

# **GAUTENG ENVIRONMENTAL IMPLEMENTATION PLAN (EIP) 2015 - 2020**

**GAUTENG DEPARTMENT OF  
AGRICULTURE AND RURAL DEVELOPMENT  
(GDARD)**



**GAUTENG PROVINCE**  
AGRICULTURE AND RURAL DEVELOPMENT  
REPUBLIC OF SOUTH AFRICA

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## ACRONYMS AND ABBREVIATIONS

AEL	Atmospheric Emissions License
AEZ	Agro-Ecological Zones
AMD	Acid Mine Drainage
APP	Annual Performance Plans
AQMP	Air Quality Management Plan
ARC	Agricultural Research Council
BID	Background Information Document
BRP	Bioregional Plan
BSAP	Biodiversity Strategy and Action Plan
CC	Climate Change
CBO	Community Based Organisations
CCRS	Climate Change Response Strategy
CCRSAP	Climate Change Response Strategy and Action Plan
CCSP	Climate Change Sector Plan
CIF	Capital Investment Framework
CITP	Comprehensive Integrated Transport Plan
CMA	Critical Management Area
COHWS	Cradle of Humankind World Heritage Site
CoJ	City of Johannesburg
CoT	City of Tshwane
C-Plan	Conservation Plan
CSD	Commission for Sustainable Development
CSIR	Council for Scientific and Industrial Research
CTMM	City of Tshwane Metropolitan Municipality
CWM WMA	Crocodile (West) Marico Water Management Area
DAFF	Department of Agriculture, Forestry and Fisheries
DEA	Department of Environmental Affairs
DED	Department of Economic Development
DoE	Department of Energy
DM	District Municipality
DMR	Department of Mineral Resources
DRDLR	Department of Rural Development and Land Reform
DTI	Department of Trade and Industry
DPSIR	Drivers-Pressures-State-Impact-Resources
DWS	Department of Water and Sanitation
EBOSS	Ekurhuleni Biodiversity and Open Space Strategy
ECA	Environment Conservation Act
EEDSM	Energy Efficiency and Demand-Side Management
EIA	Environmental Impact Assessment
EIP	Environmental Implementation Plan

EIMP	Environmental Implementation and Management Plan
EMF	Environmental Management Framework
EMM	Ekurhuleni Metropolitan Municipality
EMP	Environmental Management Plan
EMZ	Environmental Management Zone
EPPC	Environmental Policy Planning and Coordination
EPWP	Expanded Public Works Programme
FTE	Full-Time Equivalent
GAPA	Gauteng Agricultural Potential Atlas
GBCSA	Green Building Council of South Africa
GCR	Gauteng City-Region
GCCRS	Gauteng Climate Change Response Strategy
GCCSC	GDARD Climate Change Steering Committee
GDARD	Gauteng Department of Agriculture and Rural Development
GDED	Gauteng Department of Economic Development
GDHS	Gauteng Department of Human Settlements
GDID	Gauteng Department of Infrastructure Development
GDoH	Gauteng Department of Health
GDP	Gross Domestic Product
GDRT	Gauteng Department of Roads and Transport
GDS	Growth and Development Strategy
GEMP	Gauteng Environmental Management Plan
GHG	Greenhouse Gas
GHWMP	Generation Integrated Hazardous Waste Management Plan
GIS	Geographic Information System
GOGTA	Gauteng Department of Cooperative Governance and Traditional Affairs
GPAES	Gauteng Protected Areas Expansion Strategy
GPEMF	Gauteng Provincial Environmental Management Framework
GPG	Gauteng Provincial Government
GSDF	Gauteng Spatial Development Framework
GSP	Gauteng Spatial Perspective
GSSA	The Grassland Society of Southern Africa
HACCP	Hazard Analysis Critical Control Point
HCWM	Health Care Waste Management Policy
HRD	Human Resource Department
IAIA	International Association for Impact Assessment
ICLEI	Local Governments for Sustainability
ICOMOS	International Council on Monuments and Sites
IDC	Industrial Development Corporation
IDP	Integrated Development Plan
IDUF	Integrated Urban Development Framework
IECMP	Integrated Environment and Conservation Management Plan

IEM	Integrated Environmental Management
IGCCC	Intergovernmental Climate Change Committee
IGR	Inter-Governmental Relations
IMP	Integrated Management Plan
IPAP	Industrial Policy Action Plan
IQ	Intelligence Quotient
ISO	International Organisation for Standardisation
ITMP	Integrated Transport Master Plan
IUCN	International Union for Conservation of Nature
IUDF	Integrated Urban Development Framework
IWMP	Integrated Waste Management Plan
JBEGS	Johannesburg Built Environment Guidelines and Standards
JMOSS	Johannesburg Metropolitan Open Space Strategy
KL	Kilolitre
KM	Kilometres
LAB	Local Action for Biodiversity
LGMTEC	Local Government Medium Term Economic Committee
LGSP	Local Government Support Plan
LM	Local Municipality
MCLM	Mogale City Local Municipality
MEC	Members of the Executive Council
METT	Management Effectiveness Tracking Tool
MIGDETT	Mining Industry Growth, Development and Employment Task Team
MinMec	Ministers and Members of the Executive Council
MIS	Municipal Infrastructure Services
MM	Metropolitan Municipality
MOSS	Metropolitan Open Space Strategy
MPRDA	Minerals and Petroleum Resources Development Act
MRA	Mine Residue Areas
MSA	Municipal Systems Act
MTSF	Medium Term Strategic Framework
NDP	National Development Plan
NEMA	National Environmental Management Act (Act No. 107 of 1998)
NEM:AQA	National Environmental Management: Air Quality Act (Act No. 39 of 2004)
NEM:BA	National Environmental Management: Biodiversity Act (Act No. 10 of 2004)
NEM:PAA	National Environmental Management: Protected Areas Amendment Act (Act No. 31 of 2004)
NEM:WA	National Environmental Management: Waste Act (Act No. 59 of 2008)
NFA	National Forest Act (Act No. 84 of 1998)
NFRF	National Forest Research Forum
NGO	Non-governmental Organisation
NHCA	National Health Care Act

NLTA	National Land Transport Act (Act No. 5 of 2009)
NSSD	National Strategy for Sustainable Development
NVFFA.	National Veld and Forests Fires Act (Act No. 101 of 1998)
NWA	National Water Act (Act No. 36 of 1989)
NWAC	National Water Advisory Council
NWMS	National Waste Management Strategy
NWRS	National Water Resource Strategy
OIE	World Organisation for Animal Health Standards
OUV	Outstanding Universal Value
PAES	Protected Areas Expansion Strategy
PATTT	Protected Areas Technical Task Team
PPP	Policy, Plan or Programme
S24G	Section 24G of NEMA
SAAWU	South African Association of Water Utilities
SACN	South African Cities Network
SACNASP	South African Council for National Scientific Professions
SACPLAN	The South African Council for Planners
SAHRA	South African Heritage Resources Agency
SAICE	The South African Institution if Civil Engineers
SAIEES	South African Institute of Ecologists and Environmental Scientists
SALGA	South African Local Government Association
SAMBF	South African Mining and Biodiversity Forum
SANBI	South African National Biodiversity Institute
SANEDI	South African National Energy Development Institute
SANRAL	South African National Roads Agency
SANS	South African National Standards
SDF	Spatial Development Frameworks
SDGs	Sustainable Development Goals
SEMA	Specific Environmental Management Acts
SESSA	Sustainable Energy Society of South Africa
SoER	State of Environment Report
SMME	Small, Medium and Micro-sized Enterprises
SONA	State of Nation Address
SOPA	State of Province Address
SPLUMA	Spatial Planning and Land Use Management Act
SPTN	Strategic Public Transport Network
TOSF	Tshwane Open Space Framework
TRT	Tshwane Rapid Transit
UNDP	United Nations Development Programmes
UNESCO	United Nations Educational, Scientific and Cultural Organisation.
UV WMA	Upper Vaal Water Management Area
VOC	Volatile Organic Compound

WC	Water Conservation
WDM	Water Demand Management
WG	Working Group
WRC	Water Research Commission
WRDM	West Rand District Municipality
WSDP	Water Services Development Plan
WTE	Waste-to-Energy

## EXECUTIVE SUMMARY

According to the National Environmental Management Act, 1998 (Act. No. 107 of 1998) (NEMA) the legal definition of “environment” is the surroundings within which humans exist that are made up of:

- The land, water and atmosphere of the earth;
- Micro-organisms, plant and animal life;
- Any part of 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 wellbeing.

Many of the activities undertaken by government departments, at the national, provincial and local level, have impacts on the environment. Every national and provincial department listed in Schedule 1 of NEMA, in terms of the procedures for cooperative governance stipulated in Chapter 3 of NEMA, is required to prepare and implement an Environmental Implementation Plan. The Gauteng Department of Agriculture and Rural Development (GDARD), as required in terms of Section 11 of the NEMA, has developed and adopted the Gauteng Environmental Implementation Plan 2015-2020 (EIP).

The structure of the EIP is aligned to the National Draft Guidelines for Environmental Implementation and Environmental Management Plans, 2015/2019 (refer to Annexure D). The EIP was developed using a number of strategic documents such as the National Development Plan (NDP) 2030, National Strategy for Sustainable Development (NSSD) 2011, the Gauteng Provincial Environmental Management Framework (GPEMF) 2014 and the Gauteng Spatial Development Framework (GSDF) 2030. The EIP was compiled in alignment with these documents to ensure the incorporation of the NEMAs environmental management principles for sustainable development.

The EIP seeks to ensure that the numerous governance controls or mechanisms, which set the targets and oversee the performance of the national and provincial Departments and Municipalities, are monitored. The mechanisms are put in place by the laws and regulations of the country to ensure appropriate governance and include amongst others the Outcomes Agreements between National and Provincial Ministers, the National Medium-Term Strategic Framework governing the five-year Strategic Plans and Annual Performance Plans (APPs) of the national and provincial Departments; the five-year IDPs and annual Service Delivery and Budget Implementation Plans of Municipalities; and various Public and Municipal Finance Management, Reporting and Auditing rules and protocols.

Monitoring and compliance is conducted using the DEA Annual Reporting Guidelines for Environmental Implementation Plans and Environmental Management Plans (refer to Annexure E). The EIP is intended to complement the mechanisms but not duplicate the work and the EIP seeks to indicate how reporting has been aligned between monitoring mechanisms. In accordance with Section 11(4) of NEMA, an EIP must be prepared with consideration given to every other Environmental Implementation Plan and Environmental Management Plan already adopted with a view of achieving consistency among such plans.

The medium-term targets and sustainable development indicators are listed for the Gauteng Departments and Municipalities in Section 6 of this plan. Section 6 will be used by the Gauteng Planning Forum and GDARD Inter-Governmental Relations (IGR) Environment Technical Committee, which are the mechanisms for conducting the monitoring and reporting of the Gauteng EIP 2015-2020 implementation process with the relevant role players. Compliance and monitoring will be conducted throughout the Province to ensure environmental provisions and targets are on track. The compliance and monitoring mechanisms will be further assisted by the sustainable development indicators, which are listed in Annexure F and categorised into: reporting required; reporting applicable; and reporting frequency.

## **SECTION 1: Introduction**

### **1.1. Legislative Background and Purpose of the EIP**

In terms of the procedures for cooperative governance stipulated in Chapter 3 of the National Environmental Management Act (NEMA) (Act 107 of 1998), every national and provincial department, listed in Schedule 1 of NEMA as exercising functions that may affect the environment, is required to prepare and implement an Environmental Implementation Plan (EIP). NEMA as amended requires that EIPs are prepared and implemented within five years of the Act coming into effect, and at intervals not more than five years thereafter. Every national department listed in Schedule 2 of NEMA is required to prepare an Environmental Management Plan (EMP) in the same timeframes. Every national department that is listed in both Schedule 1 and Schedule 2 may prepare a consolidated Environmental Implementation and Management Plan (EIMP). Municipalities must, in turn, adhere to the national and relevant provincial EIPs and EMPs, and the principles contained in Section 2 of NEMA in the preparation of any policy, plan or programme (PPP), including the drafting of municipal Integrated Development Plans (IDPs).

The purpose of the EIP is to describe policies, plans and programmes of an organ of state that performs functions that may impact on the environment, and how the organ of state's policies, plans and programmes that may significantly affect the environment will comply with NEMA principles and National environmental Norms and Standards. The content requirements of the EIP are outlined in Chapter 3 of NEMA. Chapter 3 of NEMA refers to cooperative governance, which is the building of partnerships between government, the private sector and civil society in order to ensure co-responsibility for environmental management; and to empower stakeholders to participate effectively. The Gauteng Province participates in the intergovernmental Subcommittee on EIPs and EMPs, which is coordinated by the National Department of Environmental Affairs (DEA) to serve as a cooperative governance forum on environmental implementation and management plans.

The purpose of the EIP, in respect of the national and provincial departments in question as well as the municipalities as provided in Section 12 of NEMA, is to:

- » Coordinate and harmonise environmental policies, plans and programmes and decisions in order to (i) minimise the duplication of procedures and functions; and (ii) promote consistency in the exercise of functions that may affect the environment;
- » Give effect to the principle of cooperative governance in Chapter 3 of the Constitution;
- » Secure the protection of the environment across the country as a whole;
- » Prevent unreasonable actions in respect of the environment that is prejudicial to the economic or health interests of other provinces or the country as a whole; and

- » Enable monitoring of the achievement, promotion and protection of a sustainable environment.

EIPs and EMPs further seek to align the environmental sector priorities and long-term strategies as identified in the National Development Plan (NDP) Vision 2030. The environmental priorities are:

- a) Sustaining South Africa's ecosystems and using natural resources efficiently;
- b) Building sustainable communities;
- c) Responding effectively to climate change mitigation;
- d) Responding effectively to climate change adaptation;
- e) Managing a just transition; and
- f) Enhancing governance systems and capacity.

The priorities are addressed and managed through the following core focus areas of the environmental sector:

- 1. Air Quality Management.
- 2. Waste and Chemicals Management.
- 3. Pollution Incident Management.
- 4. Environmental Impact Management.
- 5. Conservation and Sustainable Use of Biodiversity.
- 6. Green Economy and Sustainable Environment.

In aligning with the above priority areas, the National Strategy for Sustainable Development 2011 (NSSD 1) adopted the following categories and provided associated indicators to guide monitoring and reporting on Sustainable Development (refer to Section 1.1.2). The areas are as follows:

- a) Enhancing systems for Integrated Planning and Implementation.
- b) Sustaining our Ecosystems and Using Natural Resources Efficiently.
- c) Towards a Green Economy.
- d) Building Sustainable Communities.
- e) Responding Effectively to Climate Change.

The NDP 2030 priorities are aligned to the NSSD 1 priorities, which are used to organise and categorise the PPPs throughout the EIP checklist tables.

#### **1.1.1. The National Development Plan 2030**

The NDP 2030 aims to eliminate poverty and reduce inequality by 2030. National development has never been a linear process, nor can a development plan proceed in a straight line. The NDP proposes a multidimensional framework to bring about a virtuous cycle of development,

with progress in one area supporting advances in others. The plan focuses on critical capabilities needed to transform the economy and society and it provides a broad strategic framework to guide key choices and actions where its success depends on all South Africans taking responsibility for the plan. The constitutional framework allows for more differentiation in the allocation of powers and functions, and this should be used to ensure a better fit between the capacity and responsibilities of provinces and municipalities, which will aid in providing better environmental intra-governmental and inter-governmental cooperation. The NDP strives to ensure a tightening of the accountability chain, where, in relation to this EIP, environmental non-compliance in terms of Section 16(1)(b) of NEMA is addressed at all levels of government.

The environmental sustainability and resilience objectives include, inter alia:

- » Implementing a set of indicators for natural resources, accompanied by publication of annual compliance reports;
- » Achieving the peak (in 2025) plateau and decline trajectory for greenhouse gas (GHG) emissions coupled with the entrenchment of an economy-wide carbon price;
- » Improving disaster preparedness for extreme climate events. Gauteng is severely affected by drought;
- » Increasing investment in new agricultural technologies, research and the development of adaptation strategies for the protection of rural livelihoods and expansion of commercial agriculture.

The NDP describes how market and policy failures have affected national and provincial natural resources, resulting in the global economy entering a period of “ecological deficit”, as natural capital (ground water, marine life, terrestrial biodiversity, crop land and grazing) is being degraded, destroyed, or depleted faster than it can be replenished. Waste and carbon-equivalent emissions per capita are climbing faster every year in an ecosystem with finite limits. The Gauteng organs of state have developed and are in the process of developing policies, plans and programmes focused on increasing efficient and effective sustainable resource management, climate change response strategies and actions plans in order to reduce the impacts on the environment and its ecosystem functions and services.

#### **1.1.2. National Strategy for Sustainable Development**

According to NEMA ‘Sustainable Development’ requires the integration of social economic and environmental factors into planning, implementation and decision-making so as to ensure that development serves present and future generations. In terms of the NSSD 1 and Action Plan this implies the selection and implementation of a development option that allows for appropriate and justifiable social and economic goals to be achieved without compromising the natural environment as required in the Constitution’s Section 24(b).

The National Strategy for Sustainable Development (NSSD 1) presents an understanding of sustainable development and explains the route being taken. It presents an action plan and indicators for the implementation of the strategy and calls for an interdependency approach across sectors and actions on sustainability. The NSSD 1 sets out key areas that are in need of attention to ensure that a shift takes place towards a more sustainable development path. The following key elements have been identified:

- » Directing the development path towards sustainability;
- » Changing behaviour, values and attitudes; and
- » Restructuring the governance system and building capacity.

South Africa's sustainable development path is in line with the United Nations Development Programmes (UNDP) 2015 Sustainable Development Goals (SDGs). The SDGs set the global sustainable development agenda and build on the Millennium Development Goals achievements and inadequacies. Government environmental PPPs are aligned to the NSSD and UNDP SDGs.

The Action Plan that forms part of the strategy is formulated within the context of the five strategic priorities that have been identified in the NSSD 1. It sets out the strategic interventions and indicators for each of these strategic priorities. The strategic priorities are aligned with the NDP and have been used to categorise the checklist tables throughout this EIP.

#### **1.1.3. The Medium-Term Strategic Framework 2014-2019**

The Medium-Term Strategic Framework (MTSF) is Government's strategic plan for the 2014-2019 electoral term. It reflects the commitments made in the election manifesto of the governing party, including the commitment to implement the NDP. The MTSF sets out the actions Government will take and targets to be achieved and it also provides a framework for the other plans of national, provincial and local government. The MTSF highlights Government's support for a competitive economy, creation of decent work opportunities and encouragement of investment. This is the first MTSF following the adoption of the NDP in September 2012, the aim of which is to ensure policy coherence, alignment and coordination across government plans as well as alignment with budgeting processes. The MTSF makes provisions based on the National Outcomes Approach.

#### **1.1.4. National Outcomes Approach**

The Outcomes Approach is embedded in and a direct resultant of the electoral mandate. The outputs are converted into a detailed Delivery Agreement with key partners that work together to achieve the outputs. The negotiated Agreement spells out who will do what by when and with what resources. Each outcome requires effective coordinating structures to ensure that key

partners of the Delivery Agreements work together to achieve the outputs that focus on natural resource protection and sustainable-use management. The structures would coordinate the implementation of the outcomes, reviewing progress and deciding on interventions when required. These structures would also conduct monitoring and evaluation of the degree to which the outcomes are being achieved, which will provide a feedback loop to annual reviews of the Delivery Agreements.

*Outcome 7: Vibrant, equitable and sustainable rural communities contributing towards food security for all.* Outcome 7 is linked to the NDP 2030 vision where agrarian transformation and infrastructure, taking environment impacts and pressures into account, will increase economic growth, food security and jobs.

*Outcome 10: Environmental assets and natural resources that are well protected and continually enhanced.* Outcome 10 relates to the NSSD and NDP environmental priority areas used to categorise the EIP.

Aligning the NDP and National Outcomes/MTSF with the State of Environment Report (SoER), discussed herein, ensures and promotes effective and efficient environmental management principles and practices.

## **1.2. Strategic context of the Gauteng Province**

The Gauteng Provincial Government recently adopted the Gauteng Department of Agriculture and Rural Development (GDARD) Strategic Plan for the 2014-2019 cycle. In addition and discussed herein, the provincial government has adopted the Joburg 2040 Growth and Development Strategy, the Gauteng Environmental Management Framework 2014, the Gauteng Conservation Plan or C-Plan 2014 as well as the Gauteng Spatial Development Framework 2030. The goals and outcomes outlined in these documents are aligned with the NDP 2030, the NSSD 1 and the MTSF.

The GDARD revised its Vision and Mission in the Strategic Plan 2014-2019. The Department's Vision incorporates five main themes, i.e.: Transformation, Modernisation, Environment, Agriculture and Rural Development. The themes reflect the mandate of the GDARD within the context of the 2014 to 2019 political agenda of national government and Gauteng Provincial Government (GPG) as expressed in the June 2014 State of Nation Address (SONA) and Gauteng Premier Makhura's State of Province Address (SOPA), as well as the strategic direction provided by the GDARD's MEC Maile in his key note address to a Strategic Planning session of the departments in August 2014.

The revised Vision for the Province is:

*“An economically transformed agricultural sector, and sustainable environmental management for healthy, food secure, developed rural and urban communities in Gauteng”.*

In order to achieve the Vision, the following Strategic Outcome Orientated Goals of the GDARD are aligned with the NDP and MTSF:

1. A modernised and transformed agricultural sector increasing food security, economic inclusion and equality.
2. Sustainable Natural Resource Management.
3. Enhanced capacity of the GDARD to implement efficiently.

The revised Mission speaks to the revised Vision and the strategic outcome orientated goals explained in the Strategic Plan 2014-2019, and it articulates the changes to the strategic approach of the Department and its focus areas over the next five years.

The revised Mission and strategic objectives for the Province is:

*“To radically modernise and transform agriculture, environment and rural development by:*

- » *Promoting environmental protection and management;*
- » *Expanding access to agricultural opportunities;*
- » *Maximising food security;*
- » *Up-scaling rural development;*
- » *Promoting the One Health System; and*
- » *Supporting sustainable livelihoods and communities.”*

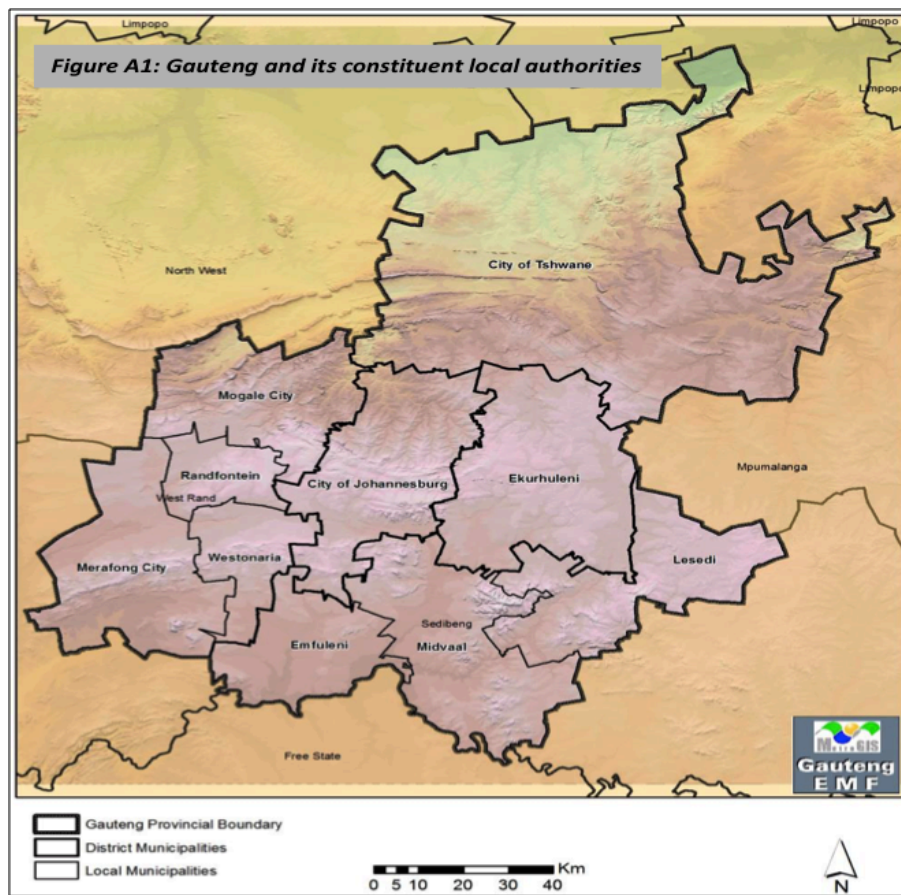
Table 1 below, provides an overview of the alignment between the GDARDs strategic objectives and the strategic outcomes of the NDP 2030 and MTSF 2019. In aligning the objectives and outcomes, it provides decision-makers with a clear goal and future plan for the Province.

**Table 1:** The alignment between the GDARD strategic objectives, the NDP 2030 and the MTSF 2014 - 2019 outcomes.

<b>GDARD Strategic Objectives</b>	<b>NDP 2030 outcomes</b>	<b>MTSF 2019 outcomes</b>
Promoting environmental protection and management	Environmental sustainability and resilience  Transforming human settlements	Protect and enhance our environmental assets and natural resources  Human settlements  Comprehensive rural development
Expanding access to agricultural opportunities	Economy and employment  Fighting corruption	A skilled and capable workforce to support an inclusive growth path  Responsive, accountable, effective and efficient development of local government systems  An efficient, effective and development-orientated public service
Maximising food security	Improving education training and innovation	Improved quality of basic education
Up-scaling rural development	Economic infrastructure  Building a capable and developmental State	An efficient, competitive and responsive economic infrastructure  Transforming society and uniting the country
Promoting the One Health System	Health care for all	A long and healthy life for all South Africans
Supporting sustainable livelihoods and communities	Social protection  Building safer communities  National building and social cohesion	An inclusive and responsive social protection system  All people in South Africa are and feel safe  Decent employment through inclusive economic growth

### 1.3. Gauteng Province Background Information

Gauteng is the financial capital of Africa, Pretoria is the administrative capital of South Africa and Johannesburg is the largest city. Both cities extend over 1645 square kilometres. Urban development is forever expanding with many urban nodes where three large metropolitans dominate – Johannesburg, Tshwane and Ekurhuleni – as well as two smaller districts – Sedibeng and West Rand. The Gauteng Province is shaped and built on gold mining, accounting for roughly 40% of the world's gold reserves. Gold production is now done largely through reworking/re-mining and extraction of economic minerals from slimes dams and mine sand dumps.



**Figure 1:** Gauteng Province and its metropolitan, district and local authorities (GPMEF, 2014)

Figure 1 illustrates the Gauteng Province's metropolitan, district and local authorities in relation to neighbouring provinces. The metropolitan and district municipalities play a key role in supporting and guiding the local authorities in terms of environmental management practices where many PPPs are prepared and developed by the metropolitan and district municipalities incorporating their local municipalities' environmental management plans.

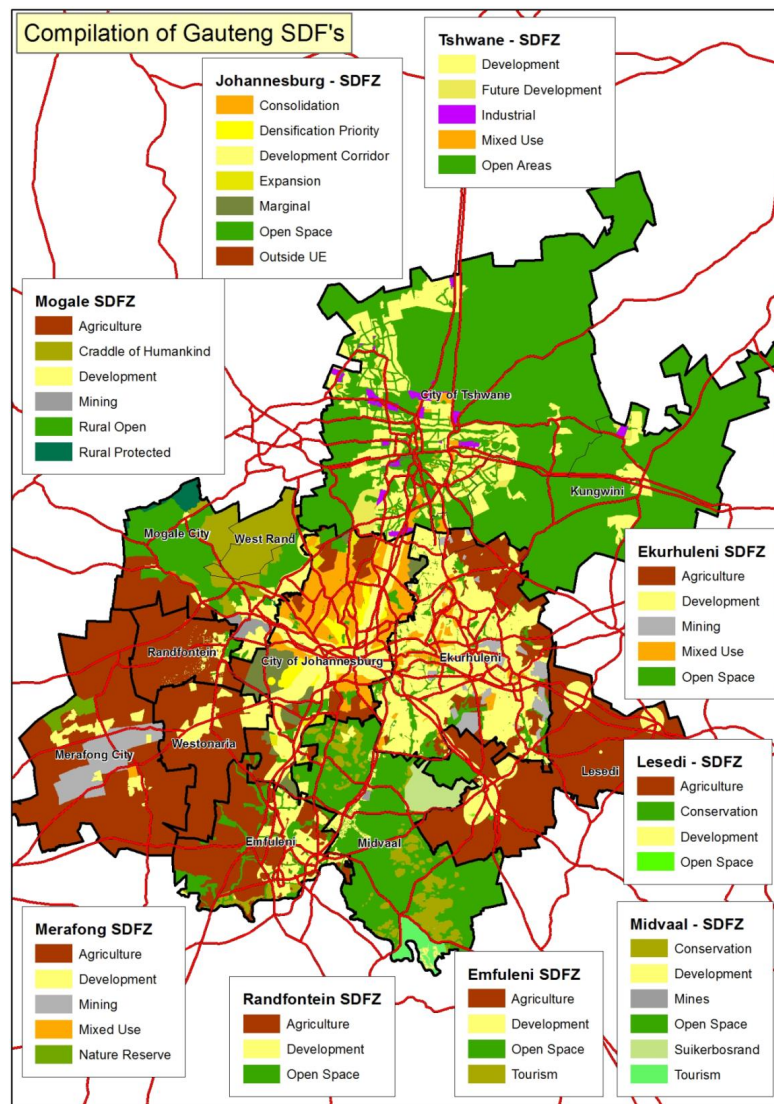
#### **1.4. Gauteng Spatial Development Framework**

The Gauteng Planning Division developed the Gauteng Spatial Development Framework 2030 (GSDF) in response to gaps in the GSDF 2011 and new legal requirements. Compared to the 2011 version this review seeks to:

- » Provide spatial guidance regarding those spatial interventions or spatial structuring elements that provincial or national government is responsible for, or likely to invest in, notably:
  - Transportation networks;
  - Sensitive natural environments;
  - Agricultural resources;
  - Large-scale housing projects; and
  - Significant economic intervention areas.
- » Make in-principle/normative pronouncements on issues that affect all municipalities in the province and which impact on the overall efficiency of the region; and
- » Ensure a high-level regional spatial logic that makes sense even when administrative boundaries are removed and is able to provide guidance for the alignment and integration of different municipal Spatial Development Frameworks (SDFs).

