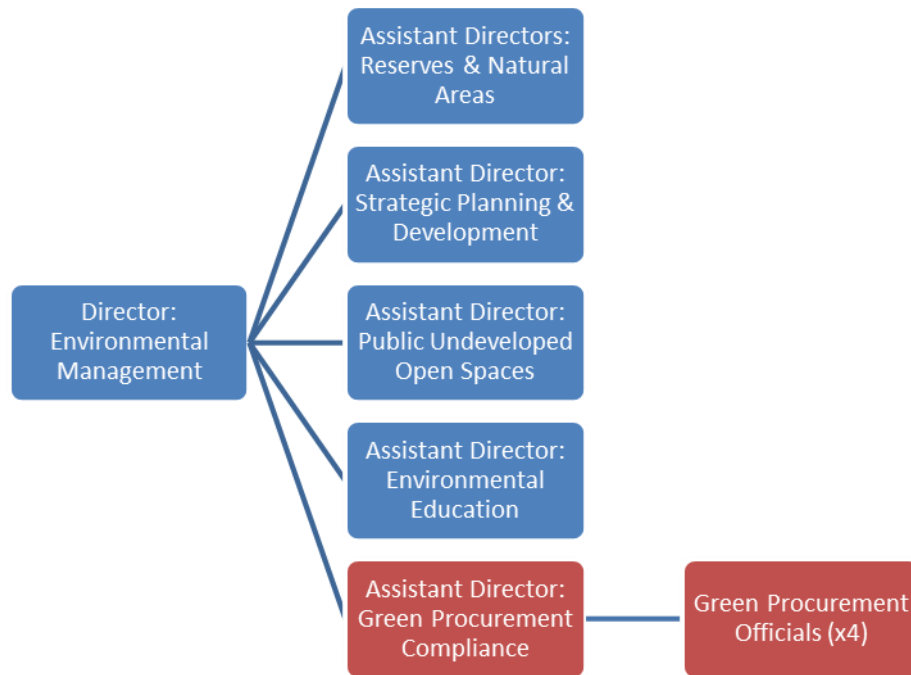


## 9.2 A FEW KEY PRINCIPLES OF ORGANISATIONAL STRUCTURE

- Strategy informs structure - the strategy needs to drive the organisational structure design. The focus is on what the Sub-Directorate wants to achieve, and whether or not the current organisational structure can deliver.
- There is no absolute – every structure contains advantages and challenges. The leadership demand is to recognize this and leverage the advantages, while managing the challenges.
- A structure must intrinsically be subject to regular review – as the primary objectives of a strategy are achieved the skills needs within the organization adapt. If the reviewed strategy no longer requires certain functions these must be morphed to concur with the new strategy.
  
- The primary challenge in structure is the persistent battle between bureaucracy (often contained in centralization) and anarchy (often contained in federal structures). It is seldom that an exclusive structure performs adequately.
- The well-known communication and co-operation dilemma also arises from organisational culture, but can be worsened by a structure that promotes isolationism / silos. Again leadership practices drive the capacity of an organization to manage the need to integrate functional silos.
- Never expect a structure to reduce the need for strong leadership. One of the greatest downfalls of public sector organizations with vast vertical and horizontal scope is the belief that inserting controls implies the option to reduce management skills.

## 9.3 PROPOSED STRUCTURE

The following figure presents the proposed departmental organogram for the Environmental Management Sub-Directorate (red blocks indicating the proposed positions for green procurement):



**Figure 9.3: Proposed Organogram**

#### 9.4 RESPONSIBILITIES

The responsibility to implement the green procurement would lie within the Environmental Management Sub-Directorate, under a new section for Green Procurement Compliance. This section would include an Assistant Director and four green procurement officials.

The Assistant Director's responsibilities would include the overall management of the section as well as being a member on the various supply chain committees. As a result the person required for this position would need to have a comprehensive knowledge of green procurement.

The green procurement officials would be responsible for:

1. Training, education and awareness building, both for internal NMBM officials and with the NMBM suppliers.
2. Registrations.
3. Auditing and verifications.

