

MATJHABENG LOCAL MUNICIPALITY



Draft Implementation policy

ENVIRONMENTAL MANAGEMENT PLAN (EMP)

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ACRONYMS

CDS	City Development Strategy
MLM	Matjhabeng Local Municipality
IDP	Integrated Development Plan
IWMP	Integrated Waste Management Plan
LA21	Local Agenda 21
MIEP	Matjhabeng Integrated Environmental Policy
UN	United Nations

DEFINITIONS

Ecological Footprint	Amount of biologically productive land and water needed to supply each person with the renewable resources they use and to absorb of the wastes from such resource use (Miller, 2005)
Environment	The surroundings in which humans exist and that is made up of: <ul style="list-style-type: none"> • The land, water and atmosphere of the earth; • Micro-organisms, plant and animal life; • Any part or combination of the above and the interrelationships among and between them; and • The physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and well-being (NEMA, 1998)
Hazardous Waste	Waste containing or contaminated by poison, corrosive agents, flammable or explosive substances, chemical or any other substance which may pose detrimental or chronic impacts on human health and the environment. Hazardous waste streams typically include: <ul style="list-style-type: none"> • Used oils, lubes, etc. • Electronic waste (E-waste) • Old batteries (car and other) • Fluorescent tubes, sodium lamps • Pesticides (old / expired / redundant or empty packaging / drums) • Paint tins • Chemicals, pharmaceuticals, etc. • Sewage sludge • Incinerator ash (e.g. from hospitals) (refer above) • Hazardous health-care waste, i.e. HCRW (refer above) (Final draft IWMP, 2004)
Integrated Development Plan (IDP)	A plan compiled by local government to prioritize and coordinate development activities and investment as required by legislation.
Local Agenda 21	A comprehensive, participative process seeking to integrate social justice, economic viability and environmental concerns at local level. It reflects the needs, resources and hopes of a community and places these in the global context.
Renewable resource	A resource that can be replenished rapidly through natural processes (trees, fresh surface water, fresh air, fertile soil) (Miller, 2005)
Sustainable development	Development that meet the basic needs of the current generation without preventing future generations from meeting their basic needs. (Miller, 2005)
Socio Economic Space	Man-made open space, e.g. parks.

1. INTRODUCTION

In order to comply with the growing needs of the Matjhabeng population, the Matjhabeng Local Municipality must ensure that all development is economically competitive and socially acceptable. The EMP provides a description of the methods and procedures for mitigating and monitoring impacts. The EMP also contains environmental objectives and targets which the project proponent or developer needs to achieve in order to reduce or eliminate negative impacts. The EMP document can be used throughout the project life cycle. It is however also imperative that the Matjhabeng Local Municipality recognizes and effectively manages the **environment** within which social and economic development exists in order to promote true sustainable development.

In response to this major challenge, the Environmental Resource Management (ERM) section finalized the drafting and approval of the Matjhabeng Integrated Environmental Policy (MIEP). This represents a milestone for the Matjhabeng Local Municipality as never before has there been an overall policy framework dealing with environmental matters in the context of sustainable development.

In an effort to ensure that the MIEP truly facilitates environmental sustainability in Matjhabeng, it is critical that it is successfully implemented. This document represents a plan, referred to as the “*MIEP implementation plan*”, which guides the implementation phase of the MIEP. It specifically outlines:

- The strategic nature of the MIEP and its link to the IDP and LA21;
- The overall implementation strategy of the MIEP which includes:
 - Objectives of MIEP implementation;
 - The overarching MIEP implementation framework;
 - Strategic documents to be drafted and implemented, and;
 - Specific environmental targets to be achieved by the Matjhabeng Local Municipality over the next 5 years

2. THE STRATEGIC NATURE OF THE MIEP: THE LINK WITH LOCAL AGENDA 21 (LA21) AND THE IDP PROCESS

From a three-day Local Government Session during the World Summit on Sustainable Development (WSSD) in 2002, which was attended by various mayors and representatives of the cities of local governments all over the world, arose three critical documents:

- The **Johannesburg Call** is a statement of commitment by local governments of the world to intensify the localized goals and aspirations of the 1992 Rio Summit.
- The **Local Government Declaration** includes recommitments by local government leaders to implement goals and targets of Agenda 21.
- The **Declaration on Sustainable Development by African Mayors** is a commitment to the achievement of sustainable development. Its emphasis is on promoting the principles of sustainable development.

It must also be noted that it is often said that the IDP and LA21 is exactly the same and there are indeed many similarities between the LA21 process and the IDP in terms of its underlying philosophy, principles and processes:



Figure 1: Similarities between LA21 and the IDP

LA21 is a voluntary process (participating local authorities voluntarily signed declarations) and the IDP is a process prescribed by legislation (Municipal Systems Act) - it can thus be said that the IDP process has “legalized” the LA21 process. The IDP can be viewed as the South African municipal planning and development response to LA21.

Since the MIEP has been formulated in line with the LA21 process, it must be regarded as the City of Tshwane’s environmental contribution to the corporate LA21 process and, since LA21 and the IDP are basically the same processes (as explained above), the MIEP must also be regarded as an integral part of the Matjhabeng Local Municipality IDP. The following figure displays this concept:

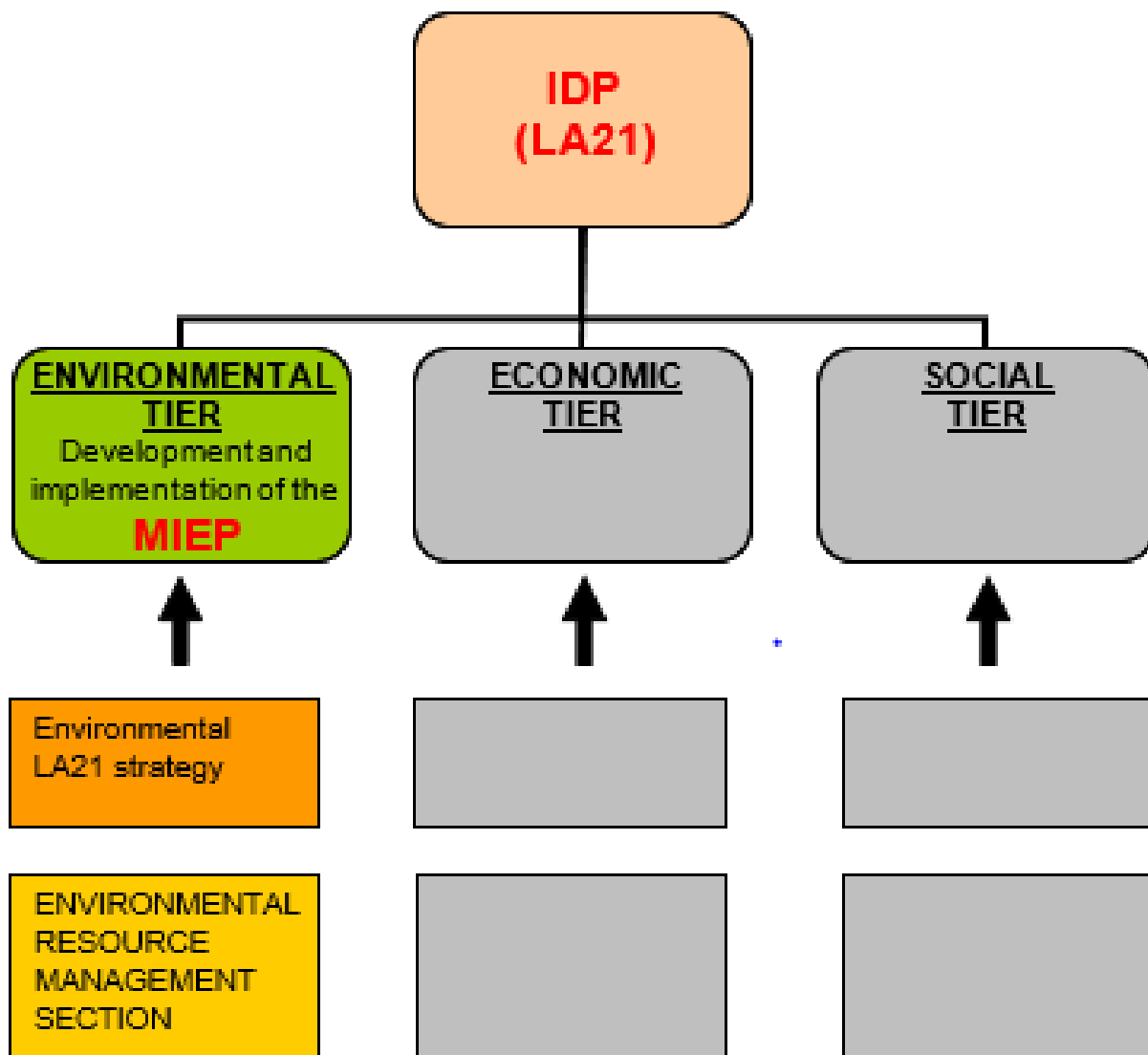


Figure 2: The environmental contribution to the Matjhabeng Local Municipality IDP/LA21 processes

3. THE IMPLEMENTATION STRATEGY

3.1 Objectives

The MIEP will be implemented over a period of 5 years. The objectives of this implementation phase are to:

- Facilitate the realization of the Matjhabeng's corporate and environmental visions;
- Facilitate corporate environmental performance;
- Strive to ensure that Matjhabeng's five key strategic priorities and eleven guiding principles are executed in an environmentally sustainable manner through continuous integration of environmental considerations therein;
- Facilitate compliance to the UN Millennium Development Goals to which the Matjhabeng Local municipality subscribes;
- Facilitate sustainable development in Matjhabeng and to establish the Matjhabeng Local Municipality as a national leader in urban sustainability;
- Reduce the ecological footprint of the Municipality (please note that the ecological footprint is calculated per capita person in the Municipality);
- Promote environmental legal compliance in the Matjhabeng Municipality
- Increase Matjhabeng's competitive edge – making it a municipality where people want to visit, live in and start their businesses in.

3.2 Overarching implementation framework

The overarching MIEP implementation framework is based on methodology as contained in the SABS ISO 14001 Environmental Management System which subscribes a management process of "*Plan – Do – Check – Act*".



Figure 3: Plan – Do - Check - Act Methodology utilized to guide implementation planning The following figure, based on figure 3 outlines the overarching framework to the implementation of the MIEP:

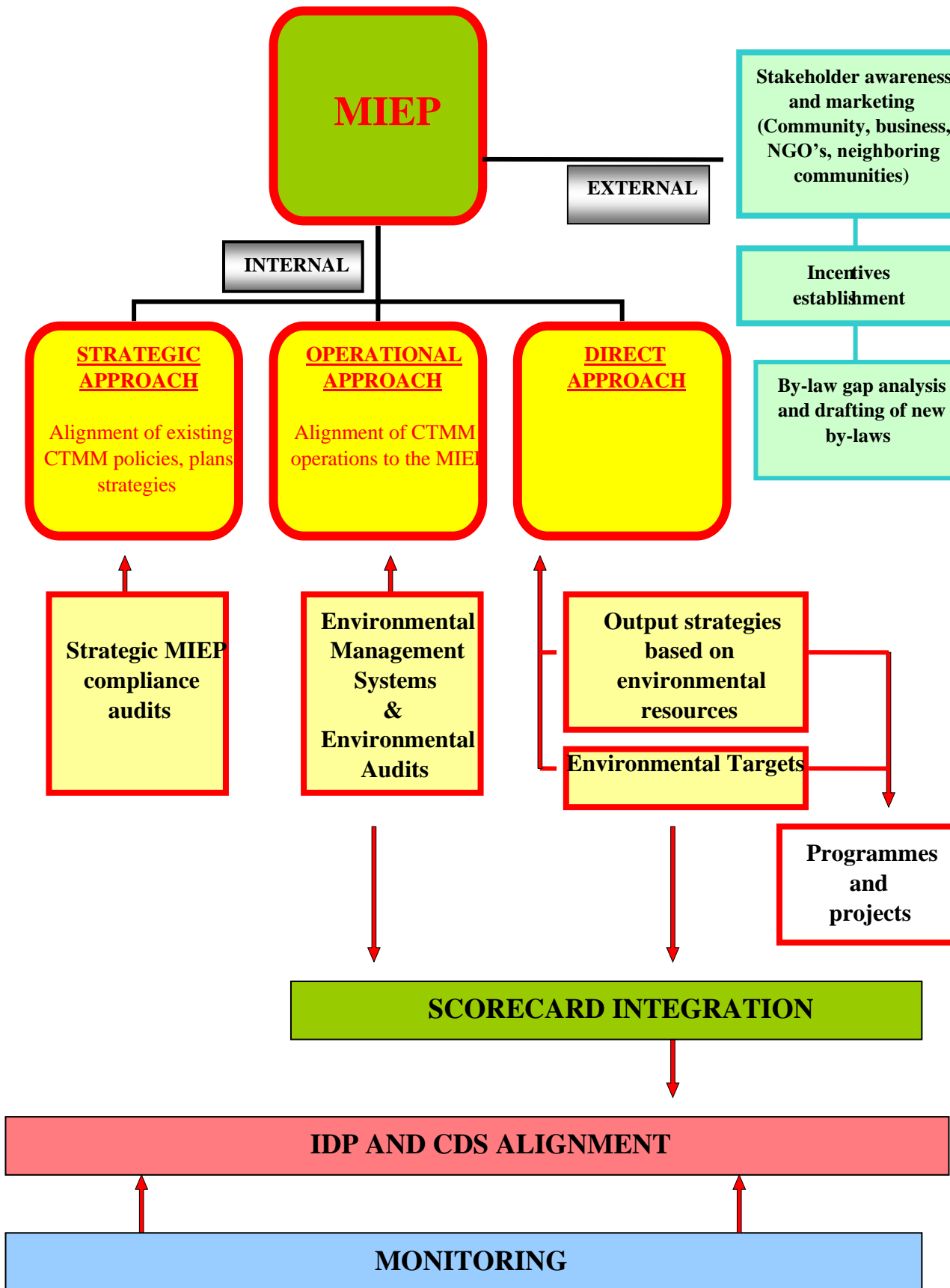


Figure 4: Overarching MIEP implementation framework

Figure 4 can be described as follows:

- The MIEP will be implemented both externally and internally to the Matjhabeng municipality.
- The MIEP **external** implementation strategy involves awareness and education programmes for external stakeholders (the wider Matjhabeng community, the business sector, non-government organizations, interested and effected parties, national and provincial government as well as neighbouring municipalities) and the establishment of incentives for external stakeholders which adheres to certain elements of the MIEP. External implementation will also include a MIEP compliance gap analysis on existing by-laws and the related update and/or establishment of new by-laws where needed. This initiative will be managed by the Environmental Resource Management Section in an integrated manner with the relevant Matjhabeng Local Municipality Departments.
- Successful implementation of the MIEP also requires alignment thereof with the main organizational and business functions of the of Matjhabeng municipality. The MIEP **internal** implementation strategy thus involves the following three tiers:
 - The **strategic approach** involves a strategic audit on all existing strategic documents in the Matjhabeng Local Municipality in an effort to re-align these to the MIEP;
 - The **operational approach** involves the implementation of Environmental Management Systems according to the SABS ISO 14001 system for all departments as well as the execution of environmental legislation audits in an effort to align all the operations of the Matjhabeng Local Municipality to environmental best practices and to strive towards environmental legislative compliance;
 - The **direct approach** involves the development of “**Output Strategies**” as listed in table to ensure environmental sustainability in Matjhabeng. Environmental best practice projects, based on these documents, will be implemented on a continual basis.

DESCRIPTION	RESPONSIBILITY	PRIORITY	DESCRIPTION
1. Matjhabeng Open Space Framework	Environmental Planning Section	2020/21 financial year	<ul style="list-style-type: none"> To facilitate correct management of Matjhabeng's open spaces Related GIS layers to be utilised the development process
2. Matjhabeng Waste Minimization Strategy	Environmental Health Section	2020/21 financial year	<ul style="list-style-type: none"> To minimize waste generation in Matjhabeng
3. Strategy for managing hazardous waste in Matjhabeng	Waste Management Section	2021/22 financial year	<ul style="list-style-type: none"> To correctly manage hazardous waste in Matjhabeng
4. Integrated waste management strategy	Waste Management Section	2020/21 financial year	To ensure integrated waste management in Matjhabeng.
5. Environmentally sustainable framework for urban agriculture	Environmental Resource Management Section	2021/22 financial year	<ul style="list-style-type: none"> To ensure that the environment is considered in all urban agriculture projects in Matjhabeng
6. Strategy for sustainable use of flora for traditional medicinal purposes	Environmental Resource Management and Nature Conservation Sections	2022/23 financial year	<ul style="list-style-type: none"> To ensure that flora for medicinal purposes are used sustainably
7. Biodiversity Strategy	Environmental Resource Management Section	2022/23 financial year	<ul style="list-style-type: none"> To sustainably plan for biodiversity management
8. Matjhabeng Air Quality Management Plan	Environmental Health Section	2022/23 financial year	<ul style="list-style-type: none"> To plan for air quality improvement and management
9. Environmental Noise Policy	Environmental Health Section	2022/23 financial year	<ul style="list-style-type: none"> To ensure environmental noise management in Matjhabeng GIS layer to be utilized in development planning process
10. Sustainable Energy and Climate Change Strategy	Environmental Health Section	2020/21 financial year	<ul style="list-style-type: none"> To ensure sustainable energy management in Matjhabeng
11. Matjhabeng Integrated Water Resource Protection Framework	Environmental Resource Management Section	2020/21 financial year	<ul style="list-style-type: none"> To manage Matjhabeng's water resource in an integrated and sustainable manner
12. Groundwater Protection Strategy	Environmental Resource Management Section	2021/22 financial year	<ul style="list-style-type: none"> To manage groundwater resources in a sustainable manner
13. Procedures for environmental emergencies	Emergency Management Services Department	2021/22 financial year	<ul style="list-style-type: none"> To correctly respond to environmental emergencies in Matjhabeng
14. Internal and External Environmental Education Strategies	Environmental Resource Management Section	2020/21 financial year	<ul style="list-style-type: none"> To ensure environmental literacy in the Matjhabeng Local Municipality