Natural Resources are a key policy area in the GSDF. National and provincial plans, strategies and frameworks related to the development and protection of natural resources centre predominantly around the following three focus areas:

1. Curbing carbon emissions through development of a more sustainable electricity supply, more energy efficient industrial, commercial and mining operations and buildings, and expansion of public transport systems to curb individual vehicle usage;
2. Protecting and managing the viable land-based water resources through the implementation of water supply interventions, addressing water leakages by focussing on infrastructure maintenance, diversifying the water supply mix and protecting wetlands and flood prone areas from development; and
3. Protection and enhancement of conservation areas and agricultural land with a focus on food security by protecting these areas from urban expansion, the development of adaptation strategies for the protection of rural livelihoods, investment in new agricultural technologies and expansion of commercial agriculture.



**Figure 2:** Gauteng Municipality's spatial land use classes (GPEMF, 2014)

Figure 2 illustrates Gauteng's municipalities and their spatial land use classes. The land use classes differ from each other and therefore require individual environmental management policies, plans and programmes to ensure sustainable natural resource and land use management.

## **1.5. Gauteng State of Environment Report**

The Gauteng State of Environment Report (SoER) 2011, highlighted how the Gauteng Province is the smallest of the nine provinces, but the most populated. High levels of energy intensive, polluting industries, mining and rates of urbanisation, have resulted in pressures on the natural environment, which has been particularly evident on water, air, biodiversity and agricultural resources. The socio-economic gains being achieved are at the expense of the health of the natural resources as the population increases and resource use intensifies.

The SoER provides an “environmental census” where the condition of the environment is described and compared at a particular time for specific geographical regions against a set of key environmental indicators. It provides an evaluation of the status of the environment and establishes linkages to the socio-economic and political environment. The report is based on the international drivers-pressures-state-impact-resources (DPSIR) framework and should guide South Africa towards sustainable resource management. It is compiled to present information to the public about the condition and quality of the environment that we live in and to inform them about what is being done to improve the environment.

The SoER will assist the GPG, specifically the GDARD, and other decision-makers to make informed decisions about the environment. Decision-makers will use the information presented to assist with achieving and reporting on environmentally sustainable development and government targets for environmental management.

The following Gauteng SoER indicators are used to further categorise the tables in Section 2, Section 3, Section 4 and Section 6:

### **1.5.1. Governance**

Government is responsible for ensuring good environmental governance, through policies, laws and strategies. The role of government includes providing institutions and infrastructure that enable the economy and society to operate. Its ability to carry out these functions has a profound impact on people’s lives and livelihoods, and the environment. Environmental governance refers to the processes of decision-making involved in controlling and managing the environment and natural resources. Good environmental governance should reflect the best understanding of the structure, function, processes and variability that epitomise natural resources.

The pressures and challenges facing cooperative environmental governance in the Gauteng Province are:

- » Participation from government departments, the private sector, non-governmental organisations (NGOs), public benefit organisations and community-based organisations.
- » Corruption.
- » Inadequate Integrated Development Plans (IDPs).
- » Lack of accountability.
- » Loosely enforced regulations.
- » Lack of interdepartmental coordination.
- » Lack of institutional and community-based building.
- » Insufficient flexibility and creativity in policies towards state-owned land, housing and infrastructure.
- » Inadequate integration of the fragmented structure and layout of the cities.

#### **1.5.1. Water**

Freshwater resources in South Africa have been exploited and are considered limited due to the semi-arid nature of the country's rainfall regime. Gauteng is responsible for 11% of the country's total water use where the urban sector consumes 80% of the total water in the province, while mining and industry consume 9% and irrigation uses 6%. Gauteng does not have any significant water resources within its own boundaries and long since used the available fringe water resources contained in the Vaal Catchment. The Department of Water and Sanitation and Rand Water monitor water resources in Gauteng. Water resources are under immense pressure to supply water for development and the health of aquatic ecosystems and water quality has been severely affected. Water from the Upper Vaal Water Management Area (UV WMA) provides most of the Province with potable water through the Rand Water distribution network while large parts of the Crocodile (West) Marico Water Management Area (CWM WMA) supports the urban land use. The "Ecological State" of rivers reflects the management of those aquatic ecosystems and progress made towards achieving a desired outcome for the health of river systems in a region.

Acid Mine Drainage (AMD) associated with mining activities is the greatest current concern relating to ground water resources. Impacts from flooding of underground voids include increased seismic activity, contamination of shallow groundwater resources and geotechnical impacts close to the surface. Careful monitoring and management of mining activities are required throughout the Province in order to mitigate and prevent severe environmental impacts.

#### **1.5.1. Waste**

Gauteng produces more waste than any of the larger provinces in South Africa. It is estimated that Gauteng generates approximately 42% of the total waste produced in South Africa. Waste is a major concern in the province and a problem that is growing daily. Waste management can

lead to savings in airspace at landfill sites, job creation and stimulation of the recycling economy. There is large potential for waste recycling and waste-to-energy projects in Gauteng. It was estimated that the economic value of the waste sector in South Africa is more than R15 billion (DST 2013, 38). However, the uptake of these projects is still minimal while the focus needs to be in the municipalities in Gauteng.

#### **1.5.1. Biodiversity**

Biodiversity refers to all organisms (plants and animals), species and populations, the genetic variation among these and all their complex assemblages of communities and ecosystems. Gauteng is largely made up of the Grassland Biome, most of which has been ploughed up for agricultural or development initiatives. Gauteng's economic growth and development depends on biodiversity, which supports commercial and subsistence farming, tourism, medicinal applications and are the basis for fishing. Biodiversity plays a crucial role in ensuring the on-going production of clean water, prevention of erosion, carbon storage to counteract global warming and the provision of clean air.

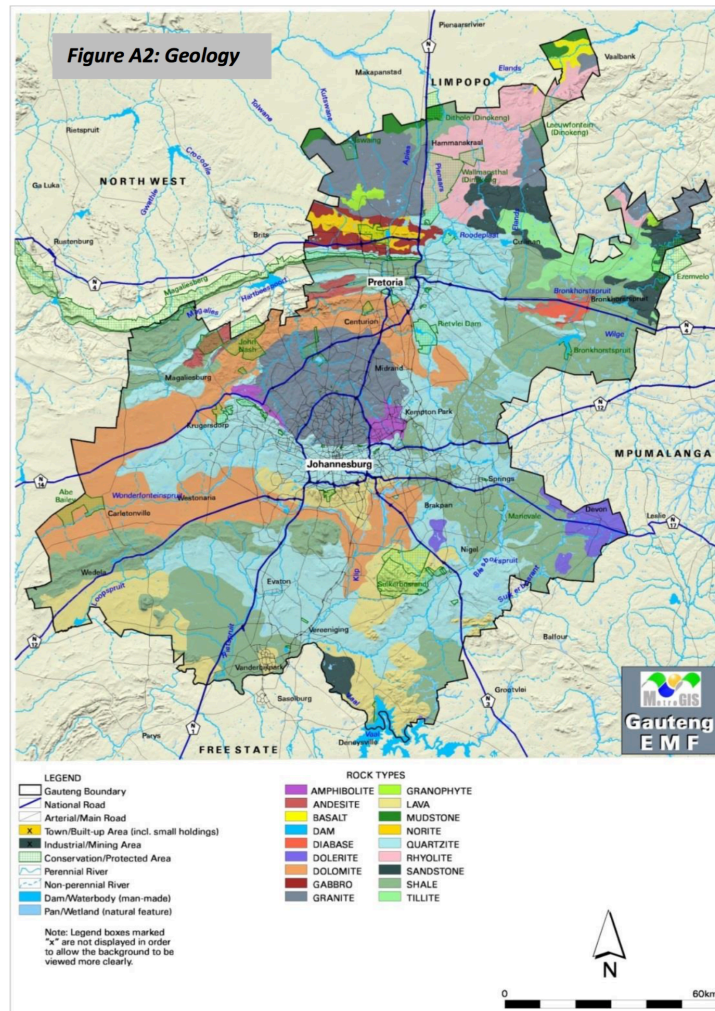
#### **1.5.2. Land Resources**

The Gauteng Province is the smallest of the nine provinces making up 1.4% of South Africa's land area and is situated in the Highveld; an inland high-altitude plateau of extensive grasslands roughly ~1 500 metres above sea level. Inappropriate and wasteful land use practices impact on the functioning of the economy, restricting development and may lead to a range of social problems. Proper land planning, sustainable natural resource use, adequate focus on reliable food production and the rectifying of land degradation are string themes arising from the investigation into land and agriculture.

The Gauteng Agricultural Potential Atlas states that approximately 28.7% of the provincial land area has been identified as suitable for agricultural use, which is characterised by a dual economy. Agricultural practice is responsible for environmental degradation; with soil erosion responsible for about 40% of land degradation worldwide, much of it caused by tillage and the preparation of land for growing crops. Food security is impacted by urbanisation trends, climate change, post-disaster recovery and rehabilitation, drought management, and soil degradation - soil fertility, compaction, acidification and erosion. The pressure drives the need to protect this land specifically for agricultural use and to enhance both food security and the green economy.

The mineral resources of Gauteng have shaped urbanisation where mining processes have occurred since the 1800s. There is a large kimberlite-diamond producing area in Cullinan and Rayton in the eastern part of Tshwane, which yields an unusually high proportion of large gems. There are at present four dolomite and limestone mines in Gauteng that mine the carbonate

rocks belonging to the Malmani Subgroup of the Transvaal Supergroup. The minerals are important industrial commodities and have numerous industrial applications. Refractory clays are extensively used in industry and are mostly mined in north and east Gauteng; these clays are closely associated with shales of the Vryheid Formation of the Karoo Supergroup.



**Figure 3:** Geographical formations in Gauteng (GPEMF, 2014)

### 1.5.3. Atmosphere: Climate Change and Air Quality

Gauteng has a mild sub-tropical climate with a distinctive wet summer and dry winter season, significantly influenced by the high altitude. Cool temperatures, dry air and the absence of wind in winter create conditions where atmospheric pollution from industrial and manufacturing activities is trapped close to the land surface, transforming the sky into a haze of pollution.

The atmosphere is a resource linked to both ecosystems and human development. Its variable nature affects food production, human health and biodiversity. The quality of air depends on

natural and human-caused emissions and the potential of the atmosphere and ecosystems to absorb and remove pollutants. Gauteng is the economic hub of South Africa and is a major contributor, and victim, to global climate change. Gauteng is home to various industrial operations – iron and steel processes, waste incinerations, cement production, lead and power generation –most of which produce large amounts of hazardous and toxic waste that leads to air and water pollution. Mining activities – land clearing, excavation, drilling, blasting, storage piles, processing plant and tailings dams – release toxic waste and GHGs. Mine residue areas (MRAs) contribute to particulates, dust and release radioactive substances, which is carried in the air or water.

#### **1.5.1. Social**

The relationship between people and the natural environment is important in a fast developing and highly urbanised province. People become more reliant on the natural environment as poverty levels increase, and yet, their vulnerability and lack of resilience to environmental degradation and pollution also increases. There is a stark contrast in living conditions and levels of income with the result that there are still people living in dire poverty despite the fact that Gauteng is the largest contributor, 33.9%, to the National Gross Domestic Product (GDP).

Gauteng receives a large number of migrants on an annual basis from across South Africa as well as from neighbouring countries. The steady influx of migrants into Gauteng has increased social demands and added pressure to already stressed natural resources and ecosystems. For more information on population growth, refer to Chapter 3 of the Gauteng Spatial Development Framework 2030.

### **1.6. Gauteng Provincial Environmental Management Framework**

The Gauteng Provincial Environmental Management Framework (GPEMF), 2014, is a legal instrument in terms of the Environmental Management Framework Regulations, 2010. The purpose of the regulations is to assist environmental impact management including Environmental Impact Assessment (EIA) processes, spatial planning and sustainable development. The GPEMFs key objectives are:

- » To make it efficient for urban development, including associated service infrastructure, to occur in defined selected areas with lower environmental concerns and high development demand in order to help facilitate the implementation of the Gauteng Growth and Management Perspective, 2014;
- » To facilitate the optimal use of current industrial, mining land and other suitable derelict land for the development of non-polluting industrial and large commercial developments;
- » To protect Critical Biodiversity Areas (CBAs as defined in C-Plan 3.3) within urban and rural environments;

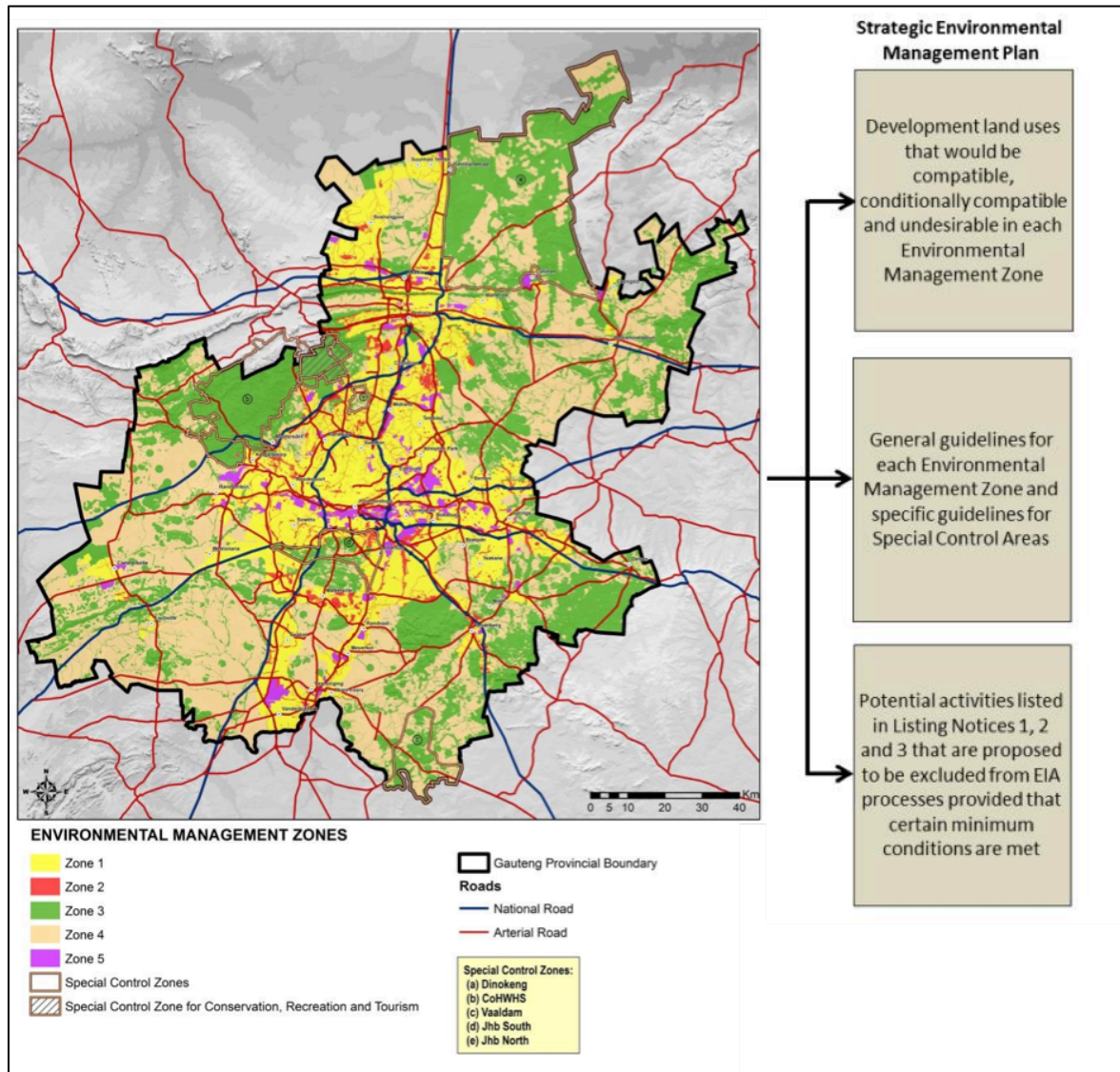
- » To ensure the proper integration of Ecological Support Areas (ESAs as define in C-Plan 3,3) into rural land use change and development;
- » To use ESAs as defined in municipal bioregional plans in spatial planning of urban open space corridors and links with urban areas; and
- » To focus on sustainable development through the implementation of initiatives such as:
  - Energy efficiency programmes, plans and designs;
  - Waste minimisation, reuse and recycling;
  - Green infrastructure in urban areas; and
  - Sustainable Urban Drainage Systems (SUDS).

The GPEMF was gazetted in July of 2015 in the Provincial and National Gazettes. The GPEMF has a strong focus on the identification of Environmental Management Zones (EMZs) and the compatibility of development activities that can be permitted within each zone. The GPEMF is currently in Phase 2 of its development (to be implemented in 2016) where one of the key objectives is to streamline environmental impact management in a manner that will contribute to the Gauteng City Region urban development goals of densification, limiting urban sprawl, limit development pressure on rural areas and to achieve better economies of scale for public services.

The EIA application and authorisation process contributes to the economic growth and development in the province. EIA is a pro-active and systematic process where potential environmental impacts, both positive and negative, associated with certain activities are assessed, investigated and reported. Economic growth and development is delayed by the EIA process, which requires re-engineering in order to promote transformation, modernisation and re-industrialisation in the Province while at the same time ensuring sustainable environmental management. The development of Phase 2 of the GPEMF was a response to this recognition, where the re-engineering of the EIA process would serve to improve turn-around times and contribute to increased investment in the Province.

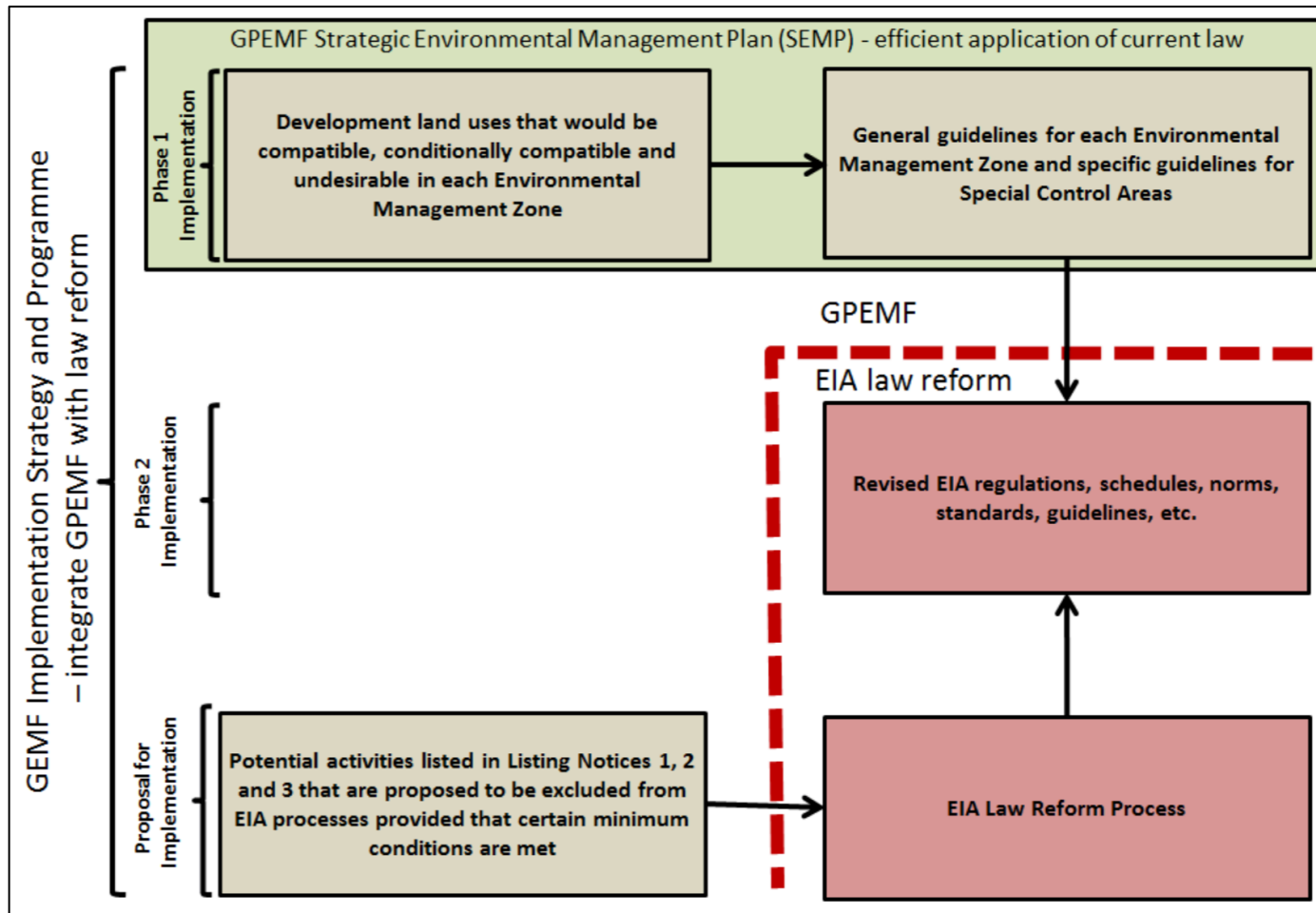
Specific Norms and Standards for the EMZs will serve to govern Activities to be excluded from authorisation by the competent authority (GDARD). This is provided for by Section 24 (2)(d) of the NEMA and the Norms and Standards will be compiled in terms of Section 24 (2)(a)(b). The Norms and Standards facilitate continued efforts in integrating and supporting municipal and provincial decision-making and align different government mandates in a way that will guide the province on a sustainable development path.

Figure 3 and 4 below highlight the priority environmental management areas within the Province and how the GPEMF will be integrated with law reform.



**Figure 4:** Environmental Management Zones in the Gauteng Province (GPEMF, 2014)

The Gauteng EMZs were derived from the desired state, the environmental sensitivity as well as the unique control areas, and have been accepted as a suitable contribution to facilitate appropriate development in Gauteng. Five EMZs have been identified and overlaying those a further six Special Management Areas were identified where specific planning and policy measures are necessary to achieve the development objective of those areas.



**Figure 5:** Implementation Strategy and Programme to integrate the GPEMF with law reform (GPEMF, 2014)

### **1.7. Gauteng Conservation Plan 3.3**

The Gauteng Conservation Plan (C-Plan) 2014, identifies sites that are critical for maintaining biodiversity, enabling planners, environmental professionals and land use managers to integrate biodiversity into land use planning and decision-making. The C-Plan has been developed using a systematic conservation planning approach. Systematic conservation planning has become the standard approach to conservation planning in South Africa due to its robust scientific approach and internationally recognised principles and methodologies. The key objective of the C-Plan is to assist the biodiversity informant in:

- Compiling Municipal Bioregional Plans.
- Land use decision-making (Basic Assessments, EIAs, town planning applications and agricultural activities).
- Land use planning (Municipal IDPs, SDFs, EMFs and Zoning Schemes).
- Proactive conservation activities (guiding protected area expansion and stewardship programmes such as the clearing of invasive alien plants or wetland rehabilitation).

The C-Plan delineates on a map known as a Critical Biodiversity Areas Map, biodiversity priority areas called Critical Biodiversity Areas, Ecological Support Areas and Protected Areas. The map is designed to be used at approximately 1:50 000 scale as the integrated biodiversity input into land use planning and decision making. The C-Plan should be used as the key biodiversity informant in the compilation of bioregional plans, EMFs and Municipal SDFs, and should be a primary biodiversity consideration in EIA.

### **1.8. Gauteng Province Municipal IDP review process**

Section 16(4) of NEMA indicates that provincial governments are responsible for ensuring that all municipalities within the province comply with the provincial EIP and the principles set out in Section 2 of NEMA in the preparation of any policy, plan or programme, including the establishment of integrated development plans. During the IDP review process (Section 3, page 66) the GPG ensures that municipal IDPs comply with all legislated requirements and assess the level of environmental performance of the IDP. IDPs are a vital tool for ensuring that municipalities mainstream and budget for all environmental obligations. Good and effective governance requires that all levels of government function in an integrated fashion. This is the focus of the strategic goal of the Province and extensive efforts are being made to ensure and improve alignment.

Municipalities are not required to produce EIPs, but Integrated Development Plan (IDP) managers must, according to NEMA (Section 16 (4) A and b), adhere to provincial EIPs. During the Strategic Planning of the IDP process, IDP managers should refer to the provincial EIP in order to investigate the highlighted environmental issues. EIPs can be a starting point for the

development of municipal strategies, which are in line with relevant sector departmental roles and responsibilities. However, each Provincial government is required to ensure that the municipalities within its province comply and adhere with the provincial EIP, as well as to the national environmental management principles in the preparation of any policy, programme or plan, including IDPs.

### **1.9. Gauteng EIP 2015 – 2020 Compilation Process and Methodology**

The following methodology was used to prepare and develop the Gauteng EIP 2015-2020:

#### *Project Commencement and Nomination of Champions:*

GDARD invited National Departments, GPG Departments and Gauteng Municipalities to participate in the development of the Gauteng EIP 2015-2020. Refer to Annexure A for a complete list.

National, provincial and municipal Departments were requested to nominate a champion (a representative from their Department) who facilitated their department's involvement in the development and implementation of the EIP. The role of the champion was to facilitate and coordinate the collection of the Departments environmental PPPs and to invite relevant colleagues associated with the PPPs to attend the one-on-one discussion meeting. During the review period, the role of the champions and their colleagues was to provide feedback and comments on the Gauteng EIP 2015-2020. A database with the relevant contact details of the champions was created and used throughout this process (refer to Annexure C).

#### *Background Information Document and Initial Briefing Meeting:*

A Background Information Document (BID) was created to explain the purpose, process and legislative background of the EIP and was circulated to the champions. Champions were invited to attend an initial briefing meeting. The purpose of the briefing meeting was to provide the champions with an overview of the EIP process and timeframes, to outline their roles and responsibilities as the nominated champions and lastly to provide the champions with an opportunity to provide their input on the EIP process.

#### *Identification of Policies, Plans and Programmes (PPPs):*

All PPPs that could potentially have significant environmental impacts were identified and analysed. The PPPs were analysed and divided into the following subsections:

- » PPPs of national departments
- » PPPs of provincial departments; and
- » PPPs of municipal departments.

#### Compilation of Checklist tables:

Environmental checklist tables were created and structured according to the 'Draft 2015 /2019 Guidelines for Implementation Plans and Environmental Management Plans' utilising the relevant PPPs (refer to Annexure D).

#### Meetings with National, Provincial and Municipal Champions:

Formal one-on-one discussion meetings were held with the champions and their relevant colleagues associated with the PPPs in order to gain their input, comments and feedback on the checklist tables. These interviews were held from the 23 November 2015 – 07 December 2015. Champions and their relevant colleagues were provided with an opportunity to provide their feedback and comments on the draft EIP during the one-month review period. The draft EIP was circulated to the champions on 11 January 2016 for review and comment. The review period ended on the 09 February 2016.

### **1.10. Structure of the EIP**

The EIP is divided into sections based on the National guidelines template for the preparation of EIPs (refer to Annexure D). Each section focuses on specific content, which will be used by decision and policy makers from national, provincial and local government as well as the public and private sectors to ensure and comply with environmental management principles described in NEMA. The sections and their descriptions are as follows:

**Section 2:** This section provides a description of policies, plans and programmes that may significantly affect the environment.

**Section 3:** This section provides a description of the manner in which the relevant national department or province will ensure that the PPPs referred to in Section 2 above will comply with the principles set out in NEMA as well as any national norms and standards.

**Section 4:** This section provides a description of the manner in which the relevant national department or province will ensure that the policies, plans and programmes referred to in Section 2 above will comply with the principles set out in NEMA.

**Section 5:** This section provides recommendations for the promotion of the objectives and plans for the implementation of the procedures and regulations referred to in Chapter 5 of NEMA.

**Section 6:** This section provides outcomes and key priority indicators for the EIP over a five-year period. The indicator source table in Section 6 consists of the national and provincial Strategic Plans, which contain the relevant outcomes and their associated indicators and targets

for each year. The targets in Section 6 are numerical or percentages, this is because the targets and their indicators are extracted directly from the PPPs of the department.

### **1.11. Annual Reporting and Compliance**

NEMA requires scheduled departments and provinces to report annually, within 4 months of the end of the financial year, on the implementation of its adopted EIPs or EMPs.

The annual reporting guidelines have been reviewed in order to simplify the reporting process. A standard method and table have been developed as a guideline to assist departments and provinces in compiling their annual reports (refer to Annexure E). Departments and provinces should note that deliverables set out in the EIPs and annual reports would be captured in the annual business plans.