## **10. IMPLEMENTATION PLAN**

### **10.1 APPROACH**

The implementation of the Green Procurement Strategy will be a multi-faceted (phased) approach. The following key aspects will need to be undertaken, the timing of which is critical if the strategy is to succeed:

1. Buy in from Council on the need and implementation of the strategy.
2. Education and awareness of business.
3. Development of Registration Systems.
4. Registration process for businesses.
5. Linking to Tradeworld Database.
6. Ongoing auditing of information on the registration.
7. Capacity building within the Municipality.

### **10.2 OBJECTIVES**

The overarching objective of the green procurement strategy is to ensure that suppliers registered on the NMBM supplier database and any new suppliers obtain a Green Certificate from the NMBM. Thereby confirming the suppliers commitment to being environmentally responsible within their business operations and as a result the service supplied to the NMBM. This Green Certificate may also form part of the tender documentation required for tenders.

### **10.3 IMPLEMENTATION ACTIONS**

The implementation phases are proposed to be conducted over a two year period with auditing occurring in the third year. Please refer to Addendum D for a breakdown of the implementation schedule.

#### **10.3.1 Year 1 - Phase 1: Council Agreement**

No strategy will work unless the Council agrees to the process. In order to expedite the process, a workshop will be required with the Council in order to take them through the strategy and to define the overall duration of implementation. The workshop will require planning and the preparation of appropriate materials. The responsibility for these actions will be with the Environmental Management: Director

/ Strategic Planning & Development: Assistant Director together with the Supply Chain Management: Director.

### **10.3.2 Year 1 - Phase 2: Capacity Building within the NMBM**

It has been proposed in this strategy, that due to the complexity of the registration and auditing process, the function needs to remain within the Municipality. The Human Resource recommendation is that a separate stream is created within Environmental Management, consisting of an Assistant Director with four officials to undertake the actual registration process and to audit the registrations on an *ad hoc* basis.

These staff members will thus require training not only in the actual registration and audit process, but possibly more importantly, on the actual principles on which the strategy is based. This capacity building is important as it defines the environment in which the staff will operate and will define their suitability to carry out their function.

Other municipal staff (especially from Supply Chain Management) will also require awareness training so that they are well informed to answer queries from the public.

### **10.3.3 Year 1 - Phase 3: Education and Awareness Programme**

The companies currently registered on the NMBM supplier database and those companies that wish to be registered will need to be educated on the strategy. This programme is critical for the success of the implementation of the strategy. Without the absolute understanding of the process, the requirements in terms of time and financial resources and the need to measure certain indicators in the future, the strategy will not be as successful as the Municipality would hope for. This would be because more resources would be required on a policing function rather than the actual application.

### **10.3.4 Year 1 - Phase 4: Development of Registration Systems**

A number of systems will be required to be used in the registration process. These include:

1. Database system to manage the data and information required for registration.
2. Filing system to manage hardcopy documents and which will be integrated to the existing municipal filing system.

3. Monitoring and auditing procedures to track compliance and to report to management on a regular basis.
4. Linkage to the soon to be upgraded Customer Care system, whereby queries can be forwarded to the most appropriate person and the trail of the query logged.

### **10.3.5 Year 2 - Phase 5: Registration**

Registration will be undertaken by the green procurement officers in the Municipality. It is proposed that SMMEs are targeted initially and more time will be required to assist these smaller companies with registration. Once the smaller companies are registered, the larger companies can be targeted, assuming they have not already been pro-active and have registered already. The registration process will be a learning curve for all parties, as there has been no exposure in South Africa to this type of strategy.

### **10.3.6 Year 2 - Phase 6: Linking to Tradeworld**

Since Tradeworld will need to confirm for the Municipality at large whether a particular company has a Green Certificate or not, the system to enter a confirmation on the Tradeworld Database will be needed. The actual process flow of information will also need to be developed and an electronic copy of the certificate stored as an item to be accessed should it be required.

### **10.3.7 Year 3 - Phase 7: Auditing of Registrations**

The auditing of the registration on an *ad hoc* basis will need to be done to satisfy the requirement for reporting to management and to Council. The auditing process will also need to be periodically independently audited by a third party, to ensure that appropriate standards are being maintained and that fairness is applied across the board.