15. Matjhabeng Wetlands Study	Environmental Resource Management Section	2021/22 financial year	<ul style="list-style-type: none"> To identify, map and report on the status of all wetlands in Matjhabeng to improve the management thereof GIS layer to be utilized in developmental planning activities
16. Green infrastructure and Facilities Guidelines	Environmental Resource Management Section	2023/24 financial year	<ul style="list-style-type: none"> To guide environmental friendly facilities and infrastructure in Matjhabeng
17. Green Buildings Guidelines and Guidelines for Low Cost Housing	Environmental Resource Management Section	2021/22 financial year	<ul style="list-style-type: none"> To guide environmental friendly low cost housing projects in Matjhabeng
18. Sustainable Transport Policy	Transport Development Division	2023/24 financial year	<ul style="list-style-type: none"> To ensure that transport in Matjhabeng integrate environmental consideration for sustainability
19. Local Economic Development Policies with environmental considerations	Local Economic Development Division	2021/22 financial year	<ul style="list-style-type: none"> To ensure the sustainability of the LED policy by integration of environmental considerations
20. Tourism Plan with environmental considerations	Tourism Division	2022/23 financial year	<ul style="list-style-type: none"> To ensure the sustainability of the Tourism Plan by integration of environmental considerations therein
21. Green Procurement Guidelines	Environmental Resource Management Section	Continuous	<ul style="list-style-type: none"> To align procurement in the Matjhabeng towards environmental best practices
22. Integrated Pollution Management and Prevention Policy	Environmental Resource Management Section	2021/22 financial year	<ul style="list-style-type: none"> To manage pollution in Matjhabeng in an integrated manner
23. Bicycle route framework	Transport Development Division	2024/25 financial year	<ul style="list-style-type: none"> To incorporate bicycle routes into road infrastructure

Table 1: Output strategies related to the implementation of the MIEP

- The **direct approach** also involves the formulation of 15 specific targets as listed in table 2. These targets should all be achieved by **June 2025** and its purpose is to drive continuous environmental performance in Matjhabeng over the next 5 years.
- Achievement of these targets will be driven through the establishment of environmental programmes for each by the ERM section in partnership with the “lead responsibility” Matjhabeng Local Municipality department/division as set out in table 2. These targets should be work- shopped extensively with relevant Matjhabeng Local Municipality departments and must be integrated into the business planning, budgeting- and scorecard processes of the departments which has been identified under the “lead responsibility” column as specified in table 2.

TARGET	APPLICABLE LEGISLATION AND MIEP PROVISIONS	RECOMMENDED ACTIONS	LEAD RESPONSIBILITY	ROLE-PLAYERS
GENERAL RESOURCE MANAGEMENT				
<p>1. Ensure that at least 25 different product categories procured by the Matjhabeng Local Municipality are identified and procured at least partly in an environmentally friendly manner.</p>	<p><u>Constitution of Republic of South Africa Act 108 Of 1996</u> Chapter 2 Section 24 everyone has the right to an environment that is not harmful to their health or wellbeing and measures that prevent pollution and ecological degradation.</p> <p><u>National Environmental Management Act, 107 of 1998</u> Section 2(3) Development must be socially, environmentally and economically sustainable.</p> <p><u>Environment Conservation Act No.73 of 1989</u> Section 24 (d) (iii) the reduction of waste by the use of alternative products.</p> <p><u>MIEP objective 1x (p.15)</u> Implementing supply-chain management according to suppliers that show environmental responsibility</p>	<p>1. Annual selection of five product categories and related integration into the Matjhabeng Local Municipality “Green Procurement Guideline” document</p> <p>2. Implementation through application of the above guideline document when implementing ISO 14001 Environmental Management Systems for applicable City of Tshwane departments</p> <p>3. Continuous awareness campaign among City of Tshwane role-players</p>	<p>Environmental Resource Management Section (<i>Environmental Management Systems Subsection</i>)</p>	<p>Procurement Division</p> <p>Sustainable Energy Matjhabeng (SEM)</p> <p>All Matjhabeng Departments when procuring applicable product categories</p>