The purpose of the annual EIP/EMP reports are to:

- Monitor implementation of targets set and commitments made in individual EIPs/EMPs;
- Monitor the implementation of recommendations made in the alignment report;
- Monitor compliance by local authorities to provincial EIPs; and
- Provide additional information not included in the First Edition EIPs/EMPs (i.e. recording adjustments made to the priorities set out in the first edition EIPs/EMPs).

In terms of Section 16(1)(b) of NEMA, every organ of state must report annually within four months of the end of the financial year on the implementation of its adopted EIP 2015-2020 to the Director-General of Environmental Affairs. The Gauteng EIP 2015-2020 would be able to ensure that the Province achieves the objectives as outlined in Section 12 of NEMA and the environment sector priorities driven by the long-term development strategies in Chapter 5 of the NDP.

The Gauteng Planning Forum and GDARD Inter-Governmental Relations (IGR) Environment Technical Committee will be used as mechanisms for conducting the monitoring and reporting of the Gauteng EIP 2015-2020 implementation process with the relevant role players. All responsible authorities must submit to GDARD their annual performance report in line with this plan. Meetings of the forum shall be held on quarterly basis and shall be attended by all role players identified in the implementation plan linked to the performance indicators for the next five years. Quarterly reports shall be consolidated into an annual report as required by Section 16(1)(b) of NEMA.

## SECTION 2: Description of policies, plans and programmes that may have an effect on the environment

The following section provides a summary of the policies plans and programmes within the Gauteng Province that may affect the environment. This table has been compiled from a review of PPPs available from national departments, provincial departments and municipalities who operate within the province and whose activities may impact on the environment.

Explanatory note: This section of the EIP focuses on giving the idea or depicting those existing and new policies, plans and programmes (PPPs) of the department that when implemented may significantly affect the environment both positively and negatively.

**Table 2:** Section 2 degree of control definitions

Degree of control	The degree of control exercised by the relevant organ of state to manage the environmental impact
<b>High</b>	The Organ of State possesses a moderate to high level of control over preventing and/or mitigating environmental impacts associated with the policy, plan or programme.
<b>Medium</b>	The Organ of State possesses a moderate or average level of control over preventing and/or mitigating environmental impacts associated with the policy, plan or programme.
<b>Low</b>	The Organ of State possesses little control or power over preventing and/or mitigating environmental impacts associated with the policy, plan or programme.

**Table 3:** Section 2 Table legend

<u>Legend</u>			
<b>Status</b>	D = in Development	A = Adopted	I = Implemented
<b>Scope</b>	N = National	P = Provincial	M = Municipal
	NDP 2030 & NSSD 1 Environmental Priority Areas		
	Gauteng SoER 2011 Indicators		

**Table 4:** Section 2 description of policies, plans and programmes

Name of policy, plan or programme	Status	Explanation of the policy, plan and programme	Scope	How the policy, plan or programme will affect the environment	Degree of control	Name of implementing organ of state
<b>ENHANCING GOVERNANCE SYSTEMS AND CAPACITY</b>						
<b>GOVERNANCE</b>						
<b>National</b>						
1. DEA Programme 2: Legal, Authorisations, Compliance and Enforcement	I	The programme seeks to improve compliance with environmental legislation by effective compliance monitoring and enforcement, providing capacity building, legal and information management support.	N	The programme focuses on increasing the number of: <ul style="list-style-type: none"> <li>- Successful compliance rates;</li> <li>- Finalised criminal cases;</li> <li>- Compliance inspections;</li> <li>- Joint compliance operations; and</li> <li>- Officials trained in environmental compliance and enforcement.</li> </ul>	Low  Medium	GDARD  DEA
2. DEA Environmental Sector Research Development and Evidence Framework 2012	A	The objective of the framework is to address the need for a common approach for the collection of solid evidence that can be used in support of environmental sector policy decisions. The framework will bridge the gap that exists between policy makers and researches and other evidence generators, by promoting dialogue and to ensure that policies are informed by the evidence from multi-stakeholders.	N	This approach will lead the promotion of coherent and evidence informed environmental programmes and policies that respond to the environmental priorities, challenges and services within the province.	Low	DEA
3. DAFF Policy, Principles and Guidelines for Control of Development Affecting Natural Forests 2010	I	The purpose of this document is to advocate effective implementation of current environmental legislation pertaining to development affecting natural forests and associated ecosystems in South Africa.	N	The document ensures that any decisions on land use change affecting natural forests in South Africa does not allow the destruction of such forests without a license; only in exceptional circumstances as determined in the National Forests Act of 1998.	Medium	DAFF
4. DAFF Compliance and Enforcement Policy 2005	A	The Policy seeks to prevent, detect and provide a corrective measure for non-compliance to the National Forest Act 1998 (NFA) and National Veld and Forest Fire Act 1998 (NVFFA).	N	The Policy promotes sustainable development and the sustainable use of natural resources through these statutes as instruments of policy. The policy seeks to achieve compliance with the objectives of and provisions in NFA and NVFFA.	Medium	DAFF

Name of policy, plan or programme	Status	Explanation of the policy, plan and programme	Scope	How the policy, plan or programme will affect the environment	Degree of control	Name of implementing organ of state
5. DAFF National List of Protected Trees and Licensing System and Guidelines 2015	I	The aim of this document is to control the use and protection of certain trees through licensing in terms of Section 15.	N	The document provides a list of tree species that require protection. The trees are protected by controlling their use and clearance through licensing.	High	DAFF
6. DMR Programme 3: Mineral Regulation	I	The programme seeks to regulate the minerals and mining sector to promote economic growth, employment, transformation and sustainable development.	N	Mining operations are monitored and controlled to mitigate and avoid waste pollution and reduce the impact on air quality.	Low Medium	GDARD DMR
<b>Provincial</b>						
7. GDARD Strategic Plan 2015-2020	D/ I	The Strategic Plan re-positions the mandate and core functions of the department and revises its Vision, Mission, Strategic Outcome Orientated Goals and Strategic Objectives within the framework of this strategic agenda. This is a provincial overarching plan to guide approach to implementation of the NDP within the region.	P	The strategic priorities and approach need to be harnessed as opportunities to advance the Sustainable Development within the region.	Medium	GDARD
8. GDARD Programme 1: Administration	I	This programme provides all the corporate support services required by the department's Programme 2 and Programme 3. It responds directly to Strategic Outcome Orientated Goal 3 and indirectly to Goals 1 and 2.	P	Sound cooperative environmental management plans and administrative actions will increase natural resource management efficiency and management.	High	GDARD
9. Gauteng Spatial Development Framework 2030 (GSDF)	I	The GSDF 2030 is a review and assessment of the relevance and accuracy of the Gauteng SDF, 2011 and not a departure from the 2011 document.	P	Spatial patterns and development plans make provisions for environmental priority areas thereby promoting development based on sustainable management principles.	Medium	GDED
10. Position paper on: Conserving and sustaining the GCR – Resource & Environmental Management	D	This paper is a review of the Gauteng Spatial Development Framework 2011 and aims to Provide an overview of the current Gauteng reality regarding pressures on natural resources and functioning ecosystem services; key policy directives; and Propose a Provincial Position to address the disjunction between spatial development and the supporting environment.	P	By considering the city as a socio-ecological system, with disturbances, functions and sources of diversity that are closely related to the social aspects of the city, based on either functional requirements or ideological pressures, it is possible to engage with change and sustainability in cities.	Medium	GDARD

Name of policy, plan or programme	Status	Explanation of the policy, plan and programme	Scope	How the policy, plan or programme will affect the environment	Degree of control	Name of implementing organ of state
11. Gauteng Spatial Perspective (GSP) 2030	I	The report serves as a concept paper aimed at presenting a rationale and basis for the review of the GSDF 2011. The GSP aligns its timeframe with the NDP 2030 and considers the Ten Pillar Programme.	P	The GSP focuses on improving and increasing environmental infrastructure to increase environmental sustainability.	Medium Low	GDARD GID
12. GDRT Programme 4: Transport Regulation	I	Provision and regulation of road based public transport, motor vehicle licencing, driver licence testing and vehicle services in line with the legislative requirements.	P	Through the regulation of traffic on the public infrastructure, law enforcement, implementation of road safety and ensuring compliance will ensure the surrounding natural environment is unaffected while public transport will decrease air pollution.	High	GDRT
<b>Municipal</b>						
13. City of Johannesburg MM Environmental Compliance and Monitoring Framework 2008	I	The Framework is a key component of the CoJ's approach to serve as a basis for ensuring the implementation of environmental legislation. The Framework seeks to realize the CoJ's vision of an environmentally sustainable city, which anticipates, manages and reduces its vulnerability to potential global and local environmental impacts, and reduce pressures on natural resources.	M	The framework will be limited to environmental compliance monitoring in line with the requirements of the NEMA Regulations.	High	City of Johannesburg MM
14. Ekurhuleni MM Environmental Policy 2013	A	The policy makes environmental issues and environmental sustainability an essential part of all decision-making processes, the development of strategies and programmes, the development and planning of land use and the management of resources	M	Specifically, this policy is used to spearhead sustainable development and planning within EMM; improve the governance function of the municipality; create environmental awareness within the municipality; enhance a safe and healthy environment; and direct sustainability and responsible decision-making.	High	Ekurhuleni MM
15. Ekurhuleni MM Environmental Management Plan report (EMPr)	D	The EMPr will address the environmental impacts during the design, implementation and operational, closure, rehabilitation and maintenance phases of a project. In order to achieve this, a number of environmental specifications/recommendations are made and standard operating procedures are provided.	M	The programme for protection of the environment that seeks to achieve a required end state and describes how activities that have, or could have, an adverse impact on the environment, will be mitigated, controlled and monitored.	High	Ekurhuleni MM

Name of policy, plan or programme	Status	Explanation of the policy, plan and programme	Scope	How the policy, plan or programme will affect the environment	Degree of control	Name of implementing organ of state
16. Cradle of Humankind World Heritage Site (COHWS) Integrated Management Plan (IMP) 2014 (Programmes)	I	The Plan is a revised version of the first Integrated Environment and Conservation Management Plan (IECMP). The plan is structured according to the IUCN Best Practice Guidelines for the development of management plans as well as the Guidelines for the Development of a management plan for a protected area. Statement of Outstanding Universal Value (OUV) measurement is used.		Development, mining prospects or any alteration of a Heritage Site is prohibited. These activities would impact the visual character as well as the physical/natural processes that have created the conditions for fossilisation to take place. Undiscovered fossils might be destroyed while important ecosystem services and functions could be altered.	High	COHWS
17. Mogale City LM Generic Environmental Management Plan (EMP) 2009	I	The Generic EMP is a management tool that seeks to realise the Mogale City's vision - promote an environmentally sustainable city, which anticipates, manages and reduces its vulnerability to potential global and local environmental shock, reduce impacts of its own built environment and urban development processes affecting natural resources.	M	The GEMP is a tool used to ensure that undue or reasonably adverse impacts of the construction, operation and decommissioning of projects on the environment are prevented or minimised; and that the positive benefits of the projects are enhanced.	High	Mogale City LM
18. Mogale City LM Compliance Monitoring and Audit Strategy 2009	I	This document is aimed at giving detailed approach of activities planned for the current financial year. This document gives a detailed status quo in MCLM on compliance monitoring and further addresses the need for intervention where there are grey areas.	M	The strategy broadly includes environmental compliance monitoring of a number of environmental aspects and focus areas to ensure sustainable environmental management.	High	Mogale City LM
19. Emfuleni LM Protocol for Monitoring Compliance 2008	I	The protocol is a tool to assist in conducting compliance inspections, which should inform the use whether the facility is compliant with environmental regulations. The protocol is intended to provide guidance on key requirements, defines regulatory terminology and gives an overview of the regulatory framework.	M	The objectives of this compliance protocol are to provide national consistency in compliance inspections for Listed Activities and promote communication between national, provincial and local environmental authorities on air compliance monitoring programmes for Listed Activities.	High	Emfuleni LM

Name of policy, plan or programme	Status	Explanation of the policy, plan and programme	Scope	How the policy, plan or programme will affect the environment	Degree of control	Name of implementing organ of state
20. Metro and District SDFs	D/I	The SDF indicates the long-term proposals, which will affect the spatial form of the Metro or District while aligning spatial development goals, strategies and policies with relevant national and provincial spatial principles, strategies and policies. The strategies manage potential environmental impacts caused by development and prevent loss and degradation of critical biodiversity areas.	M	The SDFs seeks to: <ul style="list-style-type: none"> <li>- Provide a clear future provincial spatial structure that is robust to accommodate growth and sustainability;</li> <li>- Specify a clear set of spatial objectives for municipalities to achieve in order to ensure realisation of the future provincial spatial structure;</li> <li>- Propose a set of plans that municipalities have to prepare in their pursuit of these objectives;</li> <li>- Provide a common language and set of shared planning constructs for municipalities to use in their planning process and plans; and enable direct growth.</li> </ul>	High	Municipalities
21. Municipal IDPs	D/I	The purpose of an IDP, <i>inter alia</i> , to guide development in the municipality in such a way that the municipality's constitutional obligations and developmental needs are met, to align the development in the municipality with national or provincial sectoral plans and planning requirements, to provide disaster management and fiscal plans and determine key performance indicators and performance targets for the municipality.	M	The IDP determines a municipality's development and operation, which has a direct impact on the environment, both potentially positive and negative. By assessing the Municipal IDP/Review Documentation/ Amended IDP to evaluate the level of compliance and the level of performance in terms of environmental requirements and the level of alignment, as well as to determine the need for support and improved alignment.	High	Municipalities
<b>SUSTAINING SOUTH AFRICA'S ECOSYSTEMS AND USING NATURAL RESOURCES EFFICIENTLY</b>						
<b>WATER</b>						
<b>National</b>						
22. DWS Programme 2: Water Planning & Information Management	I	The purpose of the programme is to ensure that the country's water resources are protected, used, developed, conservable, managed and controlled in a sustainable manner for the benefit of the people and the environment by developing a knowledge base and implementing effective policies, procedures and integrated planning strategies both for water resources and water services.	N	Sustainable use and development of water resources will ensure water for future generations. The programme focuses on ensuring adequate water availability reducing projected demand; integrated water management; protecting the integrity of fresh water ecosystems; and improving the surface and groundwater monitoring network.	High  Medium  Low	Municipalities  GDARD  DWS

Name of policy, plan or programme	Status	Explanation of the policy, plan and programme	Scope	How the policy, plan or programme will affect the environment	Degree of control	Name of implementing organ of state
23. National Water Resource Strategy 2 (NWRS2) 2013	I	The Strategy builds on the first NWRS1 published in 2004. The purpose of the strategy is to ensure that national resources are protected, used, developed, conserved, managed and controlled in an efficient and sustainable manner towards achieving South Africa's development priorities in an equitable manner over the next 10 years.	N	The Strategy emphasises the importance of water resources and water resource management whereby: <ul style="list-style-type: none"> <li>- Water supports development and the elimination of poverty and inequality;</li> <li>- Water contributes to the economy and job creation;</li> <li>- Water is protected, used, developed, conserved, managed and controlled sustainably and equitably.</li> </ul>	Medium  Low  High	DWS  GDARD  Municipalities
<b>Provincial</b>						
24. GDARD Programme 3: Environment	I	The programme is responsible for the sustainable resource management mandate area of the GDARD. Greater emphasis is placed on economic growth and development elements.	P	Ensure the protection and management of Gauteng's natural and environmental resources and ecosystems.	High	GDARD
25. Gauteng Wetland Policy	A	The Wetlands Policy provides an overview of the Department's approach to development on and close to wetlands within the Gauteng Province. Officials in the evaluation of development applications proposed on and close to wetland environments and as a basis for other administrative decisions pertaining to these environments, including compliance promotion and enforcement action, will use the policy.	P	In assessing the development impacts on and around wetlands, the area is delineated and the nature and importance is determined. The assessment identifies the necessary buffer zone thereby ensuring wetland protection and management.	Medium  High	GDARD  Municipalities
<b>Municipal</b>						
26. City of Johannesburg MM Catchment Management Policy 2008	A	To conserve and enhance the watercourses and riparian zones within Johannesburg through implementing integrated catchment planning and management practices in order to protect water resources and to promote healthy aquatic ecosystems and riverine areas, which support sustainable social and economic use to the optimal benefit of all stakeholders, including the environment.	M	The degree of flood and/or environmental protection required by this policy is considered reasonable for regulatory purposes and is based on engineering and scientific methods of study. Compliance with the policy cannot ensure complete protection from flooding or reduced environmental impact.	Medium  Low	City of Johannesburg MM  GDARD

Name of policy, plan or programme	Status	Explanation of the policy, plan and programme	Scope	How the policy, plan or programme will affect the environment	Degree of control	Name of implementing organ of state
27. City of Johannesburg MM Wetland and Riparian Protection and Management Plan 2009	I	The purpose of the project is to develop a Wetland Protection and Management Plan, which can be used to inform spatial planning, development decisions and management strategies for priority wetlands within the city in order to promote the protection and sustainability of wetlands and associated water resources, and provide an integrated approach to development and the protection of the environment.	M	Prioritisation of the: <ul style="list-style-type: none"> <li>- Conservation of wetlands outside the urban edge;</li> <li>- Rehabilitation and conservation of wetlands which are upstream of areas at risk of flooding and storm water impacts; and</li> <li>- Conservation of wetlands, which support important aquatic eco-systems and biodiversity.</li> </ul>	High	City of Johannesburg MM
28. Ekurhuleni MM Draft Long-Term Water Conservation (WC) and Water Demand Management (WDM) Strategy 2015	I	The purpose of the strategy is to outline the measurable objectives and action programmes to be undertaken by the Municipalities Water and Sanitation Department to ensure achievement of economic efficiency objectives, reduction of non-revenue water and deferment of the need for new water resources development.	M	WC is the overall principle that requires effective management and protection of water resources. The scope of WDM includes both distribution management and customer or end use demand management measures. WC and WDM are effective when integrated.	High	Ekurhuleni MM
29. Randfontein Water Services Development Plan (WSDP) 2009	I	The WSDP focuses on specifics regarding Water Services, Integrated Water Resource Management and Institutional Arrangements. The WSDP and the Randfontein Integrated Development Plan informs each other.	M	Physical restrictions that affect the environment in the Randfontein area include the presence of dolomite and red data species. The presence of mining activities, nature reserves, slopes and undermined areas must be considered.	Medium	Randfontein LM
<b>WASTE</b>						
<b>National</b>						
30. DEA Programme 7: Chemicals and Waste Management	I	The programme seeks to reduce the negative impacts of waste on the environment, managed through improving management of waste disposal sites and decreasing the disposal of waste tyres into landfills.	N	The programme focuses on: <ul style="list-style-type: none"> <li>- Reducing the number of unlicensed waste disposal facilities;</li> <li>- Reducing the number of illegal dumping sites; and</li> <li>- Increasing the percentage of waste reused and diverted from landfill sites.</li> </ul>	High  Low	Municipalities  GDARD

Name of policy, plan or programme	Status	Explanation of the policy, plan and programme	Scope	How the policy, plan or programme will affect the environment	Degree of control	Name of implementing organ of state
<b>Provincial</b>						
31. Gauteng Integrated Waste Management Policy 2006 (IWMP development in progress)	A	Integrated Waste Management (IWM) seeks to optimise across Province waste management (WM) services to ensure effective and coordinated WM over the entire waste life cycle, whilst applying the Precautionary and Polluter Pays Principles.	P	Better waste management reduces environmental pollutions; diversion of waste from landfill decreases the need for additional landfills; waste recovery, reuse and recycling reduce the consumption of natural resources, likewise the minimization of waste.	Medium	GDARD
<b>Municipal</b>						
32. City of Johannesburg MM Integrated Waste Management Plan (IWMP) 2011	I	The IWMP aims to facilitate the implementation of the IWM Policy of the City of Johannesburg (CoJ). Eight core goals addressing the main challenges identified within the CoJ have been recognised for the IWMP on the basis of the CoJ IWM Policy objectives and mandate as derived from the Waste Act. Local municipalities are required to develop first generation IWMPs and to submit the plans to their respective provincial environmental departments.	M	The primary objective of IWM planning is to integrate and optimise waste management services, thereby maximising efficiency and improving the quality of life of all citizens while the associated environmental impacts and financial costs are minimised.  The IWMP aims to reduce reliance on landfill disposal and managing waste in a manner that is protective of the environment and society.	High  Low	City of Johannesburg MM  GDARD
33. City of Tshwane Integrated Waste Management Plan (IWMP) 2014 draft	D	The IWMP aims to facilitate the implementation of the IWM Policy of the CoT. Goals addressing the main challenges identified within the CoT have been recognised for the IWMP on the basis of the CoT IWM Policy objectives and mandate as derived from the Waste Act.	M	The IWMP focuses on landfill sites; waste minimisation, recycling and reduction; solid waste; environmental health functions; and other areas with potential environmental impacts.	High  Low	City of Tshwane MM  GDARD
34. Ekurhuleni MM Integrated Waste Management Plan (IWMP)	D	To be adopted in 2016.	M	Not available at this stage	High	Ekurhuleni MM
35. Sedibeng DM Integrated Waste Management Plan (IWMP) 2014	D	The IWMP process consisted of two phases, the first consisting of a "Situational Analysis" and the determination of the "Desired End State" for waste management within the District Municipal Jurisdiction.	M	Waste management reduces environmental pollution; diversion of waste from landfill decreases the need for more landfills' waste recovery, reuse and recycling will reduce the consumption of natural resources.	High  Low	Sedibeng DM  GDARD

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36. West Rand DM Integrated Waste Management Plan (IWMP 2010-2020) 2010	I	IWM is focused on initially addressing the West Rand District Municipality's 'non-compliances' with the NEM:WA and other relevant waste management policies and guidelines. Thereafter it aims to improve the overall efficiency and sustainability of waste management practices within the DM. A key component of the IWMP is to increase institutional capacity, as well as technical ability of the Authorities, though a focused recruitment and technical training drive.	M	Coordinated and controlled waste management where waste is prevented/minimised, recycled/reused, treated and disposed of will decrease environmental impacts and increase socio-economic development.	High Low	West Rand DM  GDARD
37. Merafong LM Integrated Waste Management Plan (IWMP) 2010	I	Merafong LM used the <i>Status Quo</i> as a baseline for waste management planning, which highlights problems, issues of concern and gaps experienced with regards to waste management. The <i>Status Quo</i> qualifies and quantifies all aspects related to the waste streams, environmental impacts, existing waste management services, practices and organisational structures.	M	The IWMP focuses on illegal dumping, landfill site leakages and overflow, waste minimisation and recycling initiatives, and environmental awareness and management.	High Low	Merafong LM  GDARD
38. Emfuleni LM Integrated Waste Management Plan 2008	I	The objective of this plan is to reduce the generation of waste and the environmental impact of all forms of waste and thereby ensure that the socio-economic development of South Africa, the health of the people and the quality of its environmental resources are no longer adversely affected by uncontrolled and uncoordinated waste management.	M	The goals of the plan are: - pollution and waste minimisation, impact management and remediation; - the incorporation of integrated environmental management principles and methodologies in spatial development planning; - develop appropriate and agreed indicators to measure performance for inclusion in EIPs and EMPs as provided for in the NEMA.	High Low	Emfuleni LM  GDARD
39. Mogale City LM Integrated Waste Management Plan (IWMP)	D/ I	The objective of this plan is to reduce the generation of waste and the environmental impact of all forms of waste and thereby ensure that the socio-economic development of South Africa, the health of the people and the quality of its environmental resources are no longer adversely affected by uncontrolled and uncoordinated waste management.	M	Coordinated and controlled waste management where waste is prevented/minimised, recycled/reused, treated and disposed of will decrease environmental impacts and increase socio-economic development.	High Low	Mogale City LM  GDARD

Name of policy, plan or programme	Status	Explanation of the policy, plan and programme	Scope	How the policy, plan or programme will affect the environment	Degree of control	Name of implementing organ of state
40. Waste Management By-Laws	A	Waste Management by-laws regulate and control the management of waste conducted by organs of state. By-laws should be aligned with the National Waste Management Strategy, as well as the NEM:WA. All municipalities will regulate all entities that provide waste management services or generate waste.	M	Recovering, recycling and reusing waste will decrease waste pollution and in turn reduce the pressure on natural resources.	High (depending on funding)	All municipalities
<b>AIR QUALITY</b>						
<b>Provincial</b>						
41. Gauteng Air Quality Management Plan (AQMP) 2009	I	The plan is aimed at developing and implementing an air management plan for the Gauteng Province in order to fulfil their obligations as set out in the NEM: Air Quality Act (39 of 2004). Develop an AQMP for the province, with clear clean air objectives and associated strategies to ensure improvement in the provincial ambient air quality and the maintenance thereof.	N	Decrease in air pollution through the control of vehicle emissions, volatile organic compounds (VOCs) emissions, waste burning, as well as Atmospheric Emission Licencing and ambient air quality monitoring.	Medium	GDARD
<b>Municipal</b>						
42. City of Johannesburg MM Air Quality Management Plan (AQMP) 2011	I	The CoJ AQMP was formulated through with coordination of the Planning, Transportation, Environment, and Health Departments with the aim of achieving acceptable air quality levels by reducing negative impacts, promote a clean and healthy environment for all citizens.	M	The AQMP focuses on reducing GHG emissions, which affect human health and the capacity of environmental ecosystems.	High  Low	City of Johannesburg MM  GDARD
43. City of Tshwane MM Air Quality Management Plan (AQMP) 2006-2008	I	The purpose of the plan is to empower the metro to meet its obligations as outlined in the Air Quality Act. The plan will initiate 'best practice in air quality management and ensure the reduction of emissions in a cost effective and equitable way.	M	The air quality within City of Tshwane Metropolitan Municipality (CTMM) will be improved and subsequently there will be a reduction of environmental and health risks.	High  Low	City of Tshwane MM  GDARD
44. Ekurhuleni MM Air Quality Management Plan (AQMP) 2005  (Under review )	I	Ekurhuleni's vision is the attainment and maintenance of acceptable air quality for the benefit of present and future generations. The objectives are to promote cleaner production and continuous improvement in best practice and promote energy efficiency within all sectors.	M	The control and management of all significant sources of air pollution relative to their contributions to ambient air pollutant concentrations. Setting local air quality objectives will ensure the protection of the natural and built environment.	High  Low	Ekurhuleni MM  GDARD

Name of policy, plan or programme	Status	Explanation of the policy, plan and programme	Scope	How the policy, plan or programme will affect the environment	Degree of control	Name of implementing organ of state
45. West Rand DM Air Quality Management Plan (AQMP) 2010	I	<p>The purpose of the WRDM AQMP is to achieve the following goals:</p> <ul style="list-style-type: none"> <li>- Establish an effective and sound basis for planning and management of air quality within the WRDM;</li> <li>- To manage air quality that will promote human health and wellbeing;</li> <li>- To encourage sustainable economic development that is not harmful to residents and ecosystem;</li> <li>- To allocate accountability to appropriate polluters; and</li> <li>- To ensure effective communication and public participation.</li> </ul>	M	<ul style="list-style-type: none"> <li>- Decreased GHG emissions.</li> <li>- Manage and enforce Listed Activities on Mining processes to reduce air and water pollution.</li> <li>- Controlled domestic fuel burning.</li> <li>- Control air emissions from non-listed activities to reduce cumulative effect on air pollution.</li> <li>- Control agricultural Activities and Biomass burning to mitigate methane emissions and breakaway fires.</li> <li>- Landfill sites and incinerators must obey ambient air quality standards so as to control GHG emissions and their impact on the ozone layer.</li> </ul>	High  Medium	West Rand DM  GDARD
46. West Rand DM Emissions Inventory Report 2011	I	<p>The WRDM is undertaking its first air emissions inventory, which will then have to be updated on a regular basis to account for emission changes. The results of the emission inventory will be used to shape the way air quality is improved in the WRDM. The emission inventory is fundamental to the development, implementation, monitoring and evaluation of the WRDM's air quality strategy.</p>	M	<p>The report will monitor and evaluate potentially dangerous volatile organic compounds (VOCs) and other GHGs in order to decrease the effects on human health and the impact on the capacity of ecological systems.</p>	Medium  Low	West Rand DM  GDARD
47. Vaal Triangle Air Quality Management Plan (AQMP) 2009	I	<p>The Vaal Triangle Air-Shed Priority Area includes the Sedibeng District Municipality and its local Midvaal and Emfuleni Municipalities. The AQMP aims to achieve:</p> <ul style="list-style-type: none"> <li>- improved air quality;</li> <li>- reduce negative impacts on human health and the environment;</li> <li>- address the effects of fossil fuels in residential applications;</li> <li>- address the effects of emissions from industrial sources; and</li> <li>- give effect to best practice in air quality management.</li> </ul>	M	<p>The priority area was promulgated in terms of Section 18(1) of the NEM:AQA (Act No. 39 of 2004) and it is the first priority area in South Africa and was declared as such due to the concern of elevated pollutant concentrations with the area, specifically particulates. The Plan is to ensure that once implemented, the air quality of the area will effectively and efficiently be brought into sustainable compliance with National Ambient Air Quality Standards within agreed timeframes.</p>	Medium  Low  Low	Sedibeng DM  Midvaal LM  Emfuleni LM