## **11. TRAINING AND AWARENESS**

### **11.1 PUBLIC PARTICIPATION PROCESS UNDERTAKEN**

An initial round of public participation was conducted at the start of the project. This included the placement of a newspaper advertisement in the local newspaper (Appendix C-1) in order to raise awareness with the general public and suppliers as well as to gauge their response for the proposed strategy.

Information packs were assembled consisting of a BID (Appendix C-2) and case studies documents (Appendix A). These were sent out to any person that requested additional information on the proposed strategy and who registered as an Interested and Affected Party (I&AP). These documents were also to be made available on the NMBM website with an online registration form. These documents were not posted and only the online registration form was made available. As a result a number of queries were received from the public on a wide variety of topics.

Registered I&APs as well as suppliers on the NMBM database were randomly selected and individual meetings were held with these companies. The purpose behind these meetings was to discuss the proposed strategy and to gain more comments thereon.

## **11.2 PROPOSED TRAINING AND AWARENESS PLAN**

The Training Plan goes hand in hand with the implementation plan, as each aspect of implementation will require some form of training. The following is proposed for training and awareness to be in line with the implementation plan:

### **11.2.1 Year 1 - Phase 1: Council**

The training plan for Council will be based on an interactive workshop, where key aspects can be discussed. Since this is a normal procedure for Council, no specific training is required.

### **11.2.2 Year 1 - Phase 2: Capacity Building within the NMBM**

A comprehensive training programme will be required to build the necessary capacity within the Municipality (Environmental Management Sub-Directorate and Supply Chain Management Sub-Directorate). The training programme will require covering the following aspects:

1. Background to green procurement.
2. Understanding the Registration Process.
3. Understanding the indicators.
4. Understanding auditing.
5. Understanding databases.
6. Understanding monitoring and reporting.



Other members within the NMBM will require an awareness programme that will:

1. Provide the background to the green procurement strategy.
2. Provide information on the registration process and the indicators.
3. Provide the links as to where registration takes place and the contact details of the responsible staff members.

### **11.2.3 Year 1 - Phase 3: Education and Awareness Programme**

The education and awareness programme for the general public and companies looking to register will need to take the form of two prime approaches:

1. Broad spectrum advertising and media awareness.
2. Information packs of specific information for companies to find out more about registration.

These programmes will need to be developed and presented in a non-technical manner and possibly may need to be translated in another language to assist with information dissemination.

### **11.2.4 Year 1 - Phase 4: Development of Registration Systems**

Where appropriate training materials will be developed to assist with maintenance and updating procedures for the systems that are developed.

### **11.2.5 Year 2 - Phase 5: Registration**

The registration process will require intense training for the officials employed by the Municipality. A comprehensive training programme will need to be developed which focuses on all aspects of the registration process, from information supplied by companies, to entering the information onto the database, to adhering to the filing system for hardcopy documents.

### **11.2.6 Year 2 - Phase 6: Linking to Tradeworld**

Tradeworld staff will need to be trained up on the registration process for information purposes and what to look for in the Green Certificate. Training will be provided by the Municipality and will include the provision of a flow chart and checklist to assist Tradeworld.

### **11.2.7 Year 3 - Phase 7: Auditing of Registrations**

Standard auditing procedures will be required to train the officials in the process. It is proposed that a third party organization be contracted to provide the necessary training.

## **12. CONCLUSION**

The registration on the supplier database would require each supplier to be compliant with the Green Procurement Strategy. Compliance would mean awarding of a Green Certificate. To obtain a Green Certificate, suppliers would need to provide documentary evidence for each of the identified drivers for their service area.

The implementation of the strategy will need to be conducted in phased approach. The training aspects goes hand in hand with the implementation plan, as each aspect of implementation will require some form or training.

The approach followed in this strategy is to make the process the least onerous on companies, and thus all information that will be needed to be supplied is readily available, and if need be, independently verifiable.

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# **ADDENDUM A**

## **SOUTH AFRICAN CASE STUDIES**

**GREEN PROCUREMENT IMPLEMENTATION STRATEGY FOR THE NELSON MANDELA BAY MUNICIPALITY**

**CASE STUDIES**

• **INTRODUCTION**

The Nelson Mandela Bay Municipality is embarking on the development of a Green Procurement Strategy for its suppliers. While the immediate reaction is that this will increase the cost of doing business with the municipality, in fact the opposite is generally true. This short document sets out some examples of what improving efficiency can mean to a company's bottom line. Being green puts money in the bank.