<p>2. Reduce environment impact municipal activities through reduction 10% in the al of by non recycled internal paper consumption, water consumption and energy consumption per capita employee.</p>	<p><u>National Environmental Management Act, 107 of 1998 Section 2(4) (a) (v) the use and exploitation of non-renewable natural resources takes into account the consequences of the depletion of the resource.</u> <u>National Environmental Management Act, 107 of 1998 Section 2(4) (a) (vi) the development, use and exploitation of renewable resources do not exceed the level beyond which their integrity is jeopardized.</u></p> <p><u>National Environmental Management Act, 107 of 1998 Section 2(4) (a) (viii) negative impacts on the environment are prevented and where they cannot be altogether prevented, are minimized and remedied.</u></p> <p><u>MIEP objective 5vii (p.11) To ensure corporate environmental responsibility by subscribing to green technology and reducing reliance on non-renewable resources</u></p> <p><u>MIEP objective 3 vi (p.20) Reducing energy consumption in all municipal operations</u></p>	<p>1. Continuous integration of reduction strategies into ISO 14001 Environmental Management Systems for selected Matjhabeng Local Municipality departments</p> <p>Annual retrofitting of water wise technologies in selected Matjhabeng Local Municipality buildings</p> <p>3. Full implementation of the Matjhabeng “Sustainable Energy and Climate Change Strategy” which includes the following measures:</p> <ul style="list-style-type: none"> • Annual retrofitting of energy efficient technologies in selected Matjhabeng Local Municipality buildings • Utilization of more energy efficient street lighting • Utilization of solar water heating systems in Matjhabeng housing developments • Procurement of energy efficient equipment, such as computers and air conditioning • Utilization of variable speed machinery in the sewage and water treatments plants 	<p>Environmental Resource Management Section (Environmental Management Systems Subsection)</p> <p>Environmental Health Section (Environmental programmes: Air Quality Management)</p> <p>Water and Sanitation Division</p> <p>Energy and Electricity Department</p>	<p>All Matjhabeng Departments when utilizing paper, water and energy</p> <p>Sustainable Energy Matjhabeng</p>
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		<ul style="list-style-type: none">• Changing personnel behavior to switch off lights and equipment when not in use• Continuous awareness campaigns among Matjhabeng Local Municipality employees		
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TARGET	APPLICABLE LEGISLATION AND MIEP PROVISIONS	RECOMMENDED ACTIONS	LEAD RESPONSIBILITY	ROLE-PLAYERS
URBAN DESIGN				
<p>3. Incorporate appropriate new environmentally responsive technologies into all Matjhabeng Local Municipality provided infrastructure, facilities, municipal buildings economical housing projects.</p>	<p><u>National Environmental Management Act, 107 of 1998</u> GN 621 of March 2001 Regulation 4.1 (4.1.5) promote energy efficiency, the use of renewable resources and the planting of trees in low cost housing projects.</p> <p><u>National Environmental Management Act, 107 of 1998</u> GN 621 of 16 March 2001 On the Environmentally Sound Low Cost Housing there is general recommendations for energy efficient housing, water-efficiency and urban greening that can be implemented by developers or individuals building houses under the Housing Subsidy Programme.</p> <p><u>MIEP objective 5vii (p.11)</u> To ensure corporate environmental responsibility by subscribing to green technology and reducing reliance on non-renewable resources</p>	<ol style="list-style-type: none"> 1. Compliance to the “<i>Matjhabeng Green Infrastructure and Facilities Guidelines</i>” when providing new infrastructure and facilities 2. Drafting of both the “<i>Matjhabeng Local Municipality Green Buildings Guidelines</i>” and the “<i>Matjhabeng Local Municipality Green Buildings Guidelines for Low Cost Housing</i>” in line with the CSIR guideline document 3. Compliance to the above documents when building new municipal buildings and sub-economical houses. 	<p>Environmental Resource Management Section (<i>Environmental Auditing and Promotion Subsection</i>)</p>	<p>municipality Planning Division</p> <p>Housing Division</p> <p>Procurement Division</p> <p>All Departments which provide infrastructure and facilities or develop new municipal buildings</p> <p>Housing Division when developing sub-economical housing</p>

<p>4. Establish incentives schemes for developers which integrate environmental</p>	<p><u>National Environmental Management Act, 107 of 1998</u> Section 2 (4) (b) Environmental management must be integrated and it must take into account the effects of decisions on all aspects</p>	<p>1. Promote the “Matjhabeng Local Municipality Green Buildings Guidelines” and the “Matjhabeng Local Municipality Green Buildings Guidelines for Low Cost Housing” among</p>	<p>City Planning Division</p>	<p>Environmental Resource Management Section Environmental</p>
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<p>best practices into their project planning.</p>	<p>of the environment and all people in the environment by pursuing the selection of the best practicable environmental option.</p> <p><u>National Environmental Management Act, 107 of 1998</u> Section 2 (4) (l) There must be inter-governmental co-ordination and harmonization of policies, legislation and actions relating to the environment.</p> <p><u>National Environmental Management Act, 107 of 1998</u> Section 23(c) requires that the effects of activities on the environment receive attention before actions are taken in connection with them.</p> <p><u>National Environmental Management Act, 107 of 1998</u> Section 24(1) requires that the environmental impact of any activity that needs authorization by an organ of state must be considered prior to the implementation of those activities.</p> <p><u>MIEP objective 1vi (p. 15)</u> Providing incentives for business, industry to improve their environmental performance, including green buildings and</p>	<p>developers</p> <ol style="list-style-type: none"> 2. Conduct appropriate benchmark research 3. Identify and establish an incentives scheme 4. Continuous marketing and awareness campaign 		<p>Planning Section</p> <p>Environmental Health Section</p> <p>Local Economic Development Division</p>
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TARGET	APPLICABLE LEGISLATION AND MIEP PROVISIONS	RECOMMENDED ACTIONS	LEAD RESPONSIBILITY	ROLE-PLAYERS
	procurement			
TRANSPORTATION				
5. Incorporate bicycle routes for at least 5% of Tshwane's roads.	<p><u>National Road Traffic Act No.93 of 1996</u> GNR.225 of 17 March 2000 Regulation 311(7) Whenever a portion of a public road has been set aside for use by persons riding pedal cycles.</p> <p><u>MIEP objective 3 vii (p. 13)</u> Incorporating bicycle routes where feasible and appropriate to the local context</p>	1. Integration of bicycle route planning activities into strategic planning of the Roads and Storm Water Division	Roads and Storm Water Division	<p>Transport Development Division</p> <p>Sustainable Energy Matjhabeng</p> <p>Municipality Planning Division</p>

<p>6. Establish an incentives scheme for commuters who use public transport.</p>	<p><u>Development Facilitation Act No 67 of 1995</u> GN 3004 of 30 August 1996 Regulation 19 (3) (a) (vi) the improvement of public transportation and circulation.</p> <p><u>Local Government Transition Act No 209 of 1993</u> Schedule 2 (8)(b) (c)the co-ordination of passenger transport services after consultation with the metropolitan local councils concerned and provision and control of public transport facilities.</p> <p><u>MIEP objective 3 vi (p. 13)</u> Investigating the promotion of incentives for commuters who use public transport</p>	<ol style="list-style-type: none"> 1. Conduct appropriate benchmark research 2. Identify and establish incentive scheme 3. Continuous marketing and awareness campaign 	<p>Transport Development Division</p>	<p>Environmental Resource Management Section</p> <p>Sustainable Energy Matjhabeng(SET)</p> <p>Local Economic Development Division</p>
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TARGET	APPLICABLE LEGISLATION AND MIEP PROVISIONS	RECOMMENDED ACTIONS	LEAD RESPONSIBILITY	ROLE-PLAYERS
WATER RESOURCE MANAGEMENT				
<p>7. Reduce unaccounted water losses in Matjhabeng 5%.</p>	<p><u>National Environmental Management Act, 107 of 1998</u> Section 2(4) (a) (v) the use and exploitation of non-renewable natural resources takes into account the consequences of the depletion of the resource.</p> <p><u>Water Services Act 108 of 1997</u> GNR 652 of 20 July 2001 Regulation 6(1) (b) discourages wasteful or inefficient water use.</p> <p><u>MIEP objective 7 (p. 21)</u> To manage water resources in an integrated manner in order to ensure that the quality, quantity and reliability of water is guaranteed as a right and set aside as a reserve</p>	<p>1. Integration of reduction strategies into strategic planning and operational activities of the Water and Sanitation Division</p>	<p>Water and Sanitation Division</p>	<p>Environmental Resource Management Section</p>