Name of policy, plan or programme	Status	Explanation of the policy, plan and programme	Scope	How the policy, plan or programme will affect the environment	Degree of control	Name of implementing organ of state
48. Air Quality By-Laws	A	Air Quality by-laws regulate and manage activities that have the potential to adversely impact the environment, public health and well-being, and ensure that air pollution is avoided or mitigated. By-laws should be aligned with the NEM:AQA. All municipalities will regulate all entities that produce air pollution.	M	Air Quality By-Law help to regulate and reduce the impact on air quality, which in turn affect ecosystem function and services.	High (depending on funding)	Municipalities
<b>BIODIVERSITY</b>						
<b>National</b>						
49. DEA Programme 5: Biodiversity and Conservation	I	The programme seeks improve the conservation status of biodiversity by safeguarding ecosystems, species and genetic diversity minimising threats to ecological sustainability and increasing the network of conservation areas towards the international commitment targets in the next MTSF period.	N	The programme focuses on conserving and managing ecosystems in a sustainable manner by increasing the: <ul style="list-style-type: none"> <li>- percentage of land under conservation;</li> <li>- number of legislative tools implemented for the conservation and sustainable use of biodiversity; and</li> <li>- number of community based interventions to promote access to natural resources and benefits.</li> </ul>	Medium  Low	GDARD  DEA
50. DAFF Champion Tree Programme 2015	I	The Programme declares specific indigenous or exotic trees, or groups of trees outstanding in size, or that have significant historical or cultural value as protected. Trees are declared protected.	N	Listed Champion Trees may not be destroyed or pruned without a license and the former will only be granted if the tree poses a threat to life or property.	High	DAFF
<b>Provincial</b>						
51. Gauteng Protected Areas Expansion Strategy (GPAES) 2013	D	The GPAES vision is the:  Expansion of the protected area system in Gauteng is undertaken in a strategic, targeted fashion to ensure the persistence of key biodiversity features and ecological processes within the province. The GPAES is based on the National PAES and focuses on 20-year and five-year targets for the province.	P	The levels of fragmentation in many of the vegetation types are such that securing viable protected areas within them is a challenge.  Successful protected area expansion depends on an innovative approach to planning in spatial priority areas, which should be adopted by provincial and local government, and the private sector.	High	GDARD

Name of policy, plan or programme	Status	Explanation of the policy, plan and programme	Scope	How the policy, plan or programme will affect the environment	Degree of control	Name of implementing organ of state
52. Gauteng Conservation Plan (C-Plan) 2014	I	<p>The Gauteng C-Plan has been developed using a systematic conservation approach and aims to:</p> <ul style="list-style-type: none"> <li>- Serve as the basis for biodiversity inputs into land use planning processes in the province.</li> <li>- Serve as the primary informant for the biodiversity component of the Basic Assessment and Environmental Impact Assessment (EIA) processes.</li> <li>- Guide protected area expansion and biodiversity stewardship programmes in the province.</li> </ul>	P	<p>The C-Plan serves as a biodiversity informant to:</p> <ul style="list-style-type: none"> <li>- Compiling Municipal Bioregional Plans.</li> <li>- Land use decision-making.</li> <li>- Land use planning.</li> <li>- Proactive conservation activities.</li> </ul>	High	GDARD
53. Biodiversity Offset Guideline and Strategy 2013	I	<p>The Guideline and Strategy is a partnership initiative of the GDARD and the Grasslands Programme of the South African National Biodiversity Institute. Biodiversity offsets are defined as 'the measurable conservation outcome resulting from actions designed to compensate for significant residual adverse biodiversity impacts arising from project development after appropriate prevention and mitigation measures have been taken.</p>	P	<p>The goal is to achieve no net loss and preferably a net gain of biodiversity on the ground with respect to species composition, habitat structure, ecosystem function and people's use and cultural values associated with biodiversity.</p>	<p>Medium</p> <p>High</p>	<p>GDARD</p> <p>SANBI</p>
54. Gauteng Biodiversity Stewardship 2010	I	<p>The programme aims to form meaningful co-management partnerships with landowners to conserve important biodiversity features in the province.</p>	P	<p>Biodiversity Stewardship is the wise use, management and protection of land by landowners to ensure that natural systems are maintained and enhanced for present and future generations.</p>	High	GDARD
<b>Municipal</b>						
55. City of Johannesburg MM Open Space System (JMOSS) 2002	I	<p>This framework was designed to address the City of Johannesburg's inherited a fragmented open space system caused by the restructuring process, which fails to provide the benefits and potentials of a Metropolitan Open Space System (MOSS). The purpose of this study is to develop an approach to establish a MOSS for the City of Johannesburg, which will be utilised as a decision support tool and a spatial planning tool that can assist in the promotion of sustainable management of open space within the City of Johannesburg.</p>	M	<p>The open space system is a both a means to conserving indigenous flora and fauna and an important step in maintaining ecological balance within the city.</p> <p>It exploits the potential of the site to improve the microclimate, air and water quality, recharge the groundwater regime, prevent flooding, reduce the impact of storm water run-off, and to increase biological diversity.</p>	<p>High</p> <p>Low</p>	<p>City of Johannesburg MM</p> <p>GDARD</p>

Name of policy, plan or programme	Status	Explanation of the policy, plan and programme	Scope	How the policy, plan or programme will affect the environment	Degree of control	Name of implementing organ of state
56. City of Johannesburg MM Biodiversity Strategy and Action Plan (BSAP) 2015	I	The Strategy and Action Plan articulates actions through which to implement the vision, strategic objectives and actions necessary for the conservation, protection, use and development of biodiversity. It provides an overview of key issues, constraints and opportunities identified in the stocktaking and assessment phase.	M	The Strategy and Action Plan sets out a framework and a plan of action for the conservation and sustainable use of biological diversity and the equitable sharing of benefits derived from this use.	Medium	City of Johannesburg MM
57. City of Tshwane MM Open Space Framework (TOSF) 2005	I	TOSF aims to establish a thorough understanding on the intrinsic value of Open Space and to develop a visionary roadmap towards the creation of an exceptional Open Space network for the city and its people.	M	Detailed data and information base on all Open Spaces within the metropolitan area, including conservation areas and strategically important Open Space resources as noted in the Gauteng C-Plan. Provides a Framework with which development activities within the City comply with NEMA.	High Low	City of Tshwane MM  GDARD
58. Ekurhuleni MM Biodiversity and Open Space Strategy (EBOSS) 2009	I	The EBOSS identifies the critical open space systems, biodiversity and ecosystems that need to be protected, conserved and managed. The vision of the EBOSS is to be relevant, feasible, acceptable and implementable. It seeks to meet the needs of the open space needs of the population while at the same time ensuring biodiversity, conservation and land resources are managed and monitored.	M	EBOSS will ensure that biodiversity is protected and managed through proper conservation methods.	High Low	Ekurhuleni MM  GDARD
59. Mogale City LM Development of Environmental Instruments for the Open Space Master Plan 2011	I	The document provides an overview of the environmental instruments that have been developed to assist in implementing and guiding the municipality towards efficient and effective sustainable environmental management and development.	M	The environmental instruments broad management objectives focus on environmental aspects, which are divided into six environmental management zones.	Medium	Mogale City LM
60. Ekurhuleni MM Bioregional Plan (BRP) 2015	I	The purpose of a bioregional plan is to inform land-use planning, environmental assessment and authorisations, and natural resource management, by a range of sectors whose policies and decisions impact on biodiversity. Bioregional plans are intended to feed into a range of multi-sectoral planning and assessment processes and to support and streamline environmental decision-making.	M	<ul style="list-style-type: none"> <li>- Biodiversity value will be ensured through the protection and promotion of the important ecological processes.</li> <li>- The plan ensures that and decisions made specifically take land-use planning into account with a focus on the environmental and threatened biodiversity.</li> </ul>	High	Ekurhuleni MM

Name of policy, plan or programme	Status	Explanation of the policy, plan and programme	Scope	How the policy, plan or programme will affect the environment	Degree of control	Name of implementing organ of state
61. West Rand DM Bioregional Plan (BRP) 2012	I	The purpose of a bioregional plan is to inform land-use planning, environmental assessment and authorisations, and natural resource management by a range of sectors whose policies and decisions impact on biodiversity. The spatial component of the bioregional plan is based on the systematic conservation plan (C-Plan 3.3) undertaken by GDARD.	M	<ul style="list-style-type: none"> <li>- Biodiversity value will be ensured through the protection and promotion of the important ecological processes, especially processes associated with wetland and river systems.</li> <li>- Threatened species and ecosystems are protected.</li> <li>- The plan ensures that and decisions made specifically take land-use planning into account with a focus on the environmental and threatened biodiversity.</li> </ul>	High	West Rand DM
<b>LAND RESOURCES</b>						
<b>National</b>						
62. DAFF Programme 5: Forestry and Natural Resources Management	I	The programme seeks to provide strategic direction and leadership to the department with regard to the promotion of the sustainable management, use and protection of forests and natural resources to achieve social and economic benefits and to promote development.	N	<p>The programme focuses on forestry operations, forestry development and regulation, and natural resource management. The aim is to:</p> <ul style="list-style-type: none"> <li>- increase sustainable agrarian reform;</li> <li>- ensure the sustainable management and effective use of natural resources by improving environmental infrastructure; and</li> <li>- reduce climate change impacts.</li> </ul>	High Medium	DAFF  GDARD
<b>Provincial</b>						
63. GDARD Programme 2: Agriculture and Rural Development	I	Responsible for the development of agriculture; and developmental of rural areas. Based on the new strategic direction for the 5 <sup>th</sup> term of governance, greater emphasis will be placed on the economic growth and development elements of both mandate areas.	P	A modernised and transformed agricultural sector increasing food security, economic inclusion and equality. Emphasises sustainable natural resource management.	Medium	GDARD
64. Gauteng Provincial Environmental Management Framework (GPEMF) 2014	I	The Gauteng EMF replaces all other EMFs in Gauteng. The purpose of the GPEMF is to provide a strategic and overall framework for environmental management in Gauteng. The objective of the GPEMF is to guide sustainable land use management within the Gauteng Province.	P	<ul style="list-style-type: none"> <li>- Align sustainable development initiatives with the environmental resources, developmental pressures, as well as the growth imperatives of Gauteng;</li> <li>- Determine EIA exclusion geographical areas; and identify appropriate, inappropriate and conditionally compatible activities in various EMZs.</li> </ul>	High Medium	Municipalities  GDARD

Name of policy, plan or programme	Status	Explanation of the policy, plan and programme	Scope	How the policy, plan or programme will affect the environment	Degree of control	Name of implementing organ of state
65. Gauteng Agricultural Potential Atlas (GAPA) 2013	I	The GAPA consists of the four pillars (i) agricultural hubs, (ii) important agricultural sites, (iii) existing agriculture, and (iv) the remaining high potential agricultural land. These four pillars are informed by Agro-Ecological Zones (AEZs) and in turn inform an Implementation Framework consisting of environmental management frameworks spatial development frameworks and area based plans.	P	The removal of the Gauteng urban edge has created significant problems for the application of the EIA regulations and consequently also for EMFs.  Environmental management must focus on the potential conflict between sites that have high agricultural potential as well as high ecological value.	High	GDARD
66. Gauteng Mine Residue Areas Strategy 2012	I	Mine Residue Areas (MRAs) were identified as a potential Provincial priority for the reclamation of land in the forthcoming five-year programme of the Gauteng Department of Agriculture and Rural Development (GDARD). Analysis of its Geographic Information System (GIS) database, suggested that only about 25km <sup>2</sup> of the 321 km <sup>2</sup> covered by the approximately 380 MRAs identified in Gauteng, could be rehabilitated at relatively low cost.	P	<ul style="list-style-type: none"> <li>- Evaluate current pollution problems caused by mining activities;</li> <li>- To quantify the amount of land under mining activities and classify them in terms of impacts and potential for reclamation;</li> <li>- To investigate which mining areas could be made available to be used for other purposes; and</li> <li>- To provide preliminary and conceptual recommendations on the short-term priorities for the reclamation of the mining sites.</li> </ul>	High  Medium	DMR  GDARD
<b>Municipal</b>						
67. Mogale City LM Policy on Environmental Requirements for Subdivision 2009	A	The Policy was developed to ensure the improvement of co-ordination between the relevant Departments within Mogale City LM concerning the requirements for and/or conditions stipulated in the approval of applications related to the subdivision of land for development.	M	The policy seeks to reduce the loss of: <ul style="list-style-type: none"> <li>- natural habitats and biodiversity,</li> <li>- non-renewable resources,</li> <li>- migratory corridors for faunal species; and</li> <li>- prevent environmental degradation.</li> </ul>	High	Mogale City LM
68. Mogale City LM Policy Guideline: Environmental Requirements for rezoning and Consent Use 2009	A	This document has been compiled as a tool flowing from the Sustainable Development Policy and Environmental Compliance and Audit Strategy. It will be used as a decision-making tool to empower the council departments in issues related to environmental impacts.	M	The tool is used to promote and uphold the sustainable development principles through ensuring the protection of fauna, flora and other natural resources.	High	Mogale City LM

Name of policy, plan or programme	Status	Explanation of the policy, plan and programme	Scope	How the policy, plan or programme will affect the environment	Degree of control	Name of implementing organ of state
69. Mogale City LM Tele-communication Mast Policy 2009	A	The aim of the Policy is to provide guidelines for the construction, erection and upgrading of structures associated with communication networks in Mogale City LM. The construction of masts of any material or type and of any height, including those used for telecommunication broadcasting and radio transmission is identified as one of the activities that require environmental authorisation.	M	The Policy ensures the protection and mitigation of environmental impacts in relation to the telecommunication mast and its infrastructure.	High	Mogale City LM
<b>RESPONDING EFFECTIVELY TO CLIMATE CHANGE (MITIGATION &amp; ADAPTION)</b>						
<b>CLIMATE CHANGE &amp; ENERGY</b>						
<b>National</b>						
70. DEA Programme 4: Climate Change and Air Quality Management	I	The programme seeks to facilitate in the provision of cleaner and healthier air that meets the ambient air quality standards and coordinate development and implementations of climate change adaption frameworks to build resilience in communities.	N	The programme focuses on reducing the negative impacts on health and minimising the effects on wellbeing through studies, air quality indicators and plans, focusing on priority areas and climate change strategies.	Medium  Low	GDARD  DEA
71. DAFF Climate Change Sector Plan (CCSP) 2012	I	The CCSP has been developed to address institutional arrangements, vulnerability assessment, mitigation and adaption in the agricultural, forestry and fisheries.	N	The CCSP seeks to: <ul style="list-style-type: none"> <li>- promote climate change awareness and knowledge;</li> <li>- to advocate sustainable terrestrial and aquatic ecosystems-based production practices that are least conducive to GHG emissions;</li> <li>- conserve the sector's natural environment; and</li> <li>- mitigate the effects of climate change.</li> </ul>	Medium	DAFF
72. DAFF Climate Change Adaption and Mitigation Programme 2015	I	The Programme has been developed to continuously improve the understanding of the sensitivity of agricultural crops, livestock species, forests and plantations to climate change and impacts. The Programme continuously improves the modelling of climate change projections, particularly in terms of downscaling these models to the local level.	N	The Programme works towards adapting agriculture and forestry to the impacts of climate change; mitigating the contribution of the agricultural and forestry sectors to the causes of climate change, including maximising opportunities for carbon sequestration.	Medium	DAFF

Name of policy, plan or programme	Status	Explanation of the policy, plan and programme	Scope	How the policy, plan or programme will affect the environment	Degree of control	Name of implementing organ of state
73. DoE Programme 6: Clean Energy	I	The purpose of the programme is to manage and facilitate the development and implementation of clean and renewable energy initiatives, Energy Efficiency and Demand- Side Management (EEDSM) initiatives as well as coordinate climate change initiatives within the energy sector.	N	The programme focuses on: <ul style="list-style-type: none"> <li>- ensuring energy efficiency;</li> <li>- promoting renewable energy;</li> <li>- Climate Change and Designated National Authority.</li> </ul> This is done through planning and developing interventions to increase energy saving, reduce climate change impacts, and climate change response strategies and environmental management plans.	Low  Medium	GDARD  DoE
74. DoE Integrated Resource Plan for Electricity 2010-2030 (2013 report)	I	The Plan was promulgated in March 2011 and suggested to be a "living plan" which would be revised by the DoE every two years. The IRP provides a platform for integration between planning processes in each of the energy carrier environments with feedback loops to these plans.	P	The Plan focuses on increasing energy efficient infrastructures, which will reduce GHG emissions and control the use of valuable water resources for energy production.	Medium  Low	DoE  GDARD
<b>Provincial</b>						
75. Gauteng Climate Change Response Strategy and Action Plan (GCCRSAP) 2011	D	The GCCRS addresses the problem of climate change through: <ol style="list-style-type: none"> <li>1. Mitigation Actions</li> <li>2. Adaption Measures</li> </ol>	P	Mitigation Actions addresses energy, transport and waste for the province.  Adaption Measures addresses water, food security, and spatial planning and land use, and natural resources and biodiversity management.	High  Medium  Low  High	GDARD  GDRT,  GDID  GDHS
76. GDED Programme 2: Integrated Economic Development Services	I	The purpose of the Programme is to ensure radical economic transformation that addresses the triple policy imperatives of decent work, an inclusive economy and equality	P	One of the focus points of the Programme is on green industries contributing to energy security as an important element to radically transforming and re-industrialising Gauteng economy. Green industries help reduce dependence on unsustainable energy sources.	Medium	GDED

Name of policy, plan or programme	Status	Explanation of the policy, plan and programme	Scope	How the policy, plan or programme will affect the environment	Degree of control	Name of implementing organ of state
<b>Municipal</b>						
77. City of Johannesburg MM Energy and Climate Change Strategy and Action Plan 2010	I	The purpose of this Energy and Climate Change Strategy is to set out an aggressive agenda for Johannesburg to play its part in averting catastrophic climate change by ambitiously cutting our GHG emissions. This plan aims to create a shared agenda for Johannesburg and the city's public and private sector organisations and to show how we can achieve these reductions together.	M	The focus of this Strategy and Action Plan is for the reduction of the atmospheric gases, otherwise known as GHG emissions as stipulated under the Kyoto Protocol.	Medium	City of Johannesburg MM
78. City of Johannesburg MM Climate Change Adaption Plan (June 2016)	D	This project is aimed at addressing the adaptation requirements for the City of Johannesburg and its people. The focus is on adaptations applied from within the City's municipal structures. The report includes an assessment of climate model projections for the CoJ region, and a risk assessment based upon that analysis and an integrated adaptation plan cutting across all the major sectors.	M	The plan seeks to provide an indication on the scale and nature of the climate change vulnerabilities facing key sectors, to prioritise the associated risks, to propose adaptive actions including identifying where further studies are required, and to provide a preliminary indication of the scale of potential costs and benefits associated with climate change.	High Medium	City of Johannesburg MM  GDARD
79. City of Tshwane Vulnerability Assessment to Climate Change 2015	D	The aim of the project was to assess the vulnerability of CoT to climate change. The project identifies sectors, regions and populations vulnerable to climate change, with the outcome of developing an adaptation road map. The assessment provides the information needed to reduce the vulnerabilities.	M	The main objective was to provide a citywide, regional and sectoral analysis of the vulnerability of the CoT to climate change with the aim of producing a city risk profile and prioritisation for the city regions.	Medium	City of Tshwane MM
80. Ekurhuleni MM Climate Change (CC) Response Strategy 2007	D	The Ekurhuleni Climate Change Response Strategy has been developed to aid the organisations in dealing with the issues and impacts related to a changing climate. Ekurhuleni is regarded as the manufacturing and industrial hub of Gauteng, and OR Tambo International Airport is located in the metro, which thus positions the city as a large emitter of GHGs.	M	The CC response strategy will aid in informing climate change actions for departments going forward. It should be used to guide departments regarding climate change work and assist with informing department with the most appropriate actions.	Medium	Ekurhuleni MM
81. Ekurhuleni MM Energy Plan	D	To be adopted in 2016.	M	Not available at this stage	High	Ekurhuleni MM

Name of policy, plan or programme	Status	Explanation of the policy, plan and programme	Scope	How the policy, plan or programme will affect the environment	Degree of control	Name of implementing organ of state
82. Mogale City LM Climate Change Framework and Operational Climate Change Plan 2014	I	The framework and operational plan is aligned to the National Climate Change Response Strategy. It aims to highlight the climate change vulnerabilities and impacts in Mogale City, and aims to assist the municipality in putting measures in place so as to minimise the climate change impacts and to reduce GHG emissions.	M	The framework and operational plan focuses on <i>adaptation</i> and <i>mitigation</i> in order to decrease vulnerability and increase resilience to future climate change while natural resources and ecosystems are protected and conserved.	High	Mogale City LM
<b>BUILDING SUSTAINABLE COMMUNITIES</b>						
<b>SOCIAL</b>						
<b>National</b>						
83. DWS Programme 3: Water Infrastructure Development	I	The purpose of the programme is to develop, rehabilitate and refurbish raw water resources and water services infrastructure to meet the socio-economic and environmental needs of South Africa. Efficient and effective water infrastructure management and rehabilitation is required to reduce leakages and pressure on bulk water systems.	N	Improved water resource management will ensure sustainable water use and provision. Efficient and effective water resource management will reduce the impacts of droughts. The programme focuses on developing and completing bulk water infrastructure projects and rehabilitating dams.	High Medium	Municipalities GDARD
84. DWS Programme 4: Water and Sanitation Services	I	The purpose of the programme is to develop, rehabilitate and refurbish raw water resources and water services infrastructure to meet the socio-economic and environmental needs of South Africa. Gauteng water and sanitation services rely on the municipalities to ensure robust environmentally sound infrastructure.	N	Improved water resource management will ensure sustainable water use, provision and sanitation delivery for the province by focusing on bucket eradication schemes, financial support and job creation.	High Medium	Municipalities GDARD
85. DRDLR: Programme 3: Rural Development	I	The purpose of the programme is to initiate, facilitate, coordinate and act as a catalyst for the implementation of a comprehensive rural development programme leading to sustainable and vibrant rural communities.	N	The programme focuses on sustainable infrastructure development to support rural economic transformation and increase potential and opportunities, and agricultural development to enhance sustainable farming and food security.	Medium Low	Municipalities GDARD
<b>Provincial</b>						
86. Gauteng Growth and Development Strategy (GDS) 2005	I	The Strategy aims to bring about socio-economic transformation, increase economic and industrial potential, and improve natural resource management and conservation.	P	The GDS focuses on land, water resource, and biodiversity protection and management measures.	Low Low	GDARD GDED

Name of policy, plan or programme	Status	Explanation of the policy, plan and programme	Scope	How the policy, plan or programme will affect the environment	Degree of control	Name of implementing organ of state
87. Gauteng 20 Year Food Security Plan 2011	I	The Gauteng 20 Year Food Security Plan sets out a portfolio of targeted strategic programmes to address food insecurity in the province in a comprehensive way, reducing the 2011 levels of hunger and inadequate access to food by half by 2030. The Plan addresses the issues of climate change and its impact on the agricultural sector.	P	Climate smart agriculture seeks to increase productivity in an environmentally and socially sustainable way, strengthen farmers' resilience to climate change, and reduce agriculture's contribution to climate change by reducing GHG emissions and increasing carbon storage on farmland.	High	GDARD
88. Draft Integrated Urban Development Framework (IDUF) 2014	I	The IUDF is a response to various chapters in the NDP (primarily chapter 8), and it aims to guide the development of inclusive, resilient and liveable urban settlements, while squarely addressing the unique conditions and challenges facing South Africa's cities and towns, it provides an approach to urban investment by the developmental state, which in turn guides the private sector and households.	P	The framework has 7 policy levers affecting the environment. 1. Integrated transport mobility 2. Integrated sustainable human settlements 3. Integrated infrastructure planning 4. Inclusive economic development 5. Efficient land governance and management 6. Empowered active communities 7. Effective urban governance	Medium Medium Medium Medium Low Low	GED GDARD GDF GDHS GDRT DRDLR DWS
89. GDRT 25-Year Integrated Transport Master Plan (ITMP) 2013	I	Mixed income and mixed-use developments developed along priority public transport corridors in line with the spatial recommendations contained under the NDP.  Land use and transportation integrated through the processes of land use densification along the priority public transport network within the urban core of Gauteng.	P	Large-scale development with the opportunity to incorporate green corridors, parks and open spaces.  Land use and transportation development through sustainable resource management and use.	Medium Medium Medium Low	GDRT GDARD GED GDHS
90. GDRT Promoting Sustainable (Green) Transport in Gauteng 2014	D	Aims to minimise the adverse impact of transport on the environment and simultaneously address current and future transport demands based on sustainable development principles.	P	Sustainable transport reduces the impact of transport on the environment with respect to carbon emissions and the effects of transport infrastructure on the immediate environment. Continued reduction will address the negative impact of climate change.	Medium  High	GDRT  GDARD
91. GDHS Programme 3: Housing Development	I	Focused on building cohesive and sustainable communities by ensuring that innovative services and infrastructure are provided to create sustainable human settlements.	P	The strategy's mandate complies with NEMA to protect ecologically viable areas representative of South Africa's biological diversity and its natural landscapes in a system of protected areas.	High	GDHS

Name of policy, plan or programme	Status	Explanation of the policy, plan and programme	Scope	How the policy, plan or programme will affect the environment	Degree of control	Name of implementing organ of state
92. GDID Programme 2: Public Works Infrastructure	I	The purpose of the Programme is to plan, procure, deliver and manage infrastructure delivery programmes, and to promote effective and efficient management of the property portfolio with a view to maximising the returns of investment.	P	The Department, while implementing its strategy and infrastructure upgrades must ensure that it is fully aligned the Climate Change Response Strategy and green agenda in order to reduce environmental impacts and contribute towards sustainable development.	High	GDID
93. GDRT Programme 2: Transport Infrastructure	I	The purpose of the programme is to provide a balanced equitable road network in the province by promoting accessibility that is sustainable, integrated and environmentally sensitive, which supports economic growth and social empowerment.	P	Environmentally safe infrastructure planning, infrastructure design, construction and maintenance.	High	GDRT
94. GDoH Implementation Plan: Policy for Environmentally Sustainable Health Care Waste Management in Gauteng Province 2012	I	The Plan is based on the framework and principles of the Gauteng Provincial Health Care Waste Management (HCWM) Policy and the National Waste Management Strategy (NWMS). The Plan is informed by previous activities and outputs produced as well as experiences within the Department. The objective is to establish a framework for a broad course of actions (activities) based on best practice, designed to make the best use of resources and opportunities to improve the standard of HCWM.	P	The expected outcomes are: - Reduced environmental impact resulting from HCWM, in particular from treatment and disposal of HCWM and its residues through application of alternative treatment methodologies within the provisions of appropriate statutory requirements. - Effective enforcement of HCWM standards and best practise principles.	Medium	GDoH
95. First Generation Integrated Hazardous Waste Management Plan for Gauteng (GHWMP) 2010	I	The Plan is based on an assessment of 11 industrial subsectors and highlights nine priority needs and nine associated action plans for hazardous waste management in Gauteng.	P	Increased management and hazardous waste compliance will reduce the negative impacts of hazardous waste on the environment.	High	GDARD
<b>Municipal</b>						
96. Joburg 2040 Growth and Development Strategy (GDS)	I	An aspirational strategy that defines the type of society the city aspires to achieve. The strategy restates the City's resolve in confronting the past injustices created during apartheid, working towards a democratic, non-racial, non-sexist and fair City while simultaneously confronting present and future challenges as they emerge.	P	The strategic vision and goals need to be harnessed as opportunities to advance the Sustainable Development within the region.	High  Medium	City of Johannesburg MM  GDED

Name of policy, plan or programme	Status	Explanation of the policy, plan and programme	Scope	How the policy, plan or programme will affect the environment	Degree of control	Name of implementing organ of state
97. City of Johannesburg Strategic Integrated Transport Plan Framework 2013	D	The aim of this document is to highlight the status quo and give an overview of some of the major developments and shortcomings in the last ten years. The Strategic Public Transport Network (SPTN) identifies the major public transport connections that need to be developed.	M	Development plans for the SPTN incorporate environmental sustainable development initiatives to ensure environmentally sustainable development.	High	City of Johannesburg MM
98. City of Tshwane Rapid Transit (TRT): Spatial Development Policy 2014	I	Provide the City with Spatial Development guidelines for densification and intensification around the Tshwane Rapid Transit stations. Planning for TRT corridors incorporating practical considerations around Capital Investment Framework (CIF) principles and requirements, existing and potential catalytic interventions and quick wins.	M	Strategic direction around sustainable infrastructure provision. Rural management programmes to improve livelihoods and stimulate employment through sustainable resource focused initiatives.	High  Medium	City of Tshwane MM  GDRT
99. Ekurhuleni MM Growth and Development Strategy (GDS) 2055	I	The objectives of the GDS 2055 are about establishing a high performing metropolitan government that is proactive in character and posture, to enhance the commitment towards the building of socially inclusive, locally integrated and a competitive global player.	M	The Re-generate theme focuses on mainstreaming biodiversity and ecosystem goods and services so that their full value is recognised, and that their sustainable use is rewarded.	Medium	Ekurhuleni MM
100. Ekurhuleni MM Comprehensive Integrated Transport Plan (CITP 2013-2017) 2015	I	The CITP describes the current land use transport system of the EMM, identifies the challenges and needs of stakeholders, and provides long-term strategies and plans.	M	The main freight transport problems are the negative impacts of heavy vehicle operations on road safety, traffic operations, road capacity, pavement conditions and the moving of dangerous goods posing environmental threats to ecologically sensitive, residential areas and other sensitive areas.	High  Medium	Ekurhuleni MM  GDRT
101. Ekurhuleni MM Corporate Disaster Management Plan 2014		The main aim of the Plan is disaster risk reduction. The Plan determines, to the extent possible, actions to be taken by all departments, stakeholders and cooperating private organisations, to prevent disasters and to reduce the vulnerability of EMM residents to any disasters that may occur.		The Plan focuses on reducing major disaster threats.	High	Ekurhuleni MM

Name of policy, plan or programme	Status	Explanation of the policy, plan and programme	Scope	How the policy, plan or programme will affect the environment	Degree of control	Name of implementing organ of state
<b>MANAGING A JUST TRANSITION AND THE GREEN ECONOMY</b>						
<b>SOCIO-ECONOMIC</b>						
<b>National</b>						
102. National Green Economy Summit Statement of Conclusion and Report of May 2010	A	The summit statement of conclusion guides the prioritisation to pursue and explore opportunities in the crosscutting nine focus areas of green economy action.	N	The summit statement of conclusion encourages the country drive towards green economy transition through promotion of the resource efficiency, low carbon pro-employment growth path.	Medium  Medium  Low	DEA  GDED  GDARD
103. DEA Programme 5: Biodiversity and Conservation	I	The programme seeks to optimise the economic benefits from the sustainable use of biological resources in line with natural resource management targets and plans for Gauteng, and the NDP.	N	The programme focuses on improving access, and fair and equitable sharing of benefits by increasing the number of sustainable natural resource based enterprises.	Medium  Low	GDED  GDARD
104. DEA Programme 7: Chemical and Waste Management	I	The programme seeks to facilitate the contribution of the recycling economy, sustainable development, livelihoods, and green and inclusive economic growth through job creation.	N	The programme focuses on growth in industries that depend on environmental services while at the same time ensuring sustainable management.	Medium  Low	GDED  GDARD
105. DTI Gauteng Industrial Symbiosis Programme	D	Industry symbiosis is a resource efficiency approach where unused or residual resources (materials, energy, water, waste, assets, logistics, expertise, etc.) of one company are used by another.	N	The symbiosis results in mutual economic, social and environmental benefits.	Medium  Low	DTI  GDARD
106. DTI Industrial Policy Action Plan (IPAP) 2014/15-2016/17	I	The IPAP focuses on policy improvements, achieving more concerted transversal action, and how to implement sector strategies based on a better understanding of sector and company dynamics.	N	The IPAP focuses on building capacity in order to analyse, coordinate and implement effective programmes.	Medium	DTI
107. DED Green Economy Accord 2011	I	The Green Economy Accord booklet is intended to help shop stewards, business representatives, community activists and government officials to communicate the contents of the Green Accord in order to empower South Africans to implement the wide-ranging commitments that are contained in the Accord and mobilise all sectors.	N	The Green Accord focuses on and promotes all sectors to move towards sustainable environmental initiatives.	Low	DED

Name of policy, plan or programme	Status	Explanation of the policy, plan and programme	Scope	How the policy, plan or programme will affect the environment	Degree of control	Name of implementing organ of state
<b>Provincial</b>						
108. GDED Green Strategic Programme for Gauteng 2011	I	The programme is designed to inform objectives and activities across the spectrum of departments and municipalities in the province, so that all parts of the government working on green issues within Gauteng are focused on the same goals and targets.	P	Reduce the pressures on available land, road transport systems, and water and energy resources. Polluting industries and deteriorating bulk infrastructure impacting natural resources is addressed.	Medium	GDED
<b>Municipal</b>						
109. City of Tshwane (CoT) Green Economy Strategic Framework 2013	I	The Framework looks at including the CoTs existing and future projects and programmes in the CoT's IDP, and it will help to inform the CoTs medium to long-term green economy objectives.	M	The framework explains that the drivers of a green economy are resource efficiency and management; low-carbon development; and inclusive growth.	High Low	City of Tshwane MM GDARD
110. West Rand DM Green IQ Strategy 2012	I	The purpose of this document is to set out a broad range of strategy options within Green Economy paradigms and experiences, from which the WRDM can select options that it feels most appropriate and implementable in the Green IQ policy processes.	M	<ul style="list-style-type: none"> <li>- Creating sustainable economic participation and growth, and inclusive practices;</li> <li>- Facilitating ranges of new Green jobs,</li> <li>- Reduce the carbon footprint of the district while inculcating knowledge systems,</li> </ul>	Medium High	West Rand DM GDARD

### **SECTION 3: Description of the manner in which the relevant organ of state will ensure that the policies, plans or programmes comply with the principles of NEMA and National Norms and Standards**

This section provides a description of the manner in which the relevant national department or province will ensure that the policies, plans and programmes referred to in Section 2 above will comply with the principles set out in chapter 1 of NEMA as well as any national norms and standards as envisaged under Section 146(2)(b)(i) of the Constitution and set out by the Minister, or by any other Minister, which have as their objective the achievement, promotion, and protection of the environment.