• **ENERGY SAVINGS**

**Goldfields**

Mining company, Goldfields, replaced their conventional sanitary water heating plants with heat pumps. The heat pumps were used to provide hot sanitary water for 1600 mine workers. The table below shows the operational costs and energy consumption of a conventional electrical resistance heating system versus a heat pump-based system for this specific 1600-user change house case study.

	Conventional electrical heating system	Heat pumps
Annual Energy Consumption	1 269 000kWh	476 000kWh
Operational Cost	R 397 800	R 144 200
Annual Energy Saving		793 000kWh
Annual Operation Cost Saving		R 249 600
Total Installation Costs	R1 mil	R2 mil
Payback period		2 years

## GREEN PROCUREMENT IMPLEMENTATION STRATEGY FOR THE NELSON MANDELA BAY MUNICIPALITY

### CASE STUDIES

#### General Motors South Africa

General Motors South Africa (GMSA) has cut energy costs at its two Port Elizabeth plants by R11.34 million a year. R7.2 million of this was achieved by implementing just three strategies:

- Reducing the paint shop spray booth operating temperature.
- Facilitating a drop in spray booth operating humidity.
- Better controlling of the paint shop oven start-up and shutdown times.

Around 70% of the energy use comes from the paint shop and vehicle finishing. GMSA energy costs make up about 10% of the company's annual manufacturing costs.

GMSA has also reduced the lighting levels in the plant by a calculated 200 kW, and retrofitted 8-ft fluorescent fittings with 5-ft energy efficient fittings, reducing energy consumption and demand in terms of lighting by 25%.

A lean approach to print, scan, fax, and copy operations has also reduced the number of devices by 45%, which has reduced energy, paper and ink consumption significantly.

#### Toyota

Toyota identified feasible electricity efficient lighting retrofit opportunities within the plant and replaced 1,500 of their 400 W mercury-vapour high bay lamps with fluorescent high bay lamps. In addition, they realized that 500 of their 400 W mercury vapour lamps provided unnecessary lighting and could actually be switched off permanently. The cost of the retrofitting was R800 000 providing a saving of approximately R1 million per year. This provides a payback period of less than 1 year.

The thermostats of approximately 200 geysers were turned down from 80 C to 50 C. Solar water heating was installed to provide hot water for the ablutions and canteens for 3 sections of the plant. The cost of the solar water heaters totaled R3.5 million providing a cost saving of R1.2 million per year, a payback period of 2.8 years. A power equaliser was installed in two sections to keep the voltage constant. Although this has not only resulted in reduced electricity consumption, it has also improved the welding quality which in turn has reduced the amount of scrap. The cost of the power equalizer was R1.2 million providing a cost saving of R480 000 per year and a payback period of 2.5 years.

## GREEN PROCUREMENT IMPLEMENTATION STRATEGY FOR THE NELSON MANDELA BAY MUNICIPALITY

### CASE STUDIES

#### Etlin Trading

Etlin Trading specializes in cold storage facilities to store approximately 12,000 tons of meat, fruit, vegetable and dairy products annually. Motivation to reduce electricity consumption was to improve efficiency and profitability of the plant. The refrigeration plant was identified as the main electricity consumer of their activities hence low cost interventions were implemented to result in electricity savings in the refrigeration process. These interventions were:

- To switch off three of four compressors during the day and use the second compressor during the night.
- Switching off the standby unit completely.
- Maintaining sufficient insulation and storage technique for cold storage facility.
- Installing timer switches to automate the process.

The cost of the energy saving interventions was R209 000 providing a cost saving of R727 273 per year, a payback period of less than 3 months.

#### Lifestyle Home Garden Centre

The Building Management System (BMS) at the Lifestyle Garden Centre is programmed to control and monitor the entire building's mechanical and electrical equipment including lighting, heating, ventilation, air-conditioning, refrigeration, and fire and security systems. The BMS enables management, with the help of relevant specialists, to electronically optimize the use of this equipment and ensures that as the Center approaches its maximum allowable demand, non-essential loads are sequentially shut down so that the building never exceeds the allocated 600kVA. The cost of the BMS was R500 000 providing a cost saving of R933 334 per year and a payback period of 7 months.