<p>8. Rehabilitate 3% of existing, degraded wetlands in Tshwane.</p>	<p><u>National Environmental Management Act, 107 of 1998</u> Section 2 (r) Sensitive, vulnerable and stressed ecosystems, such as wetlands require specific attention in management and planning procedures, especially where they are subject to significant human resource usage and development pressure.</p>	<ol style="list-style-type: none"> 1. Determine status quo of existing Matjhabeng Wetlands 2. Identify wetlands to be rehabilitated 3. Establish and implement rehabilitation plan 	<p>Environmental Resource Management Section</p>	<p>municipality Planning Division</p> <p>Environmental Planning Section</p> <p>Nature Conservation and Resorts Section</p> <p>“Working for Wetlands”</p>
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TARGET	APPLICABLE LEGISLATION AND MIEP PROVISIONS	RECOMMENDED ACTIONS	LEAD RESPONSIBILITY	ROLE-PLAYERS
	<p><u>Environment Conservation Act No.73 of 1989</u> White Paper Discussion GN 1095 of 28 July 1997 Policy Objective 2.2 (2.2.3) (4) prevents inappropriate activities and development around wetlands, and that of linear development in particular.</p> <p><u>World Heritage Convection Act No. 45 of 1999</u> Section 4(1) (p) sensitive, vulnerable or stressed ecosystems, such as estuaries and wetlands require specific attention in management and planning procedures.</p> <p><u>MIEP objective 1 iv (p. 19)</u> Ensuring that appropriate rehabilitation measures are implemented to minimize the impact of development</p>			
AIR QUALITY				

<p>9. Ensure that Tshwane's contribution to levels of criteria air pollutants do not exceed South African air quality standards for more than 10 days per annum.</p>	<p><u>National Environmental Management: Air quality Act No.39 of 2004</u> Section 7(2) (d) the reduction of discharges likely to impair air quality, including the reduction of air pollution at source.</p> <p><u>National Environmental Management: Air quality Act No.39 of 2004</u> Section 16(1) (a) (iii) to identify and reduce the negative</p>	<p>1. Full implementation of the Mathjabeng Air Quality Management Plan</p>	<p>Environmental Health Section (<i>Environmental programmes: Air Quality Management</i>)</p>	<p>All role-players identified in the Matjhabeng Air Quality Management Plan</p>
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TARGET	APPLICABLE LEGISLATION AND MIEP PROVISIONS	RECOMMENDED ACTIONS	LEAD RESPONSIBILITY	ROLE-PLAYERS
	<p>impact on human health and the environment of poor air quality.</p> <p><u>National Environmental Management: Air quality Act No.39 of 2004</u> Section 17(b) (c) the level of its compliance with ambient air quality standards and measures taken by it to secure compliance with those standards.</p> <p><u>MIEP objective 2 (p. 23)</u> To manage air quality inMatjhabengin terms of the requirements of relevant legislation</p>			
<p>LAND USE</p>				

<p>10. Provide one hectare socioeconomic space per 1000 people</p>	<p><u>Local Government Transition Act No.209 of 1993</u> Schedule 2(3)(a) formulate and implement a metropolitan integrated development plan incorporating metropolitan land use planning and the promotion of integrated economic development.</p> <p><u>Development Facilitation Act 67 of 1995</u> GNR 1 of 7 January 2000 Regulation 18(1) (2) (a) the State or local government body making the land available and the person or body to whom the land is made available.</p>	<p>1. Full implementation of the Matjhabeng Open Space Policy Framework</p>	<p>Environmental Planning Section</p>	<p>Parks and Horticulture Section</p> <p>Nature Conservation and Resorts Section</p>
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TARGET	APPLICABLE LEGISLATION AND MIEP PROVISIONS	RECOMMENDED ACTIONS	LEAD RESPONSIBILITY	ROLE-PLAYERS
	<p><u>MIEP objective 5 (p. 14)</u> To ensure the management of open spaces, conservation areas and natural resources in order to promote a healthy sense of place.</p>			
<p>ENERGY</p>				

<p>11. Diversify energy supply and increase renewable and cleaner energy sources by 3%.</p>	<p><u>National Environmental Management Act, 107 of 1998</u> GN 435 of 23 February 2001 Regulation 5.2 (5.2.1) To develop policies and strategies on the demand for energy, renewable energy resources and technologies and the implementation of non-grid electricity programmes</p> <p><u>National Environmental Management Act, 107 of 1998</u> White paper discussion GNR 749 of 15 May 1998 Regulation 4 on the energy resources is to promote the use of renewable energy resources and environmentally friendly alternative energy resources.</p> <p><u>MIEP objective 3 iv (p. 20)</u> Diversifying the energy supply and increasing renewable and cleaner energy sources</p>	<p>1. Full implementation of the Matjhabeng “<i>Sustainable Energy and Climate Change Strategy</i>”</p>	<p>Sustainable Energy Matjhabeng</p>	<p>All role-players identified in the Matjhabeng Local Authority Energy Strategy</p> <p>Environmental Health Section (<i>Environmental programmes: Air Quality Management</i>)</p>
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TARGET	APPLICABLE LEGISLATION AND MIEP PROVISIONS	RECOMMENDED ACTIONS	LEAD RESPONSIBILITY	ROLE-PLAYERS
BIODIVERSITY				
<p>12. Eradicate 100% of alien invasive species in Municipal Nature Reserves.</p>	<p><u>National Environmental Management: Biodiversity Act No 10 of 2004</u> Section 64 (1) (c) to eradicate alien species and invasive species from ecosystems and habitats.</p> <p><u>National Environmental Management: Biodiversity Act No 10 of 2004</u> Section 76 (1) management authority of a protected area preparing a management plan for the area in terms of the Protected Areas Act must incorporate into the management plan an invasive species control and eradication strategy.</p> <p><u>Conservation of Agricultural Resources Act 43 of 1989</u> GNR 1048 of 25 May 1989 15A land user shall control any category 1 plants that occur on any land or inland water surface.</p> <p><u>MIEP objective 5 iii (p. 20)</u> Ensuring that appropriate programmes are implemented for the management and control of alien and invasive plant and animal species</p>	<p>1. Integration of eradication programme into strategic planning and operational activities of the Nature Conservation and Resorts Section</p>	<p>Nature Conservation and Resorts Section</p>	<p>“Working for water”</p>