Explanatory note: This section demonstrates how the department will ensure that the identified priority PPPs comply with the environmental management principles for sustainable development outlined in Section 2 of NEMA, and with any national norms and standards set by departments with a mandate for environmental management. Compliance is indicated by how and whether the principles, and norms and standards were considered during the formulation of existing PPPs, and/ or whether those departments mandated with environmental management was consulted. In terms of cooperative governance, a brief indication of the way in which the formulation of proposed (future) PPPs have considered these principles or norms and standards, and have been aligned (harmonised) with the relevant PPPs of other departments is provided .

**Table 5:** Section 3 description of how the policies, plans and programmes comply with the principles of NEMA

Name of policy, plan or programme	List of relevant norms and standards	Description of how the organ of state will ensure that development and/or implementation of policies, plans and programmes comply with NEMA's environmental management principles	Established consultative Forum
<b>ENHANCING GOVERNANCE SYSTEMS AND CAPACITY</b>			
<b>GOVERNANCE</b>			
<b>National</b>			
1. DEA Programme 2: Legal, Authorisations, Compliance and Enforcement	National Norms and Standards published under the: <ul style="list-style-type: none"> <li>- National Environmental Management: Biodiversity Act (Act No. 10 of 2000, NEM:BA);</li> <li>- National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008, NEM:WA);</li> <li>- National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004, NEM:AQA);</li> <li>- National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003, NEM:PAA);</li> <li>- Environment Conservation Act, 1989 (Act No.73 of 1989, ECA;); and</li> <li>- National Water Act (Act No. 36 of 1998, NWA).</li> </ul>	The Programme is part of the DEA 5-year plan, which is aligned with the NEMA principles and mandated functions.	National Environmental Compliance and Enforcement Forum
2. DEA Environmental Sector Research Development and Evidence Framework 2012	Stipulations associated with research.	The Framework was developed by the DEA and focuses on the environmental sector therefore the NEMA principles are incorporated.	Intergovernmental and Ecological Forums
3. DAFF Policy, Principles and Guidelines for Control of Development Affecting Natural Forests 2010	The principles and guidelines promote and include NEMA principles such as: a) avoidance of loss in biodiversity and disturbance of ecosystems; b) applying the precautionary approach; c) polluter pays principle is applied; d) negative impacts must be assessed, prevented or minimised.	Some NEMA principles are embodied in the policy and guidelines for decision-making, and officials are given training in applying these.	None

Name of policy, plan or programme	List of relevant norms and standards	Description of how the organ of state will ensure that development and/or implementation of policies, plans and programmes comply with NEMA's environmental management principles	Established consultative Forum
4. DAFF Compliance and Enforcement Policy 2005	National Norms and Standards published under the: <ul style="list-style-type: none"> <li>- NEM:BA;</li> <li>- NEM:WA;</li> <li>- NEM:AQA;</li> <li>- NEM:PAA;</li> <li>- ECA;</li> <li>- National Forest Act, 1998 (Act No. 84 of 1998); and</li> <li>- NWA</li> </ul>	The Policy was developed by DAFF therefore the NEMA principles are incorporated in the Policy.	National Veld Fire Management Advisory Forum
5. DAFF National List of Protected Trees and Licensing System and Guidelines 2015	Decision-tree guidelines for different types of applications to cut, damage or prune protected tree species are based on NEMA principles such as: a) that loss of biodiversity and disturbance of ecosystems are avoided b) that a (risk averse) precautionary approach is taken c) that the exploitation of renewable resources do not exceed levels that jeopardise their future existence.	Some NEMA principles are embodied in the guidelines for decision-making, and officials are given training in applying these.	No Forum has been established at this time
6. DMR Programme 3: Mineral Regulation	National Norms and Standards published under the Minerals and Petroleum Resources Development Act 2002, (Act No. 28 of 2002, MPRDA).	The DMR coordinated the development of this programme, and the NEMA principles are incorporated in the Programme.	Mining Forum
<b>Provincial</b>			
7. GDARD Strategic Plan 2015-2020	Treasury stipulated reporting requirements.	The GDARD developed the Strategic Plan therefore the principles of NEMA are incorporated in the Plan and represented by Working Groups (WG).	National Working Groups
8. GDARD Programme 1: Administration	The National Environmental Management Act 1998 (NEMA), Act 107 of 1998 as the primary environmental legislation provides for legal framework that ensures the concretisation of the environmental rights as guaranteed in Section 24 of the Constitution of the Republic of South Africa, Act 108 of 1996. NEMA has repealed greater parts of the Environmental Conservation Act (ECA).	The GDARD developed the Strategic Plan therefore the principles of NEMA are in it and represented by Working Groups (WG).	National Working Groups

Name of policy, plan or programme	List of relevant norms and standards	Description of how the organ of state will ensure that development and/or implementation of policies, plans and programmes comply with NEMA's environmental management principles	Established consultative Forum
9. Gauteng Spatial Development Framework 2030 (GSDF)	Development principles and applicable Norms and Standards set out in Chapter 2 of Spatial Planning Land Use Management Act, 2013 (Act No. 16 of 2013, SPLUMA).	The GSDF was produced by the Gauteng Office of the Premier (Gauteng Planning Division) as part of the transversal policy framework for the Gauteng Government. NEMA principles were incorporated throughout the drafting process: <ul style="list-style-type: none"> <li>- protecting and maximising ecosystem services;</li> <li>- creation of sustainable human settlements through a focus on enabling a functional environment and eco-system services.</li> </ul>	Gauteng Planning Forum Local Government Forums SALGA WG 6
10. Position paper on: Conserving and sustaining the GCR – Resource & Environmental Management	National Norms and Standards published under all NEMA and SEMAs.	The Gauteng SDF comprises of environmental management plans and therefore has NEMA principles incorporated into it.	Gauteng Planning Forum
11. Gauteng Spatial Perspective (GSP) 2030	Development principles and applicable norms and standards set out in Chapter 2 of SPLUMA.	The GSP is based on the GSDF.	Gauteng Planning Forum
12. GDRT Programme 4: Transport Regulation	National Norms and Standards published under the: <ul style="list-style-type: none"> <li>- National Land Transport Act 2009 (Act No. 5 of 2009, NLTA)</li> <li>- NEM:WA</li> <li>- NEM:AQA</li> </ul>	The GDRT Programme is part of the GDRT 5-year plan, which is aligned with the NEMA principles and mandated functions.	Transport Forum
<b>Municipal</b>			
13. City of Johannesburg MM Environmental Compliance and Monitoring Framework 2008	The National Environmental Management Act 1998 (NEMA), Act 107 of 1998 as the primary environmental legislation provides for legal framework that ensures the concretisation of the environmental rights as guaranteed in Section 24 of the Constitution of the Republic of South Africa, Act 108 of 1996. NEMA has repealed greater parts of Environment Conservation Act 1998 (ECA), Act 73 of 1989.	In order to give effect to section 24 of the Constitution, the document provides: <ul style="list-style-type: none"> <li>- Basic principles common to successful programs; and</li> <li>- A framework for structuring compliance strategies and enforcement programs.</li> </ul>	SALGA WG 1
14. Ekurhuleni MM Environmental Policy 2013	National Norms and Standards published under all NEMA and SEMAs.	The Policy was promulgated based on the NEMA principles.	SALGA WG 2

Name of policy, plan or programme	List of relevant norms and standards	Description of how the organ of state will ensure that development and/or implementation of policies, plans and programmes comply with NEMA's environmental management principles	Established consultative Forum
15. Ekurhuleni MM Environmental Management Plan report (EMPr)	National Norms and Standards published under all NEMA and SEMAs.	The Report was conducted to ensure alignment with the NEMA principles and compliance with NEMA regulations.	The Plan is still under development therefore no consultative forums have been established as yet.
16. Cradle of Humankind Integrated Management Plan 2014 (Programmes)	National Norms and Standards published under the: - World Heritage Convention Act, 1999 (act no. 49 of 1999); - National Heritage Resources Act, 1999 (Act No. 25 of 1999); - National Environmental Management Protected Areas Act, 2003 (Act No. 57 of 2003, NEM:PAA); and - NEM:BA.	The COHWHS developed the Plan, and the NEMA principles, as well as the World Heritage Convention Act, are incorporated into this Plan.	Provincial-Municipal Air Quality Forum  SALGA WG 2
17. Mogale City LM Generic Environmental Management Plan (EMP) 2009	National Norms and Standards published under all NEMA and SEMAs.	Ensure environmental rights, Section 24 of the Constitution, contained in the Bill of Rights are concretised.	SALGA WG 2
18. Mogale City LM Compliance Monitoring and Audit Strategy 2009	National Norms and Standards published under all NEMA and SEMAs.	The Strategy has been developed to ensure environmental compliance monitoring in the Municipality.	SALGA WG 1 & 2
19. Emfuleni LM for Protocol Monitoring Compliance 2008	The National Environmental Management Act 1998 (NEMA), Act 107 of 1998 as the primary environmental legislation provides for legal framework that ensures the concretisation of the environmental rights as guaranteed in Section 24 of the Constitution of the Republic of South Africa, Act 108 of 1996. NEMA has repealed greater parts of Environment Conservation Act 1998 (ECA), Act 73 of 1989.	The Protocol has been developed as part of the Compliance Monitoring Handbook and provides a guidance protocol for compliance inspections at facilities classified as Listed Activities.	SALGA WG 1 & 2
20. Metro and District SDFs	SDFs are compiled in accordance with the provisions of Section 26(e) of the Municipal Systems Act 32 of 2000. National norms and standards published under SPLUMA, NEM:BA, and ECA.	The SDFs are developed around environmental provisions, which incorporate the NEMA principles.	SDF Forum Gauteng Planning Forum  SALGA WG 2

Name of policy, plan or programme	List of relevant norms and standards	Description of how the organ of state will ensure that development and/or implementation of policies, plans and programmes comply with NEMA's environmental management principles	Established consultative Forum
21. Municipal IDPs	<ul style="list-style-type: none"> <li>- Local government Municipal Systems Act (Act No. 32 of 2000, MSA);</li> <li>- Municipal Finance Management Act (Act No. 56 of 2003, MFMA)</li> <li>- SPLUMA (Act No. 16 of 2013);</li> <li>- IDP Guide Pack (Department of Provincial and Local Government);</li> <li>- Integrated Development Plan Format Guide (Department of Provincial and Local Government).</li> </ul>	GDARD participates in the IDP drafting processes and annual review. The IDP / Review Documentation / Amended IDP is assessed to evaluate compliance, performance and alignment. Compliance and performance are measured against the principles contained in Section 2 of NEMA.	<p>All Forums with related sectors</p> <p>SALGA WG 1</p> <p>SALGA WG 2</p> <p>IDP Analysis Review Process</p>
<b>SUSTAINING SOUTH AFRICA'S ECOSYSTEMS AND USING NATURAL RESOURCES EFFICIENTLY</b>			
<b>WATER</b>			
<b>National</b>			
22. DWS Programme 2: Water Planning & Information Management	National Norms and Standards published under the NWA.	The Programme is part of the DWS 5-year plan, which is aligned with the NEMA principles and mandated functions.	Rand Water Forum
23. National Water Resource Strategy 2 (NWRS2) 2013	National norms and standards published under the NWA.	The NWRS2 was developed to ensure alignment with the NEMA principles.	World Water Forum WG 5
<b>Provincial</b>			
24. GDARD Programme 3: Environment	National EIA regulations and listing notices; National Norms and Standards published under NEM:WA and NEM:BA.	The GDARD developed the Strategic Plan therefore the principles of NEMA are incorporated and represented by Working Groups (WG).	National Working Groups
25. Gauteng Wetland Policy	National Norms and Standards published under the NEM:WA and NEM:BA.	The Policy was developed by the GDARD therefore the NEMA principles are incorporated into this Policy.	Working For Wetlands WG 5
<b>Municipal</b>			
26. City of Johannesburg MM Catchment Management Policy 2008	National Norms and Standards published under the NWA.	Part 3 of Chapter 3 of the National Water Act (Act 36 of 1998) confers on the environment, in the form of the ecological reserve, equal status to the basic human need reserve.	SALGA WG 2

Name of policy, plan or programme	List of relevant norms and standards	Description of how the organ of state will ensure that development and/or implementation of policies, plans and programmes comply with NEMA's environmental management principles	Established consultative Forum
27. City of Johannesburg MM Wetland and Riparian Protection and Management Plan 2009	National Norms and Standards published under the NWA and NEM:BA.	Wetland functions have driven a global awareness and wetland conservation plan, and that has informed the National Water Act, The Conservation of the Agricultural Resources Act and the National Environmental Management Act.	SALGA WG 2
28. Ekurhuleni MM Long-Term Water Conservation and Water Demand Management Strategy 2015	The principles from the Water Services Act (No. 108 of 1997) and the National Water Act (No. 36 of 1998) are included.	The WC/WDM Strategy developed is related to existing requirements promulgated through the Acts, in particular the Water Services Act, Regulations and the Water Services Development Plan.	The Plan is still under development therefore no consultative forums have been established as yet.
29. Randfontein Water Services Development Plan (WSDP) 2009	National Norms and Standards published under the NWA	The WSDP complies with the relevant requirements of the Water Services Act, as the WSDP is part of the IDP process, where the WSDP is a sectoral plan for water services.	Rand Water Forum  SALGA WG 2
<b>WASTE</b>			
<b>National</b>			
30. DEA Programme 7: Chemicals and Waste Management	National Norms and Standards published under the: <ul style="list-style-type: none"> <li>- NEM:WA;</li> <li>- NEM:AQA;</li> <li>- NWA.</li> </ul>	The Programme is part of the DEA 5-year plan, which is aligned with the NEMA principles and mandated functions.	WG 9
<b>Provincial</b>			
31. Gauteng Integrated Waste Management Policy 2006 (IWMP development in progress)	NEM:WA regulations; National Waste Management Strategy; National norms and standards published under: <ul style="list-style-type: none"> <li>- NEM:WA;</li> <li>- NEM:AQA;</li> <li>- National Health Act (Act 61 of 2003);</li> <li>- The Municipals Structures Act (Act 117 of 1998); and</li> <li>- The Municipals Systems Act (32 of 2000).</li> </ul>	GDARD developed the Plan. The NEMA principles, as well as the NEM: WA, are incorporated in the Plan.	Waste Management Forum  WG 9

Name of policy, plan or programme	List of relevant norms and standards	Description of how the organ of state will ensure that development and/or implementation of policies, plans and programmes comply with NEMA's environmental management principles	Established consultative Forum
<b>Municipal</b>			
32. City of Johannesburg MM Integrated Waste Management Plan (IWMP) 2011	Section 11 in Chapter 3 of the NEM:WA states that each municipality must develop an Integrated Waste Management Plan. NEM:WA regulations; National Waste Management Strategy; National Norms and Standards published under NEM:WA.	The IWMP was developed to ensure compliance with the NEM:WA and the principles of NEMA are incorporated into the Plan.	Waste Management Forum  WG 9  SALGA WG 2
33. City of Tshwane Integrated Waste Management Plan (IWMP) 2014 draft	Section 11 in Chapter 3 of the NEM:WA states that each municipality must develop an Integrated Waste Management Plan. NEM:WA regulations; National Waste Management Strategy; National Norms and Standards published under NEM:WA.	The IWMP was developed to ensure compliance with the NEM:WA and the principles of NEMA are incorporated into the Plan.	Waste Management Forum  WG 9  SALGA WG 2
34. Ekurhuleni MM Integrated Waste Management Plan (IWMP)	Section 11 in Chapter 3 of the NEM:WA states that each municipality must develop an Integrated Waste Management Plan. NEM:WA regulations; National Waste Management Strategy; National Norms and Standards published under NEM:WA.	The IWMP was developed to ensure compliance with the NEM:WA and the principles of NEMA are incorporated into the Plan.	Waste Management Forum  WG 9  SALGA WG 2
35. Sedibeng DM Integrated Waste Management Plan (IWMP) 2014	Section 11 in Chapter 3 of the NEM:WA states that each municipality must develop an Integrated Waste Management Plan. NEM:WA regulations; National Waste Management Strategy; National Norms and Standards published under NEM:WA.	The IWMP was developed to ensure compliance with the NEM:WA and the principles of NEMA are incorporated into the Plan.	Waste Management Forum  WG 9  SALGA WG 2
36. West Rand DM Integrated Waste Management Plan (IWMP 2010-2020) 2010	Section 11 in Chapter 3 of the NEM:WA states that each municipality must develop an Integrated Waste Management Plan. NEM:WA regulations; National Waste Management Strategy; National Norms and Standards published under NEM:WA.	The IWMP was developed to ensure compliance with the NEM:WA and the principles of NEMA are incorporated into the Plan.	Waste Management Forum  WG 9  SALGA WG 2

Name of policy, plan or programme	List of relevant norms and standards	Description of how the organ of state will ensure that development and/or implementation of policies, plans and programmes comply with NEMA's environmental management principles	Established consultative Forum
37. Merafong LM Integrated Waste Management Plan (IWMP) 2010	Section 11 in Chapter 3 of the NEM:WA states that each municipality must develop an Integrated Waste Management Plan. NEM:WA regulations; National Waste Management Strategy; National norms and standards published under NEM:WA.	The IWMP was developed to ensure compliance with the NEM:WA and the principles of NEMA are incorporated into the Plan.	Waste Management Forum  WG 9  SALGA WG 2
38. Emfuleni LM Integrated Waste Management Plan 2008	Section 11 in Chapter 3 of the NEM:WA states that each municipality must develop an Integrated Waste Management Plan. NEM:WA regulations; National Waste Management Strategy; National Norms and Standards published under NEM:WA.	The IWMP was developed to ensure compliance with the NEM:WA and the principles of NEMA are incorporated into the Plan.	Waste Management Forum  WG 9  SALGA WG 2
39. Mogale City LM Integrated Waste Management Plan (IWMP)	Section 11 in Chapter 3 of the NEM:WA states that each municipality must develop an Integrated Waste Management Plan. NEM:WA regulations; National Waste Management Strategy; National Norms and Standards published under NEM:WA.	The IWMP was developed to ensure compliance with the NEM:WA and the principles of NEMA are incorporated into the Plan.	Waste Management Forum  WG 9  SALGA WG 2
40. Waste Management By-Laws	National Norms and Standards published under NEM:WA.	NEM:WA demands for the review and alignment of waste management by-laws with current legislative developments thereby complying with environmental management principles.	Waste Management Forum
<b>AIR QUALITY</b>			
<b>Provincial</b>			
41. Gauteng Air Quality Management Plan 2009	National Framework for Air Quality Management; and National Norms and Standards published under the NEM:AQA.	GDARD developed the Plan, and the NEMA principles, as well as the NEM: AQA, are incorporated into the Plan.	Air Quality Officers Forum  Provincial-Municipal Air Quality Forum WG 2

Name of policy, plan or programme	List of relevant norms and standards	Description of how the organ of state will ensure that development and/or implementation of policies, plans and programmes comply with NEMA's environmental management principles	Established consultative Forum
<b>Municipal</b>			
42. City of Johannesburg MM Air Quality Management Plan 2011	National Framework for Air Quality Management; an Air Quality Management Plan (AQMP) is a legal requirement in terms of Section 15 (1) of the NEM:AQA; and National Norms and Standards published under the NEM:AQA.	The AQMP was developed to ensure compliance with the NEM:AQA and the principles of NEMA are incorporated into the Plan.	Provincial-Municipal Air Quality Forum  WG 2  SALGA WG 2
43. City of Tshwane MM Air Quality Management Plan 2006-2008	National Framework for Air Quality Management; an Air Quality Management Plan (AQMP) is a legal requirement in terms of Section 15 (1) of the NEM:AQA; and National Norms and Standards published under the NEM:AQA.	The AQMP was developed to ensure compliance with the NEM:AQA and the principles of NEMA are incorporated into the Plan.	Provincial-Municipal Air Quality Forum  WG 2  SALGA WG 2
44. Ekurhuleni MM Air Quality Management Plan (AQMP) 2005 (under review)	National Framework for Air Quality Management; an Air Quality Management Plan (AQMP) is a legal requirement in terms of Section 15 (1) of the NEM:AQA; and National Norms and Standards published under the NEM:AQA.	The AQMP was developed to ensure compliance with the NEM:AQA and the principles of NEMA are incorporated into the Plan.	Provincial-Municipal Air Quality Forum  WG 2  SALGA WG 2
45. West Rand DM Air Quality Management Plan 2010	National Framework for Air Quality Management; an Air Quality Management Plan (AQMP) is a legal requirement in terms of Section 15 (1) of the NEM:AQA; and National Norms and Standards published under the NEM:AQA.	The AQMP was developed to ensure compliance with the NEM:AQA and the principles of NEMA are incorporated into the Plan.	Provincial-Municipal Air Quality Forum  WG 2  SALGA WG 2
46. West Rand DM Emissions Inventory Report 2011	National Norms and Standards published under the NEM:AQA.	The WRDM conducted the Emissions Inventory Report to assess air quality, which is in the NEMA principles.	Provincial-Municipal Air Quality Forum  WG 2  SALGA WG 2

Name of policy, plan or programme	List of relevant norms and standards	Description of how the organ of state will ensure that development and/or implementation of policies, plans and programmes comply with NEMA's environmental management principles	Established consultative Forum
47. Vaal Triangle Air Quality Management Plan 2009	National Framework for Air Quality Management; an Air Quality Management Plan (AQMP) is a legal requirement in terms of Section 15 (1) of the NEM:AQA; and National Norms and Standards published under the NEM:AQA	The AQMP was developed to ensure compliance with the NEM:AQA and the principles of NEMA are incorporated into the Plan.	Provincial-Municipal Air Quality Forum  WG 2  SALGA WG 2
48. Air Quality By-Laws	National Norms and Standards published under the NEM:AQA	The NEM:AQA demands that air quality standards are adopted and enforced, which complies with environmental management principles.	Provincial-Municipal Air Quality Forum  WG 2  SALGA WG 2
<b>BIODIVERSITY</b>			
<b>National</b>			
49. DEA Programme 5: Biodiversity and Conservation	National Norms and Standards published under the: <ul style="list-style-type: none"> <li>- NEM:BA;</li> <li>- NEM:PAA;</li> <li>- ECA; and</li> <li>- NWA.</li> </ul>	The Programme is part of the DEA 5-year plan, which is aligned with the NEMA principles and mandated functions.	Biodiversity and Implementation Forums
50. DAFF Champion Tree Programme 2015	Champion Trees are declared protected under Section 12 (1)(a) of the National Forest Act. (NFA).	The Programme was developed by DAFF with the purpose of protecting trees therefore NEMA principles have been incorporated.	A Forum is yet to be established
<b>Provincial</b>			
51. Gauteng Protected Areas Expansion Strategy (GPAES) 2013	National Protected Area Expansion Strategy will guide regional/provincial plans.	The purpose of the Strategy is to increase the protected area estate, which is aligned with the NEMA principles.	Protected Areas Technical Task Team (PATTT)
52. Gauteng Conservation Plan (C-Plan) 2014	National norms and standards published under the ECA and NEM:BA.	The GDARD compiled the Plan, and the NEMA principles are therefore incorporated into the Plan.	Conservation and Resource Management Unit

Name of policy, plan or programme	List of relevant norms and standards	Description of how the organ of state will ensure that development and/or implementation of policies, plans and programmes comply with NEMA's environmental management principles	Established consultative Forum
53. Biodiversity Offset Guideline and Strategy 2012	Conservation of the natural environment is required in terms of the Constitutions, NEMA and the NEM:BA.	Many laws, policies, or plans provide direction for, or inform, the use of biodiversity offsets as an instrument for environmental management. National environmental principles in Chapter 2 of NEMA are incorporated into the Guideline and Strategy.	Biodiversity Offsets Committee  GDARD and the Grasslands Programme
54. Gauteng Biodiversity Stewardship 2010	National Norms and Standards published under the NEM:PAA and NEM:BA.	The Biodiversity Stewardship initiative is based on the NEMA principles.	Biodiversity Stewardship Technical WG
<b>Municipal</b>			
55. City of Johannesburg MM Open Space System (JMOSS) 2002	Johannesburg Built Environment Guidelines and Standards (JBEGS) 2014; National Norms and Standards published under the NEM:BA	The JMOSS was developed with the NEMA principles incorporated into the JMOSS.	Biodiversity and Open Space Forums  SALGA WG 2
56. City of Johannesburg MM Biodiversity Strategy and Action Plan (BSAP) 2015	National Norms and Standards published under the: - NEM:BA - NEM:PAA	The BSAP was developed with the NEMA principles incorporated into the Plan.	Biodiversity and Implementation Forums  SALGA WG 2
57. City of Tshwane Open Space Framework (TOSF) 2005	National Norms and Standards published under the: - NEM:BA - NEM:PAA	The TOSF was developed with the NEMA principles incorporated into the Framework.	Biodiversity and Open Space Forums  SALGA WG 2
58. Ekurhuleni MM Biodiversity and Open Space Strategy (EBOSS) 2009	National Norms and Standards published under the: - NEM:BA - NEM:PAA	The EBOSS was developed with the NEMA principles incorporated into the Strategy..	Biodiversity and Open Space Forums  SALGA WG 2
59. Mogale City LM Development of Environmental Instruments for the Open Space Master Plan 2011	All National Environmental Norms and Standards published under NEMA and SEMAs.	The document is a summary of the environmental instruments that have been developed to specifically ensure sustainable environmental manage and development, and the NEMA principles were used to develop the instruments.	Local Working Groups