## GREEN PROCUREMENT IMPLEMENTATION STRATEGY FOR THE NELSON MANDELA BAY MUNICIPALITY

### CASE STUDIES

#### Durban Electricity Building

A simple timer switch was used to switch off the air-conditioning system after-hours. The system was programmed to turn off after everyone was scheduled to have left work and to turn back on again shortly before they were scheduled to arrive back at work. The cost was R45 000 with a cost saving of R37 576 per year and a payback period of just over 1 year.

An "Energy Awareness Campaign" to reduce their electricity usage was also undertaken. A recent energy audit of the building identified lighting and small energy users (e.g. computers) as a significant opportunity where electricity efficiency can be improved. The aim of the suggested measures was to improve housekeeping by ensuring that lights and small energy users were switched off when not in use (e.g. during lunch breaks or after hours). Effective awareness-raising was seen as key to successfully changing the behaviour of employees. Several measures, such as producing posters and information stickers, circulating regular energy facts via email or intranet, or engaging with staff regarding electricity saving ideas, were implemented. Total cost of the campaign was R30 000 and the total cost saving was R36 850 per year, a payback period of less than 1 year.

#### Danville Park Girls High School

Danville Park Girls High School replaced the existing electrical geyser in the staff quarters with a solar water heater costing R18 000, cost saving of R2 460 per year with a payback period of 7.3 years.

120 of the 100 W incandescent bulbs were replaced with 14 W CFL's and 839 of the 5 foot 75 W fluorescent tubes were replaced with electricity efficient 58 W tubes. Total cost was R16 585, cost saving was R75 698 per year, a payback period of just 2 months.

#### Anchor's Rest (Umhlanga Rocks, Kwa-Zulu Natal)

The elements on two of the geysers at Anchor's Rest were turned down from 70°C to 55°C. This resulted in R0 spent but a saving of R1 790 per year. Anchor's Rest has installed daylight sensors in areas of the guesthouse that require outside lights such as the front entrance, sliding gates and security areas. Cost of the sensors was R118 providing a cost saving of R246 per year.

A solar tube light was installed in two dark areas of the B&B. This eliminated the need for artificial lighting in these areas during daylight hours. The cost of the solar tube lights was R3 200 providing a monetary saving of R615.75 per year.



## GREEN PROCUREMENT IMPLEMENTATION STRATEGY FOR THE NELSON MANDELA BAY MUNICIPALITY

### CASE STUDIES

#### • WATER SAVINGS

##### SA Sea Products

Nozzles were fitted on hosepipes to eliminate water wastage from the continually running hoses, resulting in a 50% reduction in water usage and therefore a saving of R 15 000 per month.

##### MF12 (not their real name)

A small jobbing shop situated in Pinetown, South Africa. The company was established in 1968 and there are 30 employees. MF12 electroplates small to medium size metal objects for individuals and metal-working firms. By implementing a comprehensive water management programme, the water use has been reduced from 31 kl / day to approximately 5 kl / day giving a saving in the region of 550 kl / month.



**Play your part,  
be water smart!**

Save it, or do without it!

- The schools water efficiency and awareness project of 2004 by Cape Town's Water Demand Management Department found that by replacing automatic flushing urinals (AFUs) with user activated flush valves (Cobra FJ6.00), a 5% saving could be made. In 206 schools surveyed there were 524 AFUs using a total of 619.7 million litres per annum, where the conversion meant a saving of 588.7 million litres @ R5.93/ kilolitre, totally R 3 490 980.00 saved each year thereafter.
- A case study of an ablution facility in a factory used by 200 people each day revealed that water consumption dropped from 3,75 million litres to 1,35 million litres per year, as a result of converting from standard stop taps to metering valves.
- In a Health Club visited by 300 people per day, water consumption in showers could be 8 100 000 litres per year. By using "water saver" showers delivering a maximum of 9 litres per minute, consumption would be reduced to 3 240 000 litres per year, representing a 60% saving.