TARGET	APPLICABLE LEGISLATION AND MIEP PROVISIONS	RECOMMENDED ACTIONS	LEAD RESPONSIBILITY	ROLE-PLAYERS
<p>13. Promote urban greening through the establishment of at least 4000 new indigenous trees in Tshwane.</p>	<p><u>Environment Conservation Act No.73 of 1989</u> White paper discussion GN 1095 of 28 July 1998 Policy Objective 2.2 (2.2.2) (3) encourage the planting of indigenous crops and trees to build the local resource base and to improve living environments.</p> <p><u>MIEP objective 4 iv (p. 14)</u> Promoting urban greening</p>	<p>1. Integration into strategic and operational planning of the Parks and Horticulture Section</p>	<p>Parks and Horticulture Section</p>	<p>Housing Division (for all new subeconomical housing developments)</p>
<p>WASTE MANAGEMENT</p>				

<p>14. Reduce per capita waste disposal to landfill by 15%.</p>	<p><u>National Environmental Management Act, 107 of 1998</u> Section 2(4)(a)(iv) waste is avoided, minimized and re-used or recycled where possible and otherwise disposed of in a responsible manner.</p> <p><u>National Environmental Management Act, 107 of 1998</u> White Paper Discussion 4 Goal 2 set targets to minimize waste generation at source and promote a hierarchy of waste management practices, namely reduction of waste at source, reuse and recycling with safe disposal as the last resort.</p>	<ol style="list-style-type: none"> 1. Integration into strategic and operational planning of the Waste Management Section 2. Possible measures include: <ul style="list-style-type: none"> • Establishment of recycling infrastructure at garden refuse sites • Composting of garden refuse • Recycling of building rubble and e-waste • Recycling at source (households) in a phased approach 	<p>Waste Management Section</p>	<p>Environmental Resource Management Section</p> <p>Environmental Health Section</p>
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TARGET	APPLICABLE LEGISLATION AND MIEP PROVISIONS	RECOMMENDED ACTIONS	LEAD RESPONSIBILITY	ROLE-PLAYERS
	<p><u>Environment Conservation Act No.73 of 1989</u> Section 24 (e) the utilization of waste by way of recovery, re-use or processing of waste.</p> <p><u>Polokwane Declaration on Waste Management, 2001</u> Aims to reduce waste generation and disposal and develop a plan for “Zero Waste”.</p> <p><u>MIEP objective 4 (p. 24)</u> To improve the quality of the environment and human health by minimizing the amount of liquid and solid waste</p>			

ENVIRONMENTAL EMERGENCY MANAGEMENT

<p>15. Undertake reasonable measures to ensure that emergency incidents, attended to by the City of Tshwane, are undertaken in an environmentally responsible manner.</p>	<p><u>Constitution of Republic of South Africa Act 108 Of 1996</u> Section 24 everyone has the right to an environment that is not harmful to their health or well-being.</p> <p><u>National Environmental Management Act, 107 of 1998</u> Section 2(4) (a) (viii) negative impacts on the environment are prevented and where they cannot be altogether prevented, are minimized and remedied.</p>	<ol style="list-style-type: none"> 1. Execute gap analysis on existing standard operating procedures related to emergency responses, clean-up actions and remedy procedures 2. Re-align the above where applicable 3. Implement an appropriate training programme to ensure compliance 	<p>Emergency Management Services Department</p>	<p>Environmental Health Section</p> <p>Environmental Resource Management Section</p>
<p>TARGET</p>	<p>APPLICABLE LEGISLATION AND MIEP PROVISIONS</p>	<p>RECOMMENDED ACTIONS</p>	<p>LEAD RESPONSIBILITY</p>	<p>ROLE-PLAYERS</p>
	<p><u>National Environmental Management Act, 107 of 1998</u> Section 30(4) (a) take all reasonable measures to contain and minimize the effects of the incident, including its effects on the environment and any risks posed by the incident.</p> <p><u>MIEP objective 1 ix (p. 23)</u> Developing appropriate procedures for environmental emergencies</p>			

Table 2: The Matjhabeng Local Municipality Environmental Targets

- Progress in terms of the overarching MIEP implementation framework will be reported upon on an annual basis through the establishment of a MIEP management information system (MIS) by the ERM section.
- Since the MIEP is an integral part of the Matjhabeng Local Municipality IDP, each IDP project and programme must integrate environmental considerations and best practices on a continual basis.
- Since the CDS guides the development approach in Matjhabeng, which must be sustainable, it is critical that all activities also integrate environmental considerations.