Name of policy, plan or programme	List of relevant norms and standards	Description of how the organ of state will ensure that development and/or implementation of policies, plans and programmes comply with NEMA's environmental management principles	Established consultative Forum
60. Ekurhuleni MM Plan Bioregional (BRP) 2015	National norms and standards published under the: - NEM:BA; and - NEM:PPA	Bioregional plans are one of a range of tools provided for in the Biodiversity Act that can be used to facilitate biodiversity conservation in priority areas outside the protected area network.	Biodiversity and Implementation Forums SALGA WG 2
61. West Rand DM Plan Bioregional (BRP) 2012	National Norms and Standards published under the: - NEM:BA; and - NEM:PPA	Bioregional plans are one of a range of tools provided for in the Biodiversity Act that can be used to facilitate biodiversity conservation in priority areas outside the protected area network.	Biodiversity and Implementation Forums SALGA WG 2
<b>LAND RESOURCES</b>			
<b>National</b>			
62. DAFF Programme 5: Forestry and Natural Resources Management	National norms and standards published under the: - National Forests Act 1998, (Act No. 84 of 1998) - National Resources Management Act 2004 (NRM) - NEM:BA - ECA - NEM:PAA	The DAFF coordinated the development of this Programme, and the principles set out in Chapter 2 of NEMA are incorporated in this Programme.	Biodiversity and Implementation Forums
<b>Provincial</b>			
63. GDARD Programme 2: Agriculture & Rural Development	- National Norms and Standards published under the relevant Agricultural Legislation. - Monitoring and Evaluation Standards - Transportation Norms and Standards	The GDARD developed the Strategic Plan therefore the principles of NEMA are incorporated therein and represented by Working Groups (WG).	Working Groups

Name of policy, plan or programme	List of relevant norms and standards	Description of how the organ of state will ensure that development and/or implementation of policies, plans and programmes comply with NEMA's environmental management principles	Established consultative Forum
64. Gauteng Provincial Environmental Management Framework (GPEMF) 2014	<p>Norms and Standards compiled in terms of Section 24 (2)(a)(b) pertaining to the GPEMF Environmental Management Zones will be published in 2016.</p> <ul style="list-style-type: none"> <li>- NEMA, as amended</li> <li>- EMF regulations</li> <li>- The Environmental Sensitivity Assessment</li> <li>- South African National Standards (SANS)</li> <li>- Ramsar Standards</li> <li>- Working for Wetlands</li> </ul>	<p>The GPMEF incorporated existing EMFs and includes new environmental data, all of which is based and developed in terms of the NEMA principles.</p> <ul style="list-style-type: none"> <li>- Identify Activities for exclusions from the EIA process using the Environmental Management Zones 1 and 5 as mapped in the GPEMF, 2014.</li> <li>- Alignment to Section 24G of NEMA, as amended.</li> <li>- A procedure to deal with EIA applications that falls under the Norms but are already being processed in the system.</li> <li>- Development of Norms and Standards, including sector specific Norms and Standards and their implementation.</li> <li>- Action plan(s) for the implementation.</li> </ul>	<p>Engagement as part of the following forums:</p> <p>EIA Forums</p> <p>GDARD IGR Technical Committee and Working Groups (Environment)</p> <p>Gauteng Planning Forum</p>
65. Gauteng Agricultural Potential Atlas (GAPA) 2013	National Norms and Standards relating to agriculture and land reform.	The GAPA was developed based on the NEMA principles.	Rural Development Forums
66. Gauteng Mine Residue Areas Strategy 2012	National Norms and Standards published under the Minerals and Petroleum Resources Development Act 2002, (Act No. 28 of 2002, MPRDA); National Framework for Air Quality Management; and National Norms and Standards published under the NEM:AQA and NEM:WA.	The core principles underpinning this Strategy are defined by the Constitution of the Republic of South Africa.	Mining Forum
<b>Municipal</b>			
67. Mogale City LM Policy on Environmental Requirements for Subdivision 2009	National Norms and Standards published under SPLUMA.	The Constitution requires, in terms of Section 41, that the ethos of cooperative governance should exist between the various spheres of government and organs of state.	<p>SALGA WG 1</p> <p>SALGA WG 2</p>

Name of policy, plan or programme	List of relevant norms and standards	Description of how the organ of state will ensure that development and/or implementation of policies, plans and programmes comply with NEMA's environmental management principles	Established consultative Forum
68. Mogale City LM Policy Guideline on Environmental Requirements for rezoning and Consent Use 2009	National Norms and Standards published under the: <ul style="list-style-type: none"> <li>- SPLUMA</li> <li>- NEM:PAA</li> <li>- NEM:BA</li> <li>- EIA Regulations (2006)</li> <li>- Section 31A of the Air Pollution Prevention Act 1965 (APPA)</li> </ul>	The document was developed specifically to focus on environmental requirements, which incorporates the NEMA principles.	SALGA WG 1 SALGA WG 2
69. Mogale City LM Telecommunication Mast Policy 2009	In terms of Sections 24 and 24D of NEMA, activity 14 states that environmental authorisation is required in cases of "the construction of masts of any material or type and of any height, including those used for telecommunication broadcasting and radio transmission..."	Mogale City LM incorporated the NEMA principles throughout the Policy.	A Forum has yet to be established
<b>RESPONDING EFFECTIVELY TO CLIMATE CHANGE (MITIGATION &amp; ADAPTION)</b>			
<b>CLIMATE CHANGE &amp; ENERGY</b>			
<b>National</b>			
70. DEA Programme 4: Climate Change and Air Quality Management	National Norms and Standards published under the: <ul style="list-style-type: none"> <li>- NEM:WA;</li> <li>- NEM:AQA</li> <li>- NWA</li> </ul>	The Programme is part of the DEA 5-year plan, which is aligned with the NEMA principles and mandated functions.	Climate Change Forum
71. DAFF Climate Change Sector Plan (CCSP) 2012	National Norms and Standards published under the: <ul style="list-style-type: none"> <li>- National Energy Act</li> <li>- NEM:AQA; and</li> <li>- White Paper on Renewable Energy (2003)</li> </ul>	The CCSP was developed to assist the agricultural, forestry and fishery sectors against the impacts of climate change while ensuring sustainable development therefore the NEMA principles are incorporated in the Plan..	Climate Change Forum
72. DAFF Climate Change Adaption and Mitigation Programme 2015	National Norms and Standards published under the: <ul style="list-style-type: none"> <li>- National Energy Act</li> <li>- NEM:AQA; and</li> <li>- White Paper on Renewable Energy (2003).</li> </ul>	The Programme was developed to reduce and protect the natural environment against the impacts of climate change while ensuring sustainable development therefore the NEMA principles are incorporated in the Programme.	Climate Change Forum
73. DoE Programme 6: Clean Energy	National Norms and Standards published under the: <ul style="list-style-type: none"> <li>- National Energy Act</li> <li>- White Paper on Renewable Energy (2003).</li> </ul>	The DoE coordinated the development of this Programme, and the NEMA principles are incorporated in the Programme.	National-Provincial Air Quality Officers Forum  Air Quality Officers Forum

Name of policy, plan or programme	List of relevant norms and standards	Description of how the organ of state will ensure that development and/or implementation of policies, plans and programmes comply with NEMA's environmental management principles	Established consultative Forum
74. DoE Integrated Resource Plan for Electricity 2010-2030 (update report 2013)	National Norms and Standards published under the National Energy Act.	The Plan focuses on energy efficiency and reducing GHGs, which is aligned with the NEMA principles.	Energy Forum
<b>Provincial</b>			
75. Gauteng Climate Change Response Strategy and Action Plan (GCCRSAP) 2011	Section 10.2.6 Provincial and Local Government of the National Climate Change Response White Paper (2011) states that "each province will develop a climate response strategy, which evaluates provincial climate risks and impacts and seeks to give effect to the National Climate Change Response Policy at a provincial level."	The GCCRSAP is based on the National Climate Change Response White Paper, which is strongly aligned with the NEMA principles.	Climate Change Forum  Air Quality Officers Forum
76. GDED Programme 2: Integrated Economic Development Services	National Norms and Standards relating to sustainable energy development.	Sustainable energy development focuses on reducing dependence on natural resources therefor the Programme incorporates the NEMA principles.	Energy Forums
<b>Municipal</b>			
77. City of Johannesburg MM Energy and Climate Change Strategy and Action Plan 2010	The Strategy and Plan is based on National Norms and Standards relating to Climate Change.	The Plan was commissioned with the NEMA principles as the baseline for ensuring environmental management.	Gauteng Climate Change Forum
78. City of Johannesburg MM Climate Change Adaption Plan 2009	The Plan is based on National Norms and Standards relating to Climate Change.	The Plan was commissioned with the NEMA principles as the baseline for ensuring environmental management.	Gauteng Climate Change Forum
79. City of Tshwane Vulnerability Assessment to Climate Change 2015	The Assessment does not include Norms and Standards.	The Assessment was conducted with the NEMA principles as the baseline for ensuring environmental management.	The Plan is still under development therefore no consultative forums have been established yet
80. Ekurhuleni MM Climate Change Response Strategy 2007	The Strategy is based on National Norms and Standards relating to Climate Change.	The Strategy was commissioned with the NEMA principles as the baseline for ensuring environmental management.	The Plan is still under development therefore no consultative forums have been established yet

Name of policy, plan or programme	List of relevant norms and standards	Description of how the organ of state will ensure that development and/or implementation of policies, plans and programmes comply with NEMA's environmental management principles	Established consultative Forum
81. Ekurhuleni MM Energy Plan	To be adopted in 2016	Not available at this stage	Not applicable
82. Mogale City LM Climate Change Framework and Operational Climate Change Plan 2014	The Plan is based on National Norms and Standards relating to Climate Change.	The Plan was commissioned with the NEMA principles as the baseline for ensuring environmental management.	Gauteng Climate Change Forum
<b>BUILDING SUSTAINABLE COMMUNITIES</b>			
<b>SOCIAL</b>			
<b>National</b>			
83. DWS Programme 3: Water and Infrastructure	National Norms and Standards published under the NWA.	The Programme is part of the DWS 5-year plan, which is aligned with the NEMA principles and mandated functions.	Rand Water Forum
84. DWS Programme 4: Water and Sanitation Services	National Norms and Standards published under the NWA and NEM:WA.	The Programme is part of the DWS 5-year plan, which is aligned with the NEMA principles and mandated functions.	Rand Water Forum
85. DRDLR: Programme 3: Rural Development	National Norms and Standards listed in South African Agricultural Legislation and: - SPLUMA - NEM:BA	The DRDLR coordinated the development of this Programme, and the NEMA principles are incorporated in this Programme.	Rural Development Forums  SALGA WG 2
<b>Provincial</b>			
86. Gauteng Growth and Development Strategy (GDS) 2005	National Norms and Standards published under all National Environmental Management Acts.	The NEMA principles are incorporated in the Strategy.	Gauteng Growth and Development Agency
87. Gauteng 20 Year Food Security Plan 2011	The Constitution of the Republic of South Africa, 1996 states in section 7(1) and (2) and in Section 8 that the South African Government is obligated to uphold and implement the rights contained in the Bill of Rights.	The NEMA principles are incorporated in the Plan to ensure sustainable agricultural practices.	Advisory Group

Name of policy, plan or programme	List of relevant norms and standards	Description of how the organ of state will ensure that development and/or implementation of policies, plans and programmes comply with NEMA's environmental management principles	Established consultative Forum
88. Draft Integrated Urban Development Framework 2014	Development principles and applicable Norms and Standards set out in Chapter 2 of the SPLUMA.	The Framework considers the following to promote sustainable development: <ul style="list-style-type: none"> <li>- Gauteng Provincial EMF;</li> <li>- Gauteng Biodiversity Mainstreaming Toolbox;</li> <li>- Gauteng Climate Change Response Strategy and Action Plan;</li> <li>- Gauteng Air Quality Management Strategy;</li> <li>- Cooperative Governance and Intergovernmental Coordination.</li> </ul>	Gauteng Planning Forums
89. GDRT 25-Year Integrated Transport Master Plan	National Norms and Standards published under the: <ul style="list-style-type: none"> <li>- National Land Transport Act 2009 (Act No. 5 of 2009, NLTA)</li> <li>- NEM:WA</li> <li>- NEM:AQA</li> </ul>	The Plan is part of the 25-year plan, which is aligned with the NEMA principles and mandated functions.	Gauteng Planning Forums
90. GDRT Promoting Sustainable (Green) Transport in Gauteng 2014	National Norms and Standards published under the: <ul style="list-style-type: none"> <li>- NLTA</li> <li>- NEM:WA</li> <li>- NEM:AQA</li> </ul>	The Programme was developed specifically to address the impacts of transport systems and management, therefore the NEMA principles are incorporated into it.	The Plan is still under development therefore no consultative forums have been established yet
91. GDHS Programme 3: Housing Development	<ul style="list-style-type: none"> <li>- The National Housing Code;</li> <li>- National Building regulations;</li> <li>- National Department of Public Works Green Building draft policy;</li> <li>- Green Building Council of South Africa (GBCSA) green building standards.</li> </ul>	The NEMA principles are incorporated into green building designs and development.	Gauteng Planning Forums
92. GDID Programme 2: Public Works Infrastructure	<ul style="list-style-type: none"> <li>- National Building regulations;</li> <li>- National Department of Public Works Green Building draft policy;</li> <li>- Green Building Council of South Africa (GBCSA) green building standards.</li> </ul>	The NEMA principles are incorporated into green building infrastructure design and development.	Gauteng Planning Forums
93. GDRT Programme 2: Transport Infrastructure	National norms and standards published under the: <ul style="list-style-type: none"> <li>- National Land Transport Act 2009 (Act No. 5 of 2009, NLTA);</li> <li>- NEM:WA;</li> <li>- NEM:AQA.</li> </ul>	The GDRT programme is part of the GDRT 5-year plan, which is aligned with the NEMA principles and mandated functions.	Air Quality Officers Forum

Name of policy, plan or programme	List of relevant norms and standards	Description of how the organ of state will ensure that development and/or implementation of policies, plans and programmes comply with NEMA's environmental management principles	Established consultative Forum
94. GDoH Implementation Plan: Policy for Environmentally Sustainable Health Care Waste Management in Gauteng Province 2012	National Norms and Standards published under the NEM:WA and National Health Care Act (Act No. 61 of 2003, NHCA).	The Plan focuses on environmentally sustainable health care waste management, and has incorporated the NEMA principles.	Health Care Waste Forum
95. First Generation Integrated Hazardous Waste Management Plan for Gauteng (GHWMP) 2010	National Norms and Standards published under the NEM:WA and National Health Care Act (Act No. 61 of 2003, NHCA).	The Plan focuses on reducing the impacts of hazardous waste on the natural environment, and has incorporated the NEMA principles.	The Gauteng Waste Forum
<b>Municipal</b>			
96. Joburg 2040 Growth and Development Strategy	All related National Norms and Standards.	The NEMA principles are incorporated in the Strategy.	SALGA Working Groups
97. City of Johannesburg Strategic Integrated Transport Plan Framework 2013	National Norms and Standards published under the: <ul style="list-style-type: none"> <li>- National Land Transport Act 2009 (Act No. 5 of 2009, NLTA)</li> <li>- NEM:WA</li> <li>- NEM:AQA</li> </ul>	The Strategic Integrated Transport Plan Framework was developed with NEMA principles incorporated into it.	Transport Forum
98. City of Tshwane Rapid Transit (TRT): Spatial Development Policy 2014	National Norms and Standards published under the: <ul style="list-style-type: none"> <li>- National Land Transport Act 2009 (Act No. 5 of 2009, NLTA)</li> <li>- NEM:WA</li> <li>- NEM:AQA</li> </ul>	The Policy was developed with NEMA principles incorporated into it.	Transport Forum  Air Quality Officers Forum  SALGA WG 6
99. Ekurhuleni MM and Growth Development Strategy 2055	All related National Norms and Standards.	Not The NEMA principles are incorporated in the Strategy.	SALGA Working Groups

Name of policy, plan or programme	List of relevant norms and standards	Description of how the organ of state will ensure that development and/or implementation of policies, plans and programmes comply with NEMA's environmental management principles	Established consultative Forum
100. Ekurhuleni MM Comprehensive integrated Transport Plan (CITP) 2015	National Norms and Standards published under the: - National Land Transport Act 2009 (Act No. 5 of 2009, NLTA); - NEM:WA; NEM:AQA.	EMM has the developed the CITP taking into account environmentally sensitive areas that could be affected by freight routes. Therefore, the CITP has incorporated the principles of NEMA.	Transport Forum  Air Quality Officers Forum
101. Ekurhuleni MM Corporate Disaster Management Plan 2014	National Norms and Standards published under relevant Acts included in the Integrated Development Plan.	The Plan was developed for Inclusion into the Integrated Development Plan as required by the Disaster Management Act, Act 57 of 2002 and section 26(g) of the Local Government: Municipal Systems Act, Act 32 of 2000.	Disaster Management Advisory Forums
<b>MANAGING A JUST TRANSITION AND THE GREEN ECONOMY</b>			
<b>SOCIO-ECONOMIC</b>			
<b>National</b>			
102. National Green Economy Summit Statement of Conclusion and Report of May 2010	Does not apply.	Does not apply.	Does not apply.
103. DEA Programme 5: Biodiversity and Conservation	National Norms and Standards published under the: - NEM:BA; - NEM:PAA; and NWA	The Programme is part of the DEA 5-year plan, which is aligned with the NEMA principles and mandated functions.	Biodiversity and Conservation Forums
104. DEA Programme 7: Chemical and Waste Management	National Norms and Standards published under the: - NEM:WA; - NEM:AQA; and - NWA	The Programme is part of the DEA 5-year plan, which is aligned with the NEMA principles and mandated functions.	National-Provincial Air Quality Officers Forum
105. DTI Gauteng Industrial Symbiosis Programme	National Norms and Standards published under the NEM:WA.	The Programme was developed specifically to address issues of environmental sustainability and management by reducing and reusing waste, therefore the NEMA principles are incorporated into it.	The Plan is still under development therefore no consultative forums have been established yet.

Name of policy, plan or programme	List of relevant norms and standards	Description of how the organ of state will ensure that development and/or implementation of policies, plans and programmes comply with NEMA's environmental management principles	Established consultative Forum
106. DTI Industrial Policy Action Plan (IPAP) 2014/15-2016/17	National Norms and Standards published under all related publications.	The IPAP focuses on economic sectors and employment clusters along with NEMA principles.	Forums are in the process of development
107. DED Green Economy Accord 2011	Does not apply.	Does not apply.	Does not apply.
<b>Provincial</b>			
108. Green Strategic Programme 2: Climate Change	Section 10.2.6 Provincial and Local Government of the National Climate Change Response White Paper (2011) states that "each province will develop a climate response strategy, which evaluates provincial climate risks and impacts and seeks to give effect to the National Climate Change Response Policy at a provincial level."	The Programme was developed specifically to address issues of environmental sustainability and management, therefore the NEMA principles are incorporated into it.	Climate Change Forum Air Quality Officers Forum
<b>Municipal</b>			
109. City of Tshwane Green Economy Strategic Framework 2013	Development principles and applicable Norms and Standards set out in SEMAs.	The Programme was developed specifically to address issues of environmental sustainability and management, therefore the NEMA principles are incorporated into this Programme.	SALGA WG 2
110. West Rand DM Green IQ Strategy 2012	<ul style="list-style-type: none"> <li>- The National Housing Code;</li> <li>- National Building regulations;</li> <li>- National Department of Public Works Green Building draft policy;</li> <li>- Green Building Council of South Africa (GBCSA) green building standards.</li> </ul>	The Programme was developed specifically to address issues of environmental sustainability and management, therefore the NEMA principles are incorporated into it.	SALGA WG 1 SALGA WG 2

#### **SECTION 4: Description of the manner in which the relevant organ of state's functions ensure that the policies, plans or programmes comply with relevant legislative provisions**

This section provides a description of how the policies, plans and programmes referred to in Section 2 above will comply with the principles set out in NEMA. This component of the EIP is at the heart of cooperative governance around environmental management. It has indicated the way in which the relevant department or province and organs of state gives affect to the priority PPPs, through exercising the priority functions. For the priority functions, the manner of compliance with the relevant legislative provisions have been described in terms of the:

- Institutional mechanisms which ensure coordination between the relevant department and other departments that are mandated with environmental management;
- Institutional mechanisms to ensure coordination with and compliance by organs of state that have been assigned, delegated or contracted with priority functions; and
- Capacity to perform the priority functions, and particularly to ensure effective implementation and functioning of the mechanisms, systems and procedures for coordination.

Explanatory note: This component of the EIP is at the heart of cooperative governance around environmental management. It has indicated the way in which the relevant department or province and organs of state gives affect to the priority PPPs, through exercising the priority functions. For the priority functions, the manner of compliance with the relevant legislative provisions have been described in terms of the:

- Institutional mechanisms which ensure coordination between the relevant department and other departments that are mandated with environmental management;
- Institutional mechanisms to ensure coordination with and compliance by organs of state that have been assigned, delegated or contracted with priority functions; and
- Capacity to perform the priority functions, and particularly to ensure effective implementation and functioning of the mechanisms, systems and procedures for coordination.

**Table 6:** Section 4, Transversal Committees formed to ensure environmental compliance and enforcement

Institutional Mechanism	Lifespan of the institutional mechanism	Description of the purpose of the mechanism	Capacity of the department for coordination	
			Human resources	Budget (estimates based on 2014 figures)
COMMITTEES				
Transversal Committees				
Selected/ relevant Provincial Working Groups (WG): <ul style="list-style-type: none"><li>WG 1: Biodiversity and Conservation</li><li>WG 2: Air Quality Management</li><li>WG 3: Local Government Support</li><li>WG 5: Environmental Impact Management</li><li>WG 7: Water Affairs</li><li>WG 9: Chemicals and Waste management</li><li>WG 10: Intergovernmental Climate Change Committee (IGCCC)</li><li>WG 11: Advisory Committee on Environmental Policy and Law Reform</li></ul>	2014-2019	The Working Group's objectives are to co-ordinate implementation, and to foster the exchange of information, consultation, agreement, assistance and support among the spheres of government with respect to their relevant focus area.	Available as per budget and Programme Structure	Cost of employment
South African Local Government Association Working Groups: <ul style="list-style-type: none"><li>WG 1: Economic Development, Planning and Environment</li><li>WG 2: Climate Change, Environmental Affairs and Sustainability</li><li>WG 4: Community Development</li><li>WG 5: Municipal Trading Services</li><li>WG 6: Municipal Infrastructure Planning</li><li>WG 8: Governance and Intergovernmental Relations</li></ul>	On-going	The Working Group's objectives are to co-ordinate implementation, and to foster the exchange of information, consultation, agreement, assistance and support among the spheres of government with respect to their relevant focus area.	Available as per budget and Programme Structure	Cost of employment

**Table 7:** Section 4 Institutional Mechanisms formed to ensure environmental compliance and enforcement

Institutional Mechanism	Lifespan of the institutional mechanism	Description of the purpose of the mechanism	Capacity of the department for coordination	
			Human resources	Budget (estimates based on 2014 figures)
ENHANCING GOVERNANCE SYSTEMS AND CAPACITY				
GOVERNANCE				
MINMEC (Local Government Support)	On-going	This forum is established by the Minister of Local Government to meet with all the Mayors to assist with oversight and support.	Mayors and Ministers of Local Government	Cost employment of
MINTEC	On-going	Technical forum working in support of the MINMEC (Local Government Support).	GDARD officials attend specific meetings	Cost employment of
Subcommittee on EIPs and EMPs	On-going	<p>The Committee gives effect and facilitates cooperative governance as defined in the Constitution in the implementation of NEMA Chapter 3. The Committee is contributed by all organs of state listed in schedules 1 and/or 2 of NEMA as well as relevant national public entities. The purpose of environmental implementation and management plans as provided in Section 12 of NEMA, is to:</p> <p>(a) co-ordinate and harmonise the environmental policies, plans, programmes and decisions of the various national departments that exercise functions that may affect the environment or are entrusted with powers and duties aimed at the achievement, promotion, and protection of a sustainable environment, and of provincial and local spheres of government, in order to:</p> <p>(i) minimise the duplication of procedures and functions; and</p> <p>(ii) promote consistency in the exercise of functions that may affect the environment;</p> <p>(b) give effect to the principle of co-operative government in chapter 3 of the Constitution;</p> <p>(c) secure the protection of the environment across the country as a whole;</p> <p>(d) prevent unreasonable actions by provinces in respect of the environment that are prejudicial to the economic or health interests of other provinces or the country as a whole; and</p> <p>(e) enable the Minister to monitor the achievement, promotion, and protection of a sustainable environment.</p>	<p>Coordinated by DEA</p> <p>Available as per Budget and Programme Structure</p>	Cost employment of

Institutional Mechanism	Lifespan of the institutional mechanism	Description of the purpose of the mechanism	Capacity of the department for coordination	
			Human resources	Budget (estimates based on 2014 figures)
Gauteng Planning Division	On-going	<p>In fulfilling the objectives of the Constitution and that of the Intergovernmental Framework Act, Municipal Systems Act and the Spatial Planning and Land use Management Act the Gauteng Planning Division (GPD) has adopted and developed a framework that will pave the way for collaborative planning and information sharing within the Gauteng City Region.</p> <p>The overarching purpose of the GPF is to provide a platform for development planning stakeholders and related professions to:</p> <ul style="list-style-type: none"> <li>▪ Provide input into policy development and development initiatives that are aimed at improving the lives of the Gauteng City Region citizens;</li> <li>▪ Consult Development Planning Stakeholders on issues relating to development;</li> <li>▪ Facilitate coordination and alignment of development strategies; and</li> <li>▪ Provide strategic and coherent approach to Development Planning.</li> </ul>	<p>Coordinate by the Gauteng Planning Division</p> <p>Available as per Budget and Programme Structure</p>	Cost of employment
Gauteng Growth and Development Agency	On-going	Implementation arm of the Gauteng Department of Economic Development and to assist the department to lead, facilitate and manage sustainable job creation and inclusive economic growth and development in the Gauteng City Region.	Merger between Gauteng Economic Development Agency & Blue IQ Holdings (Pty) Ltd.	Cost of employment
Inter-Governmental Relations (IGR)	On-going	The Committee meets regularly to facilitate contact between departments and municipalities and to make sure that there is alignment of planning priority strategies and resources between provincial and municipal government.	Provincial and Local Government	Cost of employment
Local Government Support Programme	On-going	IDEA has provided strategic support to municipalities through the development of the Local Government Support Plan (LGSP). Practical and technical support to municipalities has been intensified by the deployment of local government support officials to all district municipalities in the country. Provinces, including the GDARD and other key local government support partners, i.e. South African Local Government Association (SALGA) and the South African Cities Network (SACN), have also implemented various programmes.	Coordinated by the DEA and supported by Provincial Environmental Departments including GDARD	Cost of employment

Institutional Mechanism	Lifespan of the institutional mechanism	Description of the purpose of the mechanism	Capacity of the department for coordination	
			Human resources	Budget (estimates based on 2014 figures)
South African Local Government Association (SALGA) Municipal Infrastructure Services (MIS) Work Group	On-going	MIS covers three areas: <ul style="list-style-type: none"> <li>• Climate Change, Environmental Affairs and Sustainability;</li> <li>• Municipal Trading Services;</li> <li>• Municipal Infrastructure Planning.</li> </ul>	South African Local Government Municipal Infrastructure Services Working Group	Cost of employment
Local Government Medium Term Economic Committee (LGMTEC)	On-going	Committee constituted in terms of the Municipal Finance Management Act to ensure sound financial management and budget responsiveness.	Coordinated by the Provincial Treasury	Cost of employment
International Association for Impact Assessment (IAIA)	On-going	Best practice in the use of impact assessment for informed decision-making regarding policies, programs, plans and projects.	<ul style="list-style-type: none"> <li>- IAIA</li> <li>- DEA</li> <li>- GDARD</li> </ul>	Cost of employment
South African Council for National Scientific Professions (SACNASP)	On-going	Establish, direct, sustain and ensure a high level of professionalism and ethical conscience amongst our scientists. Their conduct should be internationally acceptable and in the broad interest of the community as outlined in the SACNASP.	South African Council for National Scientific Professions (SACNASP)	SACNASP
South African Institute of Ecologists and Environmental Scientists (SAIEES)	On-going	Initiated in 1998 as an institute, which could serve in the interests of ecologists and environmental scientists in southern Africa.	South African Institute of Ecologists and Environmental Scientists (SAIEES)	SAIEES
South African Association of Water Utilities (SAAWU)	On-going	Established a formal institutional structure to represent, promote and co-ordinate the interest of the public sector and to address the backlogs for service delivery.	Rand Water and municipalities	Cost of employment
Catchment Management Forum	On-going	Provide integrated planning and cooperative resource management.	Available as per Budget and Programme Structure	Cost of employment
Rand Water	On-going	Deliver and supply affordable, reliable, and good quality water and other services to all stakeholders.	Rand Water and municipalities	Cost of employment
Water Institute of Southern Africa	On-going	Promote professional excellence in the water sector, through building expertise, sharing knowledge and improving quality of life.	<ul style="list-style-type: none"> <li>- DWA</li> <li>- Rand Water</li> <li>- Magalies Water</li> <li>- Sedibeng Water</li> </ul>	Cost of employment