**GREEN PROCUREMENT IMPLEMENTATION STRATEGY FOR THE NELSON MANDELA BAY MUNICIPALITY**

**CASE STUDIES**

- **WASTE SAVINGS**

**GlaxoSmithKline**

GlaxoSmithKline encouraged its employees to bring mugs to work, thereby eliminating the use of 50 000 polystyrene cups per month and saving the organisation R 7000.00. They redesigned the waste yard for effective recycling, thereby saving R 7700.00 per month on waste removal. Installed rain-water tanks and grey water tanks for irrigation and ablution purposes, and after re-piping the plumbing for toilet flushing realised a saving of 250 000 liters of fresh water per month.



- **CONCLUSION**

From the above case studies it can be seen that cost savings can be seen through the implementation of greener actions, rather than it actually costing more.



# **ADDENDUM B**



## **EXAMPLES OF ENVIRONMENTAL QUESTIONNAIRES**

# **ADDENDUM C**

## **PUBLIC PARTICIPATION DOCUMENTS**

**Addendum C-1: Newspaper Advertisement**

The Herald, 25 November 2009


nelson mandela bay  
MUNICIPALITY

HOST CITY

MUNICIPAL NOTICE-BOARD

GREEN PROCUREMENT IMPLEMENTATION STRATEGY  
REGISTER NOW!

If you are a service or product supplier to the Nelson Mandela Bay Municipality (NMBM), you need to read this notice so that you can register to be kept informed of the NMBM's Green Procurement Implementation Strategy.

**INTRODUCTION**

The Nelson Mandela Bay Metropolitan Municipality (NMBM) recognizes the need to manage natural resources more effectively and responsibly in order to ensure positive effects on health, quality of life and cost of living. As one of the largest procurers of products and services in the region, the NMBM can influence others to manage their use of natural resources and to take responsibility for their product lifecycle costs. The NMBM has, therefore, appointed BKS to assist in developing a Green Procurement Implementation Strategy for all its service and product suppliers. The NMBM is one of the first South African municipalities to develop and implement a green procurement strategy and policy. Green (sustainable) procurement means systematically integrating environmental and social considerations into all procurement activities.

**MOTIVATION FOR PROJECT**

The public sector purchases significant amounts of products and services each year. With such market power, public authorities are not only able to achieve substantial direct environmental, financial and social improvements, but also to exercise considerable influence in shifting the entire market towards the supply of more sustainable products and services. Recognising this, the World Summit on Sustainable Development in 2002 committed public authorities to 'promote public procurement policies that encourage development and diffusion of environmentally sound goods and services'.

The NMBM is leading the way in South Africa in implementing green procurement, of which a fundamental component is to make amendments to the NMBM Supply Chain Management and Environmental Policies in order to give legal status to its green procurement objectives.


**ALL BUSINESSES THAT PROVIDE OR PLAN TO PROVIDE IN FUTURE ANY SERVICE OR PRODUCT TO THE NMBM WILL BE AFFECTED BY THE NMBM'S GREEN PROCUREMENT STRATEGY AND IT WOULD BE IN YOUR BEST INTEREST TO BECOME INVOLVED.**

Suppliers, potential suppliers and any other Interested and Affected Party (I&AP) are requested to register with BKS. This will ensure that you receive an information pack providing you with more information regarding the project as well as to be included on our database to ensure that you are kept informed of the project's progress and allowed the opportunity to comment on all draft documents prior to finalisation and implementation.

**Name of Public Participation Consultant: BKS (Pty) Ltd**  
**Contact Persons: Marti Moolman / Lucille Behrens**

**Marti Moolman:**  
 Tel: 012 421 3615  
 Fax: 012 421 3601  
 Post: P O Box 3173, Pretoria, 0001  
 E-mail: martimo@bks.co.za

**Lucille Behrens:**  
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 E-mail: lucilleb@bks.co.za



To register as an interested and/or affected party, please submit your name, contact information, and substantiated interest in the project to either of the above contact persons by no later than **FRIDAY, 18 DECEMBER 2009**.