The following table gives an outline of specific roles and responsibilities in terms of the above described overarching implementation (figure 4) approach to the MIEP:

ACTION	RESPONSIBILITY	TIMEFRAME
EXTERNAL IMPLEMENTATION		
MIEP stakeholder training and awareness	Lead Responsibility Environmental Resource Management Section	Continuous
Incentives establishment	Lead Responsibility Environmental Resource Management Section	Continuous
	Supporting Responsibility Relevant Matjhabeng Local Municipality departments in terms of incentives establishment which correlates with their operations	
By –laws gap analysis and revisement and/or establishment of new bylaws	Lead Responsibility Environmental Resource Management Section	To be finalized by 2021/22 financial year
	Supporting Responsibility Relevant Matjhabeng Local Municipality departments	
INTERNAL IMPLEMENTATION		
	Lead Responsibility Environmental Resource Management Section	Audits finalization date June 2022

Strategic MIEP compliance audits	Supporting Responsibility All Departments must align audited strategic documents according to the recommendations made in relevant audit reports and ensure alignment of new documents	As soon as practicable possible
Environmental Management Systems for each Matjhabeng Local Municipality Department	Lead Responsibility Environmental Resource Management Section (implementation)	Continuous
	Supporting Responsibility All Matjhabeng Local Municipality Departments for which an EMS has been implemented must adhere to the system as far as practicable possible	Continuous
ACTION	RESPONSIBILITY	TIMEFRAME
Environmental Legislative Audits	Lead Responsibility Environmental Resource Management Section (conducting audits)	Continuous
	Supporting Responsibility All Matjhabeng Local Municipality Departments for which an environmental legislative audit has been conducted must adhere to its findings where practicable	Continuous
Output strategies based on environmental resources (table 1)	Lead Responsibility Environmental Resource Management Section (identification of output strategies, responsibilities and timeframes)	May 2021
	Supporting Responsibility All identified responsible departments	As outlined in table 1
MIEP project implementation	Cooperative identification, management and implementation between the Environmental Resource management Section and other applicable Matjhabeng Local Municipality Departments	Continuous
	Lead Responsibility	

Establishment of Environmental Targets and related programmes	Establishment of targets: Environmental Resource Management Section (work-shopping and cooperation with Matjhabeng Local Municipality Depts.)	June 2021 2020/21
	Target Programmes: Partnership with relevant Matjhabeng Local Municipality departments	
	Supporting Responsibility Office of the COO and Heads of Departments (scorecard integration and sufficient planning and support to reach target and related programme) Relevant Matjhabeng Local Municipality Departments to formulate target programmes in partnership with the ERM section	Annually 2020/21
IDP and CDS Alignment	Lead Responsibility Office of the COO All IDP Project Managers	Continuous
Monitoring	Lead Responsibility Environmental Resource Management Section (Database establishment, data analysis and reporting)	Annually
	Supporting Responsibility All relevant Matjhabeng Local Municipality Departments with data to enable monitoring of MIEP targets	When required

Table 3: Responsibilities and time-frames in terms of the MIEP overarching implementation strategy

3.3 PUBLIC PARTICIPATION

3.3.1 Internal

The overarching MIEP implementation strategy and/or this document should be workshopped extensively with all relevant Matjhabeng Local Municipality departments to gain support, buy-in and approval. Participation was as follows:

DEPARTMENT/DIVISION/SECTION OR TASK TEAM	DATE
1. Environmental Health	
2. Environmental Management	
3. Inner City Unit	
4. MIEP Interdepartmental Task Team*	
5. Waste Management	
6. Transport Development	
7. CDS, IDP and OP	
8. Housing	
9. MIEP Interdepartmental Task Team**	
10. Energy and Electricity	
11. Marketing	
12. Water and Sanitation	
13. Emergency Management Services	
14. Interdepartmental workshop***	
15. Metropolitan Planning	
16. General info session with Municipal Employees	
17. Local Economic Development	
18. Tourism Division	

Table 4: Internal Public Participation Process

* Energy and Electricity, Emergency Management Services Department, traffic police, town Planning, Agricultural Trading Development, Environmental Management, Roads and Storm-water, Housing, Tourism, Water and Sanitation, Local

Economic Development, Environmental Health, Human Resources, Office of the Executive Mayor, Transport Development, Corporate Services

*** Environmental Resource Management, Economic Development, Energy and Electricity, Social Development, Corporate Services, Water and Sanitation, Metropolitan Planning, Legal and Secretarial Services, Finance, Marketing, Emergency Management Services*

**** Health Care, Energy and Electricity, Emergency Management Services, Metropolitan Planning, Nature Conservation and Resorts, Housing, Parks and Horticulture*

The final draft MIEP implementation plan should be forwarded to various internal stakeholders and distributed via corporate mail for final comments on to ensure satisfaction in terms of the contents thereof among all internal stakeholders.

3.3.2 External

Since the MIEP is mainly an **internal** corporate policy pertaining to Matjhabeng Local Municipality activities, this document should not be work-shopped externally to the Matjhabeng Local Municipality as extensively as the internal public participation process (section 2.3.1 above).

Workshops and information sessions related to this plan should however be conducted in communities and different community structures:

The above external public participation process shall be extended to also include more general community members as well as those Ward Councillors and Ward Committee Members in the Matjhabeng wards. Both National- and Provincial Government will also be informed in terms of this document in an attempt to gain the support of all spheres of Government.

3.4 FUNDING

There is often an impression that environmental excellence costs money. However, this is not necessarily the case as “green” products, operations and projects can be self –funding, e.g. an investment in mechanisms to reduce energy consumption will pay for itself over time, as will recycling and paper consumption reduction initiatives. This financial benefit however is a long-term process, and sufficient funding is however currently needed to drive this implementation plan.

The operational implementation of the MIEP in terms of the “MIEP implementation plan” will mainly be funded via the operational budget of the ERM section. Since the said section is quite small, it does however have limited funding available. The ERM section will thus continuously source donor funding where possible.

It will however also be expected from those Matjhabeng Local Municipality departments which has been identified as “responsible” departments in terms of the “Output Strategies” (table 1) and as “lead responsibility” departments regarding the environmental targets (table 2) to ensure sufficient budgeting for the drafting and achievement of these strategies and targets (since it must be reflected on scorecards and business plans of all identified departments it is automatically linked to the budgeting process).

It should be noted that a corporate “environmental vote” should be established to fund operational environmental expenditure, in the municipality.

It is also envisaged that the IDP process will fund any capital projects emanating from the implementation of the MIEP.

It is also recommended that the Matjhabeng Local Municipality IDP incorporate measures to illustrate how “green” projects reduce expenditure, and that the related budget savings are applied to fund environmental initiatives.

4. CONCLUSION

The successful implementation of the MIEP will ultimately foster change in the Matjhabeng’s culture, habits and values through the establishment of a more environmentally friendly means of executing our daily tasks - vital for achieving a sustainable future for all in Matjhabeng. Given the gravity of the impacts of relentless environmental change there is little time to loose— and blissful ignorance is the main obstacle.