Institutional Mechanism	Lifespan of the institutional mechanism	Description of the purpose of the mechanism	Capacity of the department for coordination	
			Human resources	Budget (estimates based on 2014 figures)
Commission for Sustainable Development (CSD)	On-going	Participates in the structure and outlook by engaging in its formal proceedings a wide range of official stakeholders and partners through innovative formulae. It conducts a multi-year work programme consisting of review and policy years.	DEA	Cost of employment
ICLEI – Local Governments for Sustainability	On-going	Promote cities and regions to be low-carbon, resilient, ecomobile, biodiverse, resource-efficient and productive.	<ul style="list-style-type: none"> <li>- GOGTA</li> <li>- DEA</li> <li>- municipalities</li> </ul>	Cost of employment
<b>SUSTAINING SOUTH AFRICA'S ECOSYSTEMS AND USING NATURAL RESOURCES EFFICIENTLY</b>				
<b>WATER</b>				
Water Research Commission (WRC)	On-going	The WRC was established in terms of the Water Research Act (Act No 34 of 1971). Generates new knowledge and to promote the country's water research purposefully, owing to the view held that water would be one of South Africa's most limiting factors in the 21st century.	<ul style="list-style-type: none"> <li>- DWS</li> <li>- DEA</li> <li>- GDARD</li> </ul>	Cost of employment
National Water Advisory Council (NWAC)	On-going	Formed to ensure that a wide cross-section of South African society, representing all water users, has the opportunity to comment and advise on all aspects of water management in the country.	<ul style="list-style-type: none"> <li>- NWAC</li> <li>- DWS</li> <li>- GDARD</li> </ul>	Cost of employment
Working for Wetlands	On-going	Joint initiative between DEA, DAFF, DWS. Combining environmental and social outcomes, Working for Wetlands weaves together the wise use of wetlands with employment creation and poverty alleviation. Using the rehabilitation of wetlands as a vehicle to achieve these outcomes, the programme follows an approach that centres on cooperative government and partnership creation with landowners, communities, civil society and the private sector.	<ul style="list-style-type: none"> <li>- DWS</li> <li>- DEA</li> <li>- DAFF</li> <li>- GDARD</li> <li>- Municipalities</li> </ul>	Cost of employment
Ramsar	On-going	Intergovernmental treaty that provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources.	Ramsar	Cost of employment
Vaal Dam Reservoir Forum	On-going	To provide a platform for the development of an integrated water resource management strategy for the Vaal Dam Reservoir.	<ul style="list-style-type: none"> <li>- DWS</li> <li>- DEA</li> <li>- Eskom</li> <li>- Local municipalities &amp; communities</li> </ul>	Cost of employment

Institutional Mechanism	Lifespan of the institutional mechanism	Description of the purpose of the mechanism	Capacity of the department for coordination	
			Human resources	Budget (estimates based on 2014 figures)
Upper Vaal Reference Group Charter	On-going	The Charter strives towards the implementation of an integrated Catchment Management Strategy for the Upper Vaal Water Management Area. The mission is to provide the necessary platform for co-ordinated development, implementation and improvement of an integrated Catchment Management Strategy through committed interactive stakeholder participation.	<ul style="list-style-type: none"> <li>- DAFF</li> <li>- Local Authorities</li> <li>- Service Providers</li> <li>- NGOs</li> <li>- Industrial, Mining &amp; agricultural Sector</li> <li>- CBOs</li> </ul>	Cost of employment
Grootdraai Dam Forum	On-going	To provide a platform for the development of an integrated water resource management strategy for the Grootdraai Dam Catchment.	<ul style="list-style-type: none"> <li>- DAFF (Champion)</li> <li>- Rand Water</li> <li>- DEA</li> <li>- Local authorities &amp; communities</li> <li>- Mines and Industries</li> <li>- Eskom &amp; Sasol</li> <li>- Private Organisations</li> </ul>	Cost of employment
Waterval Catchment Forum	On-going	The forum aims to develop an integrated water management strategy for the Waterval River Catchment, and identify and encourage participation of all role players within the catchment, which may impact the water quality.	<ul style="list-style-type: none"> <li>- DAFF (Champion)</li> <li>- DEA</li> <li>- Rand Water</li> <li>- Local authorities &amp; communities</li> <li>- Mines and Industries</li> <li>- Eskom &amp; Sasol</li> <li>- Private Organisations</li> </ul>	Cost of employment
Wilge River Forum	On-going	The Wilge Forum aims to develop an integrated water management strategy for the Wilge River Catchment, and ensure an integrated water management structure that will provide for sustainable utilization of water resources by all role players within the Catchment.	<ul style="list-style-type: none"> <li>- DWS</li> <li>- DEA</li> <li>- Eskom</li> <li>- Local municipalities &amp; Cost of employment communities</li> <li>- Private Organisations</li> </ul>	Cost of employment

Institutional Mechanism	Lifespan of the institutional mechanism	Description of the purpose of the mechanism	Capacity of the department for coordination	
			Human resources	Budget (estimates based on 2014 figures)
WASTE				
National Recycling Forum	On-going	Promotes the recovery and recycling of materials in South Africa.	DEA	Cost employment of
Institute of Waste Management of Southern Africa	On-going	It is a multi-disciplinary non-profit association that is committed to supporting professional waste management practices.	Institute of Waste Management of Southern Africa	Cost employment of
Waste Management Forum	On-going	The purpose of the Forum is to: <ul style="list-style-type: none"><li>- discuss the municipality's Integrated Waste Management plans (IWMP's);</li><li>- encourage municipalities with no IWMP's to develop them;</li><li>- those that have them must update them and align with the waste act;</li><li>- discuss by-laws: municipalities with by laws must update them and they must align with the waste act and those with no by laws must develop them;</li><li>- discuss the implementation of the Gauteng General Waste Collection Standards and encourage municipalities to implement them;</li><li>- discuss waste management strategies and plans for province and municipalities;</li><li>- discuss waste management innovations (especially for industries).</li></ul>	Available as per Budget and Programme Structure	Cost employment of
AIR QUALITY				
National Association for Clean Air	On-going	Non-profit organisation established in October 1998 to promote the cause of clean air in South Africa, and is today the prime technical and scientific non-governmental body in the area of air quality management in South Africa.	- DEA	Cost employment of
Gauteng Air Quality Officers Forum	To be established	The Forum's function is to co-ordinate: <ul style="list-style-type: none"><li>- air quality activities within the province;</li><li>- activities include reporting AEL's (air quality emissions licences), air quality management plans, by laws, compliance and enforcement activities taken.</li></ul>	Attended by provincial and municipal officials (National officials are invited depending on the purpose of the meeting). The meeting is held quarterly	Cost employment of

Institutional Mechanism	Lifespan of the institutional mechanism	Description of the purpose of the mechanism	Capacity of the department for coordination	
			Human resources	Budget (estimates based on 2014 figures)
Provincial Ambient Air Quality Monitoring Committee	On-going	The Committee aims to address: <ul style="list-style-type: none"> <li>- challenges related to ambient air quality monitoring;</li> <li>- instruments, management of stations and data management;</li> <li>- co-ordinate capacity building where there is a need for development.</li> </ul>	Coordinated by GDARD  Available as per Budget and Programme Structure	Cost of employment
City of Johannesburg Air Quality Co-ordinating Committee	To be established	The Committee will focus on managing the air quality in the municipality.	CoJ Air Quality Officials	Cost of employment
<b>BIODIVERSITY</b>				
Biodiversity Planning Forum	On-going	The Forum focuses on the technical aspects of biodiversity planning, and provides an opportunity to individuals, agencies and departments involved in spatial biodiversity planning to share and synthesise valuable lessons from biodiversity planning projects. These projects underpin strategic interventions and supports improved environmental decision-making	Available as per budget and structure	Cost of employment
South African National Biodiversity Institute (SANBI)	On-going	Leads and coordinates research, and monitors and reports on the state of biodiversity in South Africa.	<ul style="list-style-type: none"> <li>- DEA</li> <li>- GDARD</li> <li>- SANBI</li> </ul>	Cost of employment
South African National Biodiversity Institute's Grassland Programme	On-going	Partnership between government, non-governmental organisations and the private sector to mainstream biodiversity into the Grassland Biome, with the intention of balancing biodiversity conservation and development imperatives in a production landscape.	South African National Biodiversity Institute's Grassland Officials	Cost of employment
Biodiversity Stewardship Technical Working Group	On-going	The Biodiversity Stewardship managers meet with private landowner to coordinate and co-manage land parcels in order to extend the protected areas estate.	Provincial Biodiversity Stewardship managers	Cost of employment
Biodiversity Offsets Committee	On-going	The Committee represents provincial and local authorities, and biodiversity offset specialists. It has been established as the key technical body for advertising an appropriate application of the Biodiversity Offset Guidelines.	GDARD	Cost of employment
Protected Areas Technical Task Team (PATTT)	On-going	The Protected Areas Technical Task Team was established to guide the development and implementation of the GPAES.	DEA and GDARD	Cost of employment
Local Action for Biodiversity (LAB)	On-going	Approach is action oriented and customized for local and regional authorities and their partners around the world, with the goal of improving biodiversity management at the local level.	<ul style="list-style-type: none"> <li>- DEA</li> <li>- DAFF</li> <li>- GDARD</li> </ul>	Cost of employment

Institutional Mechanism	Lifespan of the institutional mechanism	Description of the purpose of the mechanism	Capacity of the department for coordination	
			Human resources	Budget (estimates based on 2014 figures)
South African Mining and Biodiversity Forum (SAMBF)	On-going	Established in 2005 in an effort to enhance biodiversity management in the mining industry. Aim of providing an opportunity for cross-sectoral interaction and cooperation aimed at improving biodiversity conservation, management and performance in the mining industry within the South African legislative framework.	<ul style="list-style-type: none"> <li>- DMR</li> <li>- DEA</li> <li>- GDARD</li> </ul>	Cost of employment
National Veld Fire and Management Advisory Forum	On-going	To ensure a coordinated approach to fire risk management in respect of aerial and ground operations throughout South Africa, in turn ensuring umbrella fire protection association (FPA's) achieve common standard with regard to overall aerial and ground operation's awareness , training , prevention and control.	Budget available	Cost of employment
National Forest Research Forum (NFRF)	On-going	The NFRF is constituted on the basis of broad representation of key Research and Development stakeholders in the forest sector. Its main objective is to facilitate consensus and integrate co-ordination in research, development and transfer of technology to the forest sector in order to enhance national economic growth, social welfare and environmental sustainability.	Budget available	Cost of employment
National Forests Act Protected Tree Species Panel	On-going	To set the criteria for selection of tree species for protection under Section 15 of the National Forests Act, 1998.	Available as per budget and structure	Cost of employment
Champion Tree Evaluation panel	On-going	To set the criteria for selection of tree species and champion trees for protection under Section 12 of the National Forests Act, 1998.	Available as per budget and structure	Cost of employment
<b>LAND RESOURCES</b>				
South African Heritage Resources Agency (SAHRA)	On-going	SAHRA is a statutory organisation established under the National Heritage Resources Act, No 25 of 1999, as the national administrative body responsible for the protection of South Africa's cultural heritage.	<ul style="list-style-type: none"> <li>- SAHRA</li> <li>- DEA</li> <li>- GDARD</li> </ul>	Cost of employment
Vele Environmental Management Committee	On-going	<p>The committees' meets to discuss matter related to Heritage and Biodiversity for Coal of Africa Limited: Vele Colliery.</p> <p>The purpose of the Committee is to conduct site inspection for the mine in order to assess compliance with NEMA, NFA, NVFF including compliance with any authorization issued under that legislation and other environmental legislation.</p>	Available as per budget and structure	Cost of employment

Institutional Mechanism	Lifespan of the institutional mechanism	Description of the purpose of the mechanism	Capacity of the department for coordination	
			Human resources	Budget (estimates based on 2014 figures)
World Heritage Committee	On-going	Responsible for the implementation of the World Heritage Convention, defines the use of the World Heritage Fund and allocates financial assistance upon requests from States Parties.	UNESCO	Cost of employment
International Council on Monuments and Sites (ICOMOS)	On-going	Promote the conservation, protection, use and enhancement of monuments, building complexes and sites.	International Council on Monuments and Sites (ICOMOS)	Cost of employment
The Grassland Society of Southern Africa (GSSA)	On-going	Involved and concerned with the science and practice of range and pasture management. This broad field involves primarily the use and conservation of natural resources.	The Grassland Society of Southern Africa (GSSA)	GSSA
<b>RESPONDING EFFECTIVELY TO CLIMATE CHANGE (MITIGATION &amp; ADAPTION)</b>				
<b>CLIMATE CHANGE &amp; ENERGY</b>				
Green Building Council of South Africa (GBCSA)	On-going	Promote, encourage and facilitate green building through market-based solutions to mitigate climate change.	Partnership between GDARD and GBCSA Available as per Budget and Programme Structure	Cost of employment
Provincial Climate Change Forum	On-going	The Forum ensures that climate change considerations and the climate change responses are fully mainstreamed into the work of government..	<ul style="list-style-type: none"> <li>- Provincial Departments</li> <li>- Metro and district municipalities</li> <li>- Relevant National Sector Departments</li> </ul>	Cost of employment
South African National Energy Development Institute (SANEDI)	On-going	Schedule 3A established to direct, monitor and conduct applied energy research and development, demonstration and deployment as well as to undertake specific measures to promote the uptake of Green Energy and Energy Efficiency in South Africa.	South African National Energy Development Institute (SANEDI)	Cost of employment
Sustainable Energy Society of SA (SESSA)	On-going	The Sustainable Energy Society of Southern Africa or SESSA is dedicated to the use of renewable energy and energy efficiency including all solar-based energies such as photovoltaic, thermal heating and cooling, wind, biomass and hydro.	<ul style="list-style-type: none"> <li>- DoE</li> <li>- DEA</li> <li>- GDARD</li> </ul>	Cost of employment

Institutional Mechanism	Lifespan of the institutional mechanism	Description of the purpose of the mechanism	Capacity of the department for coordination	
			Human resources	Budget (estimates based on 2014 figures)
GDARD Climate Change Steering Committee (GCCSC)	On-going	<p>The Committee ensures that climate change considerations and the climate change responses are fully mainstreamed into the work of government. The Committee addresses the following matter:</p> <ul style="list-style-type: none"> <li>- reporting to the Provincial Climate Change Forum, the IGCCC, National Climate Change Committee;</li> <li>- provide a platform for all relevant directorates/chief directorates to share information on the various climate change-related policies and measures;</li> <li>- provide a platform for all relevant directorates/chief directorates to share knowledge and build capacity through sharing information;</li> <li>- monitor and report progress;</li> <li>- initiate joint projects/initiatives/campaigns;</li> <li>- facilitate the implementation of the Gauteng Climate Change Strategy;</li> <li>- act as a reference group.</li> </ul>	<ul style="list-style-type: none"> <li>- EPPC</li> <li>- Agriculture</li> <li>- Rural Development</li> <li>- Air Quality</li> <li>- Impact Management</li> <li>- Waste Management</li> <li>- Biodiversity Management</li> <li>- Sustainable Resource Management</li> <li>- Communications</li> <li>- HRD</li> <li>- Strategic Planning</li> <li>- IGR</li> </ul>	Cost of employment
<b>BUILDING SUSTAINABLE COMMUNITIES</b>				
<b>SOCIAL</b>				
Agricultural Research Council (ARC)	On-going	Conducts research with partners, develops human capital and fosters innovation to support and develop the agricultural sector.	<ul style="list-style-type: none"> <li>- ARC</li> <li>- DEA</li> <li>- GDARD</li> </ul>	Cost of employment
Council for Scientific and Industrial Research (CSIR)	On-going	CSIR undertakes directed and multidisciplinary research, technological innovation as well as industrial and scientific development to improve the quality of life of the country's people.	Council for Scientific and Industrial Research (CSIR)	Cost of employment
South African National Roads Agency Ltd (SANRAL)	On-going	SANRAL operates in terms of its founding legislation, The South African National Roads Agency Limited and National Roads Act (Act No. 7, 1998).	South African National Roads Agency Ltd (SANRAL)	Cost of employment
The South African Council for Planners (SACPLAN)	On-going	Statutory Council of nominated members appointed in terms of the Planning Profession Act, 2002 (Act 36 of 2002) by the Minister of Rural Development and Land Reform to regulate the Planning Profession (Planning is both the organisational process of creating and maintaining a plan) in terms of the Act.	The South African Council for Planners (SACPLAN)	Cost of employment
South African Institution of Civil Engineering (SAICE)	On-going	Provide the community with environmentally and economically sustainable infrastructure.	South African Institution of Civil Engineering (SAICE)	Cost of employment

Institutional Mechanism	Lifespan of the institutional mechanism	Description of the purpose of the mechanism	Capacity of the department for coordination	
			Human resources	Budget (estimates based on 2014 figures)
Gauteng Integrated Food Security Strategy Forum	To be established	The Forum will facilitate and implement the strategic food security projects and programmes.	Available as per Budget and Programme Structure	Cost of employment
Sustainability Institute	On-going	International learning centre focused on helping the agricultural community break free from its racial past and teach them how to sustain the ecosystem of their society.	Sustainability Institute	Cost of employment
Mining Industry Growth, Development and Employment Task Team (MIGDETT)	On-going	Help the industry manage the negative effects of the global economic crisis and to save jobs.	Mining Industry Growth, Development and Employment Task Team	Cost of employment
<b>MANAGING A JUST TRANSITION AND THE GREEN ECONOMY</b>				
<b>SOCIO-ECONOMIC</b>				
Industrial Development Corporation (IDC)	On-going	Promotes sustainable economic growth and industrial development.	Relevant departments	Cost of employment

## **SECTION 5: Recommendations for the promotion of the objectives and plans for the implementations of the procedures and regulations referred to in Chapter 5 of NEMA**

Explanatory note: Chapter 5 of NEMA concerns the tools and instruments required to ensure the integrated environmental management activities that affect the environment. Departments and provinces that are required to prepare EIPs are mandated with promoting, managing or conducting many of these activities. This requirement therefore provides them with an opportunity to make recommendation about the most effective ways in which to implement integrated environmental management (IEM) in their sector. This also highlights the difference between the focus of EIPs (or EMPs) on cooperative governance (under Chapter 3 of NEMA), and the tools (plans, procedures and regulations) that give effect to environmental management (under Chapter 5 of NEMA).

Table 8: Section 5 Recommendations

Recommendations
<b>ENHANCING GOVERNANCE SYSTEMS AND CAPACITY</b>
Enhance integrated planning to appropriately incorporate biodiversity and ecosystem vulnerability.
Environmental management committees should include biodiversity stakeholders.
Improved information collection and analysis on private sector initiatives in the waste, air quality, energy and climate change adaptation fields.
Identify skills, capacity and financial provisions within the province and municipalities to ensure environmental interventions are implemented.
Provincial and local government must establish a standing line of engagement with various related provincial and municipal departments to ensure management targets are met.
Promote coordination between government and private sectors around waste management.
Ensure coordination, alignment, support and participation of all key departments and spheres of government regarding implementing the energy strategy.
Improve alignment of sector plans and IDPs with the EIP.
Align the development of all sector plan processes with the IDP cycle to ensure that these processes feed into the IDP.
<b>SUSTAINING SOUTH AFRICA'S ECOSYSTEMS AND USING NATURAL RESOURCES EFFICIENTLY</b>
Municipalities must make provision for extra zoning in town planning schemes for protection of all urban nature reserves, bird sanctuaries and wetlands.
Implement provisions to protect and enhance all riparian zones and make provision for buffer and ecological corridors.
Implement provisions to protect and enhance natural resources that provide ecological goods and services, with specific focus on improving the living conditions of the poor.
Municipalities must make provision for extra zoning in town planning schemes for the protection of 1:50 & 1:100 year flood lines adjacent to watercourses.
Municipalities must make provision for extra zoning in town planning schemes for protection of all Class 1 & 2 ridges.
Development of integrated waste recycling, collection, disposal and treatment systems.
Mining and development avoid protected areas, wetlands and ecologically thriving areas.
Maintain and obtain formal conservation protection of more land of conservation value to promote functional ecosystem and biodiversity conservation.
Implement appropriate zoning and land management guidelines to avoid impacting ecologically sensitive areas and ecological processes.
Avoid conversion of high potential agricultural land to more intense land-uses, which may have a negative impact on threatened species or the ecological processes that support these species.
Focus on threatened species-specific management interventions by conserving agencies and NGOs.
Air Quality Management Plans to be developed and implemented.
Waste Management Plans to be developed and implemented.
Areas of biodiversity value should be included in an updated land cover map for the province.
Conservation Management Authorities must adhere to the SoER.

Active support for increased water use efficiency in the agricultural sector with regard to irrigation and re-use of wastewater.
Increase water re-use options and harvesting systems.
<b>RESPONDING EFFECTIVELY TO CLIMATE CHANGE (MITIGATION &amp; ADAPTION)</b>
Departments must adopt climate change mitigation and adaption measures, based on the MTSF objectives, as part of their annual performance plans.
The development and implementation of climate change response projects.
Continued research and monitoring of localised causes and effects of climate change.
Support climate change protection programmes.
Promote the reduction of GHG emissions as part of implementing Air Quality Management Plans.
<b>BUILDING SUSTAINABLE COMMUNITIES</b>
Remove financial obstacles to innovative green urban development and off-grid infrastructure through engagement with National and Provincial Treasury and municipalities.
Support and finance rural sustainable agricultural activities through subsidies.
Support the agricultural market system and provide statutory measures for subsistence and commercial farmers.
Increase civic education and opportunities for mutual learning and use technology to enhance participation.
Mobility policy must be formulated to ensure proper integration between road, rail and air transport as well as between private and public transport options.
Set energy efficiency targets to be incorporated into proposed subsidized housing initiatives and private housing developments.
Develop clear strategies and action plans on improving public transport and incentives for decreased use of private vehicles.
Ensure Critical Management Areas (CMAs) are monitored at all levels of government.
Promote industrial and municipal Integrated Waste Management planning.
<b>MANAGING A JUST TRANSITION AND THE GREEN ECONOMY</b>
Address Waste-to-Energy (WTE) technology (guidelines, research and development, and improved technology).
Discrete flexible systems, processes and technology and procedures regarding service delivery must be customised to better suit businesses.
Incorporate the Atmospheric Emissions Licence (AEL) function and EIA processes to obtain all relevant industry information pertaining to air quality and GHG emissions..
Support conservation and urban agriculture and improving irrigation water use.

## SECTION 6: Outcomes and key priority indicators for the EIP over a five-year plan or programme

Explanatory note: There are two general types of indicators that may be used in an EIP.

1. The NSSD headline indicator and/ or the National Development Plan indicators that respond directly to the NEMA principles for sustainable development against which functions, PPPs described in the EIP should be evaluated. These indicators provide the means for monitoring general achievement of the goals of environmental management.
2. Performance indicators of institutional compliance with the mechanisms and procedures for cooperative governance have been included in the EIP.

*Important Note:* Targets for the outer years (from 2016-2020) are estimates only and may change based on updated strategic and annual plans. Compliance reports will take these potential target shifts into account. Some PPPs identified in the EIP are still under development, and as such indicators have not yet been identified for these programmes.

The targets in Section 6 are numerical or percentages, this is because the targets and their indicators are extracted directly from the departments policies, plans or programmes. The 2015 reporting baseline is in the original policy, plan or programme.

**Table 9:** Section 6 Indicator source table (refers to superscripts in the indicator column)

Code	Source of indicator	Code	Source of indicator
a	National Strategy for Sustainable Development (NSSD)	k	DoE Strategic Plan 2015-2020
b	Outcome 7	l	DRDLR Strategic Plan 2015-2020
c	Outcome 10	m	GDRT Strategic Plan 2014-2019
d	Medium Term Strategic Framework (MTSF)	n	GDHS Strategic Plan 2015-2019
e	National Development Plan (NDP)	o	GDID Strategic Plan 2014-2019
f	Joburg 2040 GDS	p	Ekurhuleni MM WC/WDM Plan 2015
g	GDARD Strategic Plan 2014-2019	q	COHWHS Integrated Management Strategy
h	National Water Resource Strategy (NWRS2)	r	Gauteng 20 Year Food Security Plan
i	DWS Strategic Plan 2015/16-2019/20	s	Green Strategic Plan 2011
j	DAFF Strategic Plan 2013/14-2017/18	t	Municipal IDPs

**Table 10:** Section 6 outcomes and key priority indicators

Programme number	Outcomes to be achieved	How (mean/ activities)	Organ of state	Medium-Term Targets				Indicators (Superscripts indicate the source of each indicator)	Indicator number	
				2015/16	2016/17	2017/18	2018/19			
ENHANCING GOVERNANCE SYSTEMS AND CAPACITY										
GOVERNANCE										
Provincial										
8. GDARD Programme 1: Office of the HoD	GDARD Strategic Objectives implemented and outcomes achieved	Compliant implementation of the previous year's APP.	GDARD	4	4	4	-	Number of Quarterly performance review sessions coordinated <sup>9</sup>	1	
8. GDARD Programme 1: Strategic Support & Governance	Legislated Performance Plans and Reports prepared, approved and submitted – to relevant oversight bodies	All required Plans and Reports submitted within set timeframes.	GDARD	2	1	1	-	Number of Performance Plans submitted (Treasury & Department of Planning, Monitoring & Evaluation) <sup>9</sup>	2	
			GDARD	16	16	16	-	Number of Legislative or oversight performance Reports submitted <sup>9</sup>	3	
			GDARD	2	1	1	-	Number of programme/ projects evaluated <sup>9</sup>	4	
8. GDARD Programme 1: Strategic Support & Governance	Enterprise risk assessment facilitated for all departmental programmes	Timely submission of quality reports and adherence to Risk Management legislative frameworks.	GDARD	2	2	2	-	Number of Strategic and Fraud Risk Assessments Conducted <sup>9</sup>	5	
			GDARD	10	10	10	-	Number of Operational Risk Assessments Conducted <sup>9</sup>	6	
			GDARD	4	4	4	-	Number of Reviews conducted (Key Internal Controls) <sup>9</sup>	7	
8. GDARD Programme 1: Strategic Support & Governance	Implement IGR and Strategic Partnership frameworks	Timely submission of quarterly reports to the MEC.	GDARD	1	-	-	-	Approved IGR Strategy and Implication Plan <sup>9</sup>	8	
			GDARD	1	-	-	-	Approved partnership strategy <sup>9</sup>	9	
8. GDARD Programme 1: Financial Management	Compliant use of GDARD's financial resources to implement strategic objectives and achieve outcomes	Financial legislation, regulations and requirements adhered to and GDARD financially compliant.	GDARD	100%	100%	100%	-	Percentage of invoices received paid within 14 days of receipt <sup>9</sup>	10	
			GDARD	75%	75%	75%	-	Percentage of total procurement that targets South Africa manufactured goods <sup>9</sup>	11	

Programme number	Outcomes to be achieved	How (mean/ activities)	Organ of state	Medium-Term Targets				Indicators (Superscripts indicate the source of each indicator)	Indicator number
				2015/16	2016/17	2017/18	2018/19		
8. GDARD Programme 1: Financial Management	Compliant use of GDARD's financial resources to implement strategic objectives and achieve outcomes	Financial legislation, regulations and requirements adhered to and GDARD financially compliant.	GDARD	30%	30%	30%	-	Percentage of total procurement that targets businesses owned by: Women <sup>b, d, e, g</sup>	12
			GDARD	10%	10%	10%	-	Percentage of total procurement that targets businesses owned by: Youth <sup>b, d, e, g</sup>	13
8. GDARD Programme 1: Financial Management	Compliant use of GDARD's financial resources to implement strategic objectives and achieve outcomes	Financial legislation, regulations and requirements adhered to and GDARD financially compliant.	GDARD	5%	5%	5%	-	Percentage of total procurement that targets businesses owned by: Persons with disabilities <sup>b, d, e, g</sup>	14
			GDARD	less than 2%	less than 2%	less than 2%	-	Percentage variance between budget and expenditure <sup>g</sup>	15
			GDARD	100%	100%	100%	-	Percentage of financial audit findings resolved <sup>g</sup>	16
			GDARD	1	1	1	-	Number of estimates Capital Expenditure Reports submitted within legislation timeframes <sup>g</sup>	17
24. GDARD Programme 3: Environmental Policy Planning & Co-ordination	Gauteng's natural resources and environment protected	All GDARD natural resources and environment protection programmes for Intergovernmental Coordination Spatial and Development Planning implemented.	GDARD	12	12	12	-	Number of inter-governmental sector tools reviewed <sup>c, g</sup>	18
			GDARD	1	-	-	-	Number of legislative tools developed <sup>c, d, e, g</sup>	19
24. GDARD Programme 3: Environmental Policy Planning & Co-ordination	Gauteng's natural resources and environment protected	All GDARD natural resources and environment protection programmes for Research and Development Support implemented.	GDARD	1	1	1	-	Number of environmental research projects undertaken <sup>c, d, e, g</sup>	20

Programme number	Outcomes to be achieved	How (mean/ activities)	Organ of state	Medium-Term Targets				Indicators (Superscripts indicate the source of each indicator)	Indicator number
				2015/16	2016/17	2017/18	2018/19		
24. GDARD Programme 3: Environmental Policy Planning & Co-ordination	Gauteng's natural resources and environment protected	All GDARD natural resources and environment protection programmes for Environmental Information Management implemented.	GDARD	3	3	3	-	Number of functional environmental information management systems <sup>c, d, e, g</sup>	21
24. GDARD Programme 3: Compliance & Enforcement	Gauteng's natural resources and environment protected	All GDARD natural resources and environment protection programmes for Environmental Quality Management Compliance and Enforcement implemented.	GDARD	110	110	125	-	Number of enforcement actions finalised for non-compliance with environmental legislation <sup>c, g</sup>	22
			GDARD	250	250	250	-	Number of compliance inspections conducted <sup>c, d, e, g</sup>	23
24. GDARD Programme 3: Compliance & Enforcement	Gauteng's natural resources and environment protected	All GDARD natural resources and environment protection programmes for Biodiversity Management, Compliance and Enforcement implemented.	GDARD	15	10	10	-	Number of S24G applications received <sup>g</sup>	24
			GDARD	15	15	10	-	Number of S24G fines paid <sup>g</sup>	25
24. GDARD Programme 3: Compliance & Enforcement	Gauteng's natural resources and environment protected	All GDARD natural resources and environment protection programmes for Biodiversity Management, Compliance and Enforcement implemented.	GDARD	25	25	25	-	Number of received S24G applications finalised <sup>g</sup>	26
			GDARD	18	20	25	-	Number of designated provincial & local Environmental Management Inspections (EMI) <sup>c, d, e, g</sup>	27