Ref. 375

Under the hand of the Acting Municipal Manager, Mr E Ntoba

PLAY YOUR PART - BE WATER SMART

## Addendum C-2: Background Information Document


**GREEN PROCUREMENT IMPLEMENTATION STRATEGY FOR THE NELSON  
MANDELA BAY MUNICIPALITY  
BACKGROUND INFORMATION DOCUMENT**

**INTRODUCTION AND BACKGROUND**


**MOTIVATION**

The Nelson Mandela Bay Metropolitan Municipality (NMBM) recognizes the need to manage natural resources more effectively and responsibly in order to ensure positive effects on health, quality of life and cost of living. The NMBM has, therefore, initiated the development of a Green Procurement Implementation Strategy for all service and product suppliers to the NMBM. As one of the largest procurers of products and services in the region, the NMBM, has the ability to influence others to manage their use of natural resources and to take responsibility for their products lifecycle costs. In doing so, the NMBM is among the leading South African municipalities to develop and implement a green procurement strategy and policy.

Green (sustainable) procurement means systematically integrating environmental and social considerations into all procurement activities. It looks at improving the efficiency of public procurement, while at the same time using public market power to bring about environmental and social benefits. In doing so it is leading by example, influencing the market place, and creating incentives for developing green technologies.



**nelson mandela bay**  
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**goGreen**

<p><b>GREEN PROCUREMENT IMPLEMENTATION STRATEGY FOR THE NELSON MANDELA BAY MUNICIPALITY BACKGROUND INFORMATION DOCUMENT</b></p>	
<p><b>MOTIVATION</b></p>	<p><b>MOTIVATION</b></p>
<p>Key benefits of green procurement include:</p> <ul style="list-style-type: none"> <li>• Cost avoidance</li> <li>• Savings from conserving resources</li> <li>• Less demand for resources</li> <li>• Achieving local environmental and health goals</li> <li>• Achieving local social goals</li> <li>• Driving local innovation (development)</li> <li>• Easier compliance with environmental legislation</li> <li>• Improving public image and increase legitimacy</li> <li>• Support of environmental/sustainability vision and goals</li> </ul>	<p>The public sector purchases significant amounts of products and services each year. With such market power, public authorities are not only able to achieve substantial direct environmental, financial and social improvements, but are also able to exercise considerable influence in shifting the whole market towards the supply of more sustainable products and services. In recognition of this the World Summit on Sustainable Development in 2002 committed public authorities to “promote public procurement policies that encourage development and diffusion of environmentally sound goods and services”.</p>

<p><b>GREEN PROCUREMENT IMPLEMENTATION STRATEGY FOR THE NELSON MANDELA BAY MUNICIPALITY BACKGROUND INFORMATION DOCUMENT</b></p>	
<p><b>AIM OF THE PROJECT</b></p>	<p><b>PROJECT PROCESS</b></p>
<p>The overarching aim of the project is to make amendments to the Supply Chain Management Policy as well as the Environmental Policy of the NMBM through the addition of environmental criteria. This will facilitate the development of an implementation strategy to increase purchases of green products and services in order to improve efficiency, cost effectiveness and continued improvement for the NMBM. Thus encouraging reductions in solid waste generation, energy and natural resource consumption and expand the market for green products and services.</p>	<p>A feasibility study on implementing green procurement into the NMBM was conducted in 2008. The findings of the study indicated that green procurement is a feasible option for the NMBM. This project now focuses on the development of a green procurement implementation strategy. This strategy will include green procurement specifications to be incorporated into the NMBM Environmental Policy and Supply Chain Management Policy. This process will involve the integration of identified key drivers and receivers. An economic assessment will be undertaken to assess the overall financial effect that green procurement may have on the local economy. Furthermore, the legal implications of the green procurement policy will be tested and assessed in accordance to current legalisation. The final stage will involve a green procurement strategy that can be incorporated into the NMBM’s policies.</p>

**GREEN PROCUREMENT IMPLEMENTATION STRATEGY FOR THE NELSON  
MANDELA BAY MUNICIPALITY  
BACKGROUND INFORMATION DOCUMENT**

**PUBLIC PARTICIPATION PROCESS**

As part of the initial process, we would like to hear what the current suppliers think, to record any concerns and to see if these can be incorporated into the overall strategy. We would also like to get input from the broader public at large. To do this we are following a two pronged approach. Adverts will be placed in the local newspaper and all businesses registered on the NMBM's Quadrem (Trade world) database will be sent information packs in order to introduce them to the project. These information packs will consist of a Background Information Document, relevant case studies and a registration sheet. Any interested person from the public, in response to the newspaper advert, will also be sent an information pack. Suppliers will be required to fill in the registration sheet in order to register as an Interested and Affected Party (I&AP). This will ensure that these suppliers are kept informed of the project and process. It will also enable them to comment and to raise any concerns.

**WHO TO CONTACT FOR INFORMATION:**

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**All businesses that provide any service or products to the NMBM will be affected by the green procurement strategy and it will be in your interest to become involved.**

**All interested persons are requested to register by the 18<sup>th</sup> December 2009.**





# **ADDENDUM D**

## **IMPLEMENTATION BUDGET AND SCHEDULE**

**IMPLEMENTATION BUDGET**

<b>IMPLEMENTATION AND TRAINING BUDGET</b>			
<b>Activity</b>	<b>Estimated Cost:</b>	<b>Subtotals</b>	<b>Totals (Excl. VAT)</b>
<b>YEAR 1</b>			<b>R 499 600.00</b>
<b>Phase 1: Council Interactive Workshop</b>		<b>R 48 850.00</b>	
Materials for workshop	R 25 250.00		
Workshop	R 23 600.00		
<b>Phase 2: Capacity Building within NMBM</b>		<b>R 64 200.00</b>	
Preparation of materials for training	R 25 100.00		
Comprehensive training Environmental Management and Supply Chain officials (1 day workshop)	R 22 850.00		
Awareness training NMBM Directorates (1 day workshop)	R 16 250.00		
<b>Phase 3: Education and Awareness Programme</b>		<b>R 223 500.00</b>	
Preparation of awareness materials and info packs	R 23 500.00		
Broad spectrum advertising and media awareness for general public	R 100 000.00		
Information packs for companies - printing and distribution	R 100 000.00		
<b>Phase 4: Development of Registration Systems</b>		<b>R 163 050.00</b>	
Database system development	R 71 300.00		
Integrate with NMBM filing system	R 10 800.00		
Develop monitoring and auditing procedures	R 36 550.00		
Training materials for maintenance and updating procedures for registration systems	R 44 400.00		
<b>YEAR 2</b>			<b>R 498 150.00</b>
<b>Phase 5: Initial Registration</b>		<b>R 413 550.00</b>	
Broad spectrum advertising and media awareness for general public	R 200 000.00		
SMME registration and additional training	R 165 150.00		
Large corporation registration and additional training	R 165 150.00		
Issue green certificate	R 83 250.00		
<b>Phase 6: Link to Tradeworld / NMBM Supplier Database</b>		<b>R 84 600.00</b>	
Development of process flow - flow chart and checklist to assist tradeworld	R 44 400.00		
Incorporate NMBM green certificate into procurement requirements	R 20 100.00		
Training tradeworld staff on registration process for info purposes	R 20 100.00		

<b>IMPLEMENTATION AND TRAINING BUDGET</b>			
<b>Activity</b>	<b>Estimated Cost:</b>	<b>Subtotals</b>	<b>Totals (Excl. VAT)</b>
<b>YEAR 3</b>			<b>R 153 500.00</b>
<b>Phase 7: Independent Auditing of Registrations</b>		<b>R 153 500.00</b>	
Independent 3rd party verification audit	R 153 500.00		

## IMPLEMENTATION SCHEDULE

<b>IMPLEMENTATION AND TRAINING SCHEDULE</b>		<b>Months</b>											
		1	2	3	4	5	6	7	8	9	10	11	12
<b>YEAR 1</b>													
Phase 1: Council Interactive Workshop	2 Months	■	■										
Phase 2: Capacity Building within NMBM	1 Month			■									
Phase 3: Education and Awareness Programme	4 Months				■	■	■	■					
Phase 4: Development of Registration Systems	3 Months								■	■	■		
<b>YEAR 2</b>													
Phase 5: Initial Registration	12 Months	■	■	■	■	■	■	■	■	■	■	■	■
Phase 6: Link to Tradeworld / NMBM Supplier Database	2 Months	■	■										
<b>YEAR 3</b>													
Phase 7: Independent Auditing of Registrations	4 weeks						■						