Programme number	Outcomes to be achieved	How (mean/ activities)	Organ of state	Medium-Term Targets				Indicators (Superscripts indicate the source of each indicator)	Indicator number
				2015/16	2016/17	2017/18	2018/19		
24. GDARD Programme 3: Environmental Management	Gauteng's natural resources and environment protected	All GDARD natural resources and environment protection programmes for Impact Management implemented.	GDARD	100%	100%	100%	-	Percentage of EIA Applications finalised within legislated timeframes <sup>c, d, e, g</sup>	28
93. GDRT Programme 2	To integrate province wide transport sector planning and multi-modernism that supports decisive spatial transformation	Ensure that macro-transport sector planning is integrated, coordinated with all land use to facilitate multi-modernism.	GDRT	2	4	5	5	Number of new construction designs <sup>m</sup>	29
				3	11	10	8	Number of upgrades designs <sup>m</sup>	30
				11	5	4	6	Number of rehabilitation designs <sup>m</sup>	31
12. GDRT Programme 4	To modernise the regulatory services that is accessible, reliable and consumer centred	Promote safe and quality transport systems and services that accessible and customer centric.	GDRT	2	-	-	-	Number of existing Driver Learner Testing Centres refurbished <sup>m</sup>	32
				120	125	130	135	Number of compliance inspections conducted <sup>m</sup>	33
92. GDID Programme 2	Manage the planning and construction of infrastructure projects	Fast tracking of service delivery goals and objectives through implementation of client projects.	GDID	-	-	-	372	Number of completed new infrastructure projects to contribute towards socio-economic development <sup>d, e, o</sup>	34
<b>Municipal</b>									
21. EMM IDP Programme: Environmental Resource Management	Connected working and living spaces	Increase number of air emissions licenses issued	EMM	239	360	400	-	Number of air emissions licenses issued <sup>c, d, e, t</sup>	35
		Increase percentage of compliance with ambient air quality standards.	EMM	70%	80%	90%	-	Percentage of compliance with ambient standards on air quality <sup>c, d, e, t</sup>	36
21. Merafong City IDP Programme: Environmental Management	Provide an integrated Spatial Development Framework	Promote efficient and effective environmental management measures.	Merafong LM	100%	-	-	-	Number of environmental audits conducted versus planned <sup>c, d, e, t</sup>	37
			Merafong LM	100%	-	-	-	Percentage of non-compliance detected versus compliance notices issued <sup>c, d, e, t</sup>	38

Programme number	Outcomes to be achieved	How (mean/ activities)	Organ of state	Medium-Term Targets				Indicators (Superscripts indicate the source of each indicator)	Indicator number
				2015/16	2016/17	2017/18	2018/19		
21. Mogale City IDP Programme: Environmental Compliance Facilitation	Sustainable environmental management	Promote sustainable environmental management.	Mogale City LM	100%	100%	100%	-	Percentage of environmental compliance facilitation services planned versus provided <sup>c, d, e, t</sup>	39
SUSTAINING SOUTH AFRICA'S ECOSYSTEMS AND USING NATURAL RESOURCES EFFICIENTLY									
WATER									
National									
22. DWS Programme 2	The country's water resources are protected, used, developed, conservable and managed and controlled in a sustainable manner for the benefit of the people and the environment	Develop a knowledge base and implement effective policies, procedures and integrated planning strategies.	DWS	60% (Draft)	100%	-	-	Percentage completion of the integrated water quality management strategy <sup>c, d, e, h, i</sup>	40
				3 (upper, Middle & Lower Vaal)	-	-	-	Number of river systems with determined resource quality objectives <sup>c, h, i</sup>	41
				60%	100%	-	-	Percentage completion of the review of existing water monitoring networks <sup>c, h, i</sup>	42
Municipal									
21. CoJ IDP Programme: Urban Water Management	Increase water resource sustainability	Interventions in water courses.	CoJ	8	-	-	-	Number of water courses rehabilitated <sup>c, f, i, t</sup>	43
		Installation of pre-paid meters, pipe replacement, pressure management, awareness programmes, rainwater harvesting.	CoJ	66 000 mL	-	-	-	Reduction in water demand of bulk water supply (mega litre) <sup>c, f, i, t</sup>	44
21. CoJ IDP Programme: Urban Water Management	Increase water resource sustainability	Industrial effluent compliance, compliance and data monitoring, maintain Green Drop Status for CoJ.	CoJ	75%	-	-	-	Percentage of compliance to norms and standards <sup>c, d, e, f, i, t</sup>	45

Programme number	Outcomes to be achieved	How (mean/ activities)	Organ of state	Medium-Term Targets				Indicators (Superscripts indicate the source of each indicator)	Indicator number
				2015/16	2016/17	2017/18	2018/19		
21. EMM IDP Programme: Roads & Stormwater	Increased conservation, sustainable use and management of biodiversity and ecosystems	Increase rehabilitation of damaged ecosystems.	EMM	1	1	1	-	Number of km of natural watercourses upgraded and protected <sup>c, i, t</sup>	46
28. EMM Long-Term WC and WDM Plan 2015	Reduce authorised water consumption	Engage with the community to improve understanding of water supply and water demand issue.	EMM	-	-	-	170l/c/d	Amount of authorised water consumption reduced <sup>c, i, p</sup>	47
	Non-revenue water reduction	Reduce Real or Physical Loss through pipe replacement and rehabilitation.	EMM	-	-	-	13%	Percentage of Real or Physical Loss reduced <sup>c, i, p</sup>	48
		Reduce Apparent Loss by replacing and updating Water Meters.	EMM	-	-	-	13.2%	Percentage of apparent Loss reduced <sup>c, i, p</sup>	49
21. Emfuleni IDP Programme: Water Services	An efficient, competitive and responsive economic infrastructure network	Address all water service delivery shortfalls and improve service delivery times and methods.	Emfuleni LM	97%	97%	-	-	Percentage compliance with Blue Drop standard <sup>c, d, e, i, t</sup>	50
			Emfuleni LM	95%	95%	-	-	Percentage compliance <sup>c, d, e, i, t</sup>	51
16. Cradle IMP Programme 5.2: Biodiversity Issues	No threat to the Paleontological values and aesthetics, and animal and human health.	Surface and Ground Water Monitoring/ management systems and processes established to facilitate inter-organisational cooperation.	COHWH S	By 2020				Review baselines studies (every five years) <sup>q</sup>	52
			DEA					Review monitoring plans for ground and surface water (every year) <sup>q</sup>	53
								Keep a register of tour groups and cave clubs <sup>q</sup>	54
								Undertake METT assessment (annually) <sup>q</sup>	55
								UNESCO Periodic Reporting <sup>c, q</sup>	56

Programme number	Outcomes to be achieved	How (mean/ activities)	Organ of state	Medium-Term Targets				Indicators (Superscripts indicate the source of each indicator)	Indicator number
				2015/16	2016/17	2017/18	2018/19		
WASTE									
Provincial									
24. GDARD Programme 3: Environmental Management	Sustainable development in Gauteng supported through waste management and use of green technologies	All GDARD sustainable development programmes implemented.	GDARD	80%	80%	80%	-	Percentage of waste license applications finalised within legislated timeframes <sup>g</sup>	57
			GDARD	10	10	10	-	Number of Waste management co-ops assisted with registration with the DTI in the priority townships <sup>d, e, g</sup>	58
			GDARD	3	3	3	-	Number of Recycling Facilities and Buy-back centres supported with recycling equipment <sup>d, e, g</sup>	59
			GDARD	10	10	10	-	Number of Waste Management Recycling Co-operatives in townships trained <sup>d, e, g</sup>	60
24. GDARD Programme 3: Environmental Management	Sustainable development in Gauteng supported through waste management and use of green technologies	All GDARD sustainable development programmes implemented.	GDARD	120	120	120	-	Number of Waste Certificates issued <sup>g</sup>	61
			GDARD	20	20	20	-	Number of Health Care Waste Approvals issued <sup>g</sup>	62
			GDARD	4	4	4	-	Number of reports on percentage of waste diverted from landfill <sup>d, e, g</sup>	63
			GDARD	12	15	18	-	Number of monitoring reports issued on cleanliness levels of municipalities <sup>g</sup>	64
Municipal									
21. CoJ IDP Programme: Waste Management	Improved waste management	Separation at source and commercial waste recycling.	CoJ	20%	-	-	-	Percentage waste reduction <sup>t</sup>	65
		Formalise of waste reclaimer, contribution to SMME entrepreneurial support.	CoJ	4 000	-	-	-	Number of job opportunities <sup>d, e, t</sup>	66
		Landfill Gas-to-Energy project.	CoJ	80%	-	-	-	Percentage reduction of GHG emission <sup>a, d, e, t</sup>	67

Programme number	Outcomes to be achieved	How (mean/ activities)	Organ of state	Medium-Term Targets				Indicators (Superscripts indicate the source of each indicator)	Indicator number
				2015/16	2016/17	2017/18	2018/19		
21. CoJ IDP Programme: Waste Management	Improved waste management	Registration, licensing, and auditing of waste management activities.	CoJ	90%	-	-	-	Percentage of compliance <sup>c, d, e, t</sup>	68
		Public and school campaigns	CoJ	25	-	-	-	Number of campaigns <sup>t</sup>	69
		Strategy to deal with illegal dumping and management of problematic waste streams.	CoJ	50%	-	-	-	Percentage reduction <sup>t</sup>	70
21. EMM IDP Programme: Waste Management	Sustainable natural resource use	Increase waste recycling.	EMM	6%	8%	10%	-	Percentage of recyclable waste reclaimed <sup>t</sup>	71
21. EMM IDP Programme: ERWAT	Increased achievement of Green Drop status for the waste water treatment works	Improve and increase efficiency of wastewater treatment works.	EMM	78%	79%	80%	-	Number of wastewater works complying with 90% against the applicable standards <sup>c, d, e, t</sup>	72
			EMM	713	763	823	-	Mega litres per day of treatment capacity <sup>t</sup>	73
21. EMM IDP Programme: ERWAT	Increased achievement of Green Drop status for the waste water treatment works	Improve and increase efficiency of wastewater treatment works.	EMM	5	6	5	-	Number of wastewater treatment works refurbished <sup>t</sup>	74
			EMM	due in 4 years	1	2	-	Number of wastewater treatment works constructed/extended/upgraded <sup>t</sup>	75
21. Emfuleni IDP Programme: Waste & Environmental Management	An efficient, competitive and responsive economic infrastructure network	Increase waste management efficiency.	Emfuleni LM	400	400	-	-	Number of new houses built with access to basic level of waste removal <sup>d, e, t</sup>	76
			Emfuleni LM	85%	85%	-	-	Percentage of formal houses with access to basic level of solid waste collection <sup>d, e, t</sup>	77
			Emfuleni LM	20 000	20 000	-	-	Number of wheelie bins delivered <sup>t</sup>	78

Programme number	Outcomes to be achieved	How (mean/ activities)	Organ of state	Medium-Term Targets				Indicators (Superscripts indicate the source of each indicator)	Indicator number
				2015/16	2016/17	2017/18	2018/19		
21. Emfuleni IDP Programme: Waste & Environmental Management	An efficient, competitive and responsive economic infrastructure network	Increase waste management efficiency.	Emfuleni LM	125 000m <sup>3</sup>	115 000m <sup>3</sup>	-	-	Volume of solid waste removal <sup>t</sup>	79
			Emfuleni LM	32	32	-	-	Number of cleaning campaigns <sup>t</sup>	80
			Emfuleni LM	95%	95%	-	-	Percentage of landfill compliance to minimum requirements <sup>c, d, e, t</sup>	81
			Emfuleni LM	600	600	-	-	Number of industries inspected for compliance <sup>c, d, e, t</sup>	82
AIR QUALITY									
Provincial									
24. GDARD Programme 3: Environmental Management	Sustainable development in Gauteng supported through waste management and use of green technologies	All GDARD sustainable development programmes implemented.	GDARD	100%	100%	100%	-	Percentage of atmospheric emission licenses with complete applications issued within legislated timeframes <sup>g</sup>	83
			GDARD	40%	70%	100%	-	Percentage of facilities with Atmospheric licenses reporting to the National Atmospheric Emissions Inventory System (NAES) <sup>g, k</sup>	84
24. GDARD Programme 3: Environmental Management	Sustainable development in Gauteng supported through waste management and use of green technologies	All GDARD sustainable development programmes implemented.	GDARD	6	6	6	-	Number of designated organs of state with approved and implemented AQMPs <sup>c, g</sup>	85
			GDARD	2	2	2	-	Number of municipalities supported to develop air quality monitoring infrastructure <sup>c, g</sup>	86
			GDARD	1	4	4	-	Number of industries reporting their GHG emissions <sup>c, g</sup>	87
Municipal									
21. CoJ IDP Programme: Air Quality	Clean and safe air	Implementation of reduction strategies.	CoJ	15%	-	-	-	Percentage reduction in PM10 (particulate matter) <sup>c, f, t</sup>	88

Programme number	Outcomes to be achieved	How (mean/ activities)	Organ of state	Medium-Term Targets				Indicators (Superscripts indicate the source of each indicator)	Indicator number
				2015/16	2016/17	2017/18	2018/19		
21. EMM IDP Programme: Environmental Resource Management	Connected working and living spaces	Increase access to opportunities in the green industry.	EMM	239	360	400	-	Number of air emission licenses issued <sup>c, t</sup>	89
			EMM	70%	80%	90%	-	Percentage of compliance with ambient standards on air quality <sup>c, t</sup>	90
BIODIVERSITY									
Provincial									
24. GDARD Programme 3: Biodiversity Management	Gauteng's natural resources and environment protected	All GDARD's natural resources and environmental protection programmes for biodiversity and protected area planning and management programmes implemented.	GDARD	26 109	26 109	26 109	-	Number of hectares in the conservation estate <sup>c, g</sup>	91
24. GDARD Programme 3: Biodiversity Management	Gauteng's natural resources and environment protected	All GDARD's natural resources and environmental protection programmes for conservation agencies and services implemented.	GDARD	7 600	7 800	8 000	-	Number of Permits issued within legislated timeframes <sup>g</sup>	92
			GDARD	83%	83%	83%	-	Percentage of area of state managed protected areas within a METT score above 67% <sup>c, g</sup>	93
Municipal									
21. CoJ IDP Programme: Biodiversity Conservation	Ensure biodiversity conservation and resource sustainability	Ecological assessments, development of Ecological Management Plans for areas to be proclaimed, public participation and legal process for proclamation.	CoJ	2%	-	-	-	Percentage of metropolitan area protected <sup>c, t</sup>	94
		Ground truthing of priority biodiversity areas.	CoJ	50%	-	-	-	Percentage completion of biodiversity audit and information management tool <sup>c, t</sup>	95

Programme number	Outcomes to be achieved	How (mean/ activities)	Organ of state	Medium-Term Targets				Indicators (Superscripts indicate the source of each indicator)	Indicator number
				2015/16	2016/17	2017/18	2018/19		
21. CoJ IDP Programme: Biodiversity Conservation	Ensure biodiversity conservation and resource sustainability	Regularisation of zonings in Public Open Spaces.	CoJ	100%	-	-	-	Percentage of regularisation process completed <sup>c,t</sup>	96
		Review and expansion of the Greening Strategy.	CoJ	7	-	-	-	Number of greening initiatives <sup>c,t</sup>	97
21. EMM IDP Programme: Environmental Resource Management	Biodiversity and Ecosystem management	Increase protection and preservation of existing ecosystems.	EMM	250	200	150	-	Total hectares of land with ecological value formally protected <sup>c,t</sup>	98
		Increase rehabilitation of damaged ecosystems.	EMM	12	15	11	-	Number of rehabilitation projects completed <sup>c,t</sup>	99
21. Mogale City IDP Programme: Open Space Management	Sustainable environmental management	Promote sustainable environmental management.	Mogale City LM	1	1	1	-	Number of regional parks provided <sup>c,t</sup>	100
			Mogale City LM	2	-	-	-	Number of residential parks provided <sup>c,t</sup>	101
			Mogale City LM	100%	100%	100%	-	Percentage of park services planned versus provided <sup>c,t</sup>	102
16. Cradle IMP Programme 5.2: Biodiversity Issues	Natural ecological functioning in terms of species, habitats, processes and condition remains intact and fully functional	Management processes and structures focussing on all habitats and species managed according to ecological principles.	COHWH S	By 2020				Maintain a record of all scientific research applications <sup>q</sup>	103
								Assess specific management plans <sup>q</sup>	104
			DEA					Undertake an annual METT assessment <sup>q</sup>	105
								UNESCO Periodic Reporting <sup>c,q</sup>	106
LAND USE									
Provincial									
63. GDARD Programme 2: Sustainable Resource Management	All GDARD's sustainable resource management outcomes and targets achieved	Guiding subdivision/ rezoning/ change of agricultural land use.	GDARD	800	800	800	-	Number of hectares protected/ rehabilitated to improve agricultural production <sup>b,d,e,g,l</sup>	107
			GDARD	105	100	100	-	Number of green jobs created <sup>b,d,e,g,l</sup>	108
			GDARD	10	10	10	-	Number of hectares of agricultural land protected through <sup>b,d,e,g,l</sup>	109

Programme number	Outcomes to be achieved	How (mean/ activities)	Organ of state	Medium-Term Targets				Indicators (Superscripts indicate the source of each indicator)	Indicator number
				2015/16	2016/17	2017/18	2018/19		
51. GPAES	Support and align the efforts of protected area agencies	Formally declare new, or extend existing, protected areas as a means of improving the representation of terrestrial habitats.	DEA GDARD	0ha	0ha	5ha	0ha	Extent (hectares) of additional protected areas declared in the terrestrial 'spatial priority areas for protected area expansion' <sup>c, d, e, g</sup>	110
<b>Municipal</b>									
21. Merafong IDP Programme: Land Use Management	Provide an integrated Spatial Development Framework	Increase management of illegal land use.	Merafong LM	100%	-	-	-	Percentage of illegal land uses registered versus action taken <sup>t</sup>	111
16. Cradle IMP Programme 5.2: Biodiversity Issues	Ensure that highland Grassland and associated habitats retain the ecological and aesthetic integrity so that the OUV in terms of Criteria (iii) and (iv) is not lost	Highveld Grassland Management achieved by controlled development of lodges, residential estates, industrial development and mining in order to preserve the existing grassland.	COHWHS  DEA	By 2020				Register of all development applications and authorisations <sup>q</sup>	112
								System/structure for the Management Authority to undertake compliance and enforcement actions <sup>q</sup>	113
								Signed service level agreements with GDARD and DEA <sup>q</sup>	114
								Register of all compliance and enforcement inspections <sup>q</sup>	115
								Undertake an annual METT assessment <sup>q</sup>	116
								UNESCO Periodic Reporting <sup>c, q</sup>	117
16. Cradle IMP Programme 5.3: Primary Fossil Sites	Ensure that the OUV is maintained through best practice management principles	Fossil Site Management Processes ensuring that all fossil sites are well managed and operate within the parameters of relevant National and Provincial legislation.	COHWHS  DEA	By 2020				Review management plans <sup>q</sup>	118
								Register al excavations sites with the MA and SAHRA <sup>q</sup>	119
								Fossil site reports (biannual) <sup>q</sup>	120
								Report to SAHRA and DEA (annual) <sup>q</sup>	121
								METT assessment (annual) <sup>q</sup>	122
								UNESCO Periodic Reporting <sup>c, q</sup>	123

Programme number	Outcomes to be achieved	How (mean/ activities)	Organ of state	Medium-Term Targets				Indicators (Superscripts indicate the source of each indicator)	Indicator number
				2015/16	2016/17	2017/18	2018/19		
RESPONDING EFFECTIVELY TO CLIMATE CHANGE (MITIGATION & ADAPTION)									
CLIMATE CHANGE & ENERGY									
Provincial									
76. GDED Programme 2	Green industries contributing to energy security as an important element of radically transforming and reindustrialising Gauteng's economy	Focus on regional and local Economic Development.	GDED	20	20	25	-	Number of green companies incubated at the Climate Innovation Centre <sup>a, d, e, s</sup>	124
92. GDID Programme 2	Sustainable infrastructure	Ensure that infrastructure is developed in compliance with the green agenda.	GDID	13	0	0	-	Number of coal boilers converted to GAS <sup>a, c, d, e, k, o</sup>	125
			GDID	24	-	-	-	Number of boilers supplied with GAS <sup>a, c, d, e, k, o</sup>	126
92. GDID Programme 2	Sustainable infrastructure	Ensure that infrastructure is developed in compliance with the green agenda.	GDID	76	0	0	-	Number of institutions to be installed with solar panels <sup>a, c, d, e, k, o</sup>	127
			GDID	6	6	7	-	Number of trigeneration and cogeneration plans in compliance with Treasury Regulation Systems in health institutions <sup>o</sup>	128
			GDID	65 200	65 200	65 200	-	Number of inefficient lights replaced with energy saving lights <sup>a, c, d, e, o</sup>	129
Municipal									
21. CoJ IDP Programme: Climate & Energy Diversification	Reduce the impacts of climate change through the diversification of energy sources	Renewable Energy Deployment, Energy Efficiency rollout, Development of risk vulnerability information systems.	CoJ	10%	-	-	-	Percentage reduction in the GHG emissions <sup>a, c, f, t</sup>	130

Programme number	Outcomes to be achieved	How (mean/ activities)	Organ of state	Medium-Term Targets				Indicators (Superscripts indicate the source of each indicator)	Indicator number
				2015/16	2016/17	2017/18	2018/19		
21. CoJ IDP Programme: Climate & Energy Diversification	Reduce the impacts of climate change through the diversification of energy sources	Solar water heaters, energy efficiency lighting, waste to energy, biogas from wastewater treatment facilities, use alternative fuels, cleaner production.	CoJ	10%	-	-	-	Percentage reduction in energy demand through diversification <sup>a, c, f, t</sup>	131
21. EMM IDP Programme: Environmental Resource Management	Reduced green house gas emissions	Increase implementation of the GHG emissions policy.	EMM	15%	20%	30%	-	Percentage of carbon emissions reduced <sup>a, c, f, t</sup>	132
21. EMM IDP Programme: Waste Management	Market and Product development	Increase landfill gas extraction.	EMM	140 000	160 000	180 000	-	Amount of landfill gas flared <sup>a, c, f, t</sup>	133
21. EMM IDP Programme: Waste Management	Sustainable Natural resource use	Increase deployment of renewable energy regimes.	EMM	28 000	32 000	36 000	-	Amount of extracted gas converted to energy <sup>a, c, f, t</sup>	134
			EMM	28 000	32 000	36 000	-	Amount of extracted gas converted to biofuel <sup>a, c, f, t</sup>	135
21. EMM IDP Programme: Energy	Sustainable Natural resource use	Increase generation of renewable energy from alternative/renewable sources.	EMM	1MW	2MW	3MW	-	Number of MegaWatts of energy generated from renewable sources <sup>a, c, f, t</sup>	136
				500kW	1MW	1MW	-	Number of MegaWatts of energy generated from waste <sup>a, c, f, t</sup>	137
BUILDING SUSTAINABLE COMMUNITIES									
SOCIAL									
Provincial									
63. GDARD Programme 2: Sustainable Resource Management	All GDARD's sustainable resource management outcomes and targets achieved	All GDARD's disaster risk Management programmes implemented.	GDARD	1	1	1	-	Number of Disaster Relief Schemes managed <sup>b, d, e, g</sup>	138
				4	4	4	-	Number of disaster risk reduction programmes managed <sup>b, d, e, g</sup>	139

Programme number	Outcomes to be achieved	How (mean/ activities)	Organ of state	Medium-Term Targets				Indicators (Superscripts indicate the source of each indicator)	Indicator number
				2015/16	2016/17	2017/18	2018/19		
63. GDARD Programme 2: Sustainable Resource Management	Protect and manage Gauteng's natural resources and environment	All GDARD's engineering services programmes implemented.	GDARD	27	30	30	-	Number of agricultural infrastructure established <sup>b, d, e, g, l, r</sup>	140
63. GDARD Programme 2: Farmer Support & Development	GDARD's Farmer Settlement and Development; Extension and Advisory Services outcomes and targets achieved	All GDARD's Farmer Settlement and Development; Extension and Advisory Services programmes implemented.	GDARD	166	172	178	-	Number of smallholder producers receiving support <sup>b, d, e, g, l, r</sup>	141
			GDARD	46	46	46	-	Number of women farmers supported <sup>b, d, e, g, r</sup>	142
			GDARD	2 000	2 200	2 200	-	Number of smallholder producers supported with agricultural advice <sup>b, d, e, g, l, r</sup>	143
63. GDARD Programme 2: Farmer Support & Development	GDARD's Food Security outcomes and targets achieved	All GDARD's Food Security programmes implemented.	GDARD	12 000	12 000	12 000	-	Number of households benefiting from agricultural food security initiatives <sup>b, d, e, g, l, r</sup>	144
			GDARD	500	500	500	-	Number of hectares cultivated for food production in communal areas and land reform projects <sup>b, d, e, g, l, r</sup>	145
			GDARD	12 000	12 000	12 000	-	Number of individual homestead gardens supported <sup>b, d, e, g, r</sup>	146
63. GDARD Programme 2: Farmer Support & Development	GDARD's Food Security outcomes and targets achieved	All GDARD's Food Security programmes implemented.	GDARD	65	65	65	-	Number of school food gardens supported <sup>b, d, e, g, r</sup>	147
			GDARD	65	65	65	-	Number of community food gardens supported <sup>b, d, e, g, r</sup>	148
			GDARD	600	600	600	-	Number of women benefitting from community food gardens <sup>b, d, e, g, r</sup>	149
63. GDARD Programme 2: Farmer Support & Development	GDARD's Food Security outcomes and targets achieved	All GDARD's Food Security programmes implemented.	GDARD	500	560	560	-	Number of participants trained in programmes <sup>b, d, e, g, l, r</sup>	150
			GDARD	1 600	1 650	1 650	-	Number of smallholder farmers trained <sup>b, d, e, g, l, r</sup>	151
			GDARD	36	36	36	-	Number of commercial farmers trained <sup>b, d, e, g, l, r</sup>	152

Programme number	Outcomes to be achieved	How (mean/ activities)	Organ of state	Medium-Term Targets				Indicators (Superscripts indicate the source of each indicator)	Indicator number
				2015/16	2016/17	2017/18	2018/19		
63. GDARD Programme 2: Veterinary Services	All GDARD's veterinary services outcomes and targets for animal health achieved	All GDARD's veterinary services, programmes and projects implemented to achieve animal health.	GDARD	3 700	3 700	3 700	-	Number of epidemiological units visited for veterinary interventions <sup>b, g</sup>	153
			GDARD	37 580	37 580	37 580	-	Number of Primary Animal Health Care (PAHC) veterinary interventions to small scale farmers <sup>b, g</sup>	154
			GDARD	40 000	40 000	40 000	-	Number of mobile Veterinary services in Townships (basic treatments, vaccinations, sterilisations and awareness) <sup>b, g</sup>	155
63. GDARD Programme 2: Veterinary Services	All GDARD's veterinary services outcomes and targets for animal health achieved	All GDARD's veterinary services, programmes and projects implemented to achieve animal health.	GDARD	148 200	148 200	148 200	-	Number of animal health regulatory veterinary interventions with emerging and commercial farmers <sup>b, g</sup>	156
			GDARD	100% completion of Strategy	100% completion of phase 1 & 2	100% completion of Aquaculture Programme	-	Percentage completion of Aquaculture Programme <sup>b, g, h</sup>	157
63. GDARD Programme 2: Veterinary Services	All GDARD's veterinary services outcomes and targets for animal health achieved	All GDARD's veterinary services, programmes and projects implemented to achieve animal health.	GDARD	100% (expansion farmers)	100% (expansion to additional farmers)	100% Completion (livestock farmers developed)	-	Percentage completion of the Nguni Project <sup>g</sup>	158
63. GDARD Programme 2: Veterinary Services	All GDARD's veterinary services outcomes and targets for export control achieved	All GDARD's veterinary services, programmes and projects implemented to achieve export control.	GDARD	7 000	7 000	7 000	-	Number of clients serviced for animal and animal products export control <sup>g</sup>	159
			GDARD	2	2	1	-	Number of Export Value Reports providing Amount and Rand Value (Tonnage/ Quantities) information of animal and animal products <sup>g</sup>	160

Programme number	Outcomes to be achieved	How (mean/ activities)	Organ of state	Medium-Term Targets				Indicators (Superscripts indicate the source of each indicator)	Indicator number
				2015/16	2016/17	2017/18	2018/19		
63. GDARD Programme 2: Veterinary Services	All GDARD's veterinary services outcomes and targets for veterinary public health achieved	All GDARD's veterinary services, programmes and projects implemented to achieve veterinary public health.	GDARD	75%	80%	83%	-	Percentage level of abattoir compliance to meat safety legislation <sup>g</sup>	161
			GDARD	3	3	3	-	Number of Mobile Slaughter facilities established <sup>g</sup>	162
63. GDARD Programme 2: Veterinary Services	All GDARD's veterinary services outcomes and targets for veterinary laboratory services achieved	All GDARD's veterinary services, programmes and projects implemented to achieve veterinary laboratory services.	GDARD	60 000	60 000	60 000	-	Number of tests performed the quality of which meets the ISO 17025 standard and OIE requirements <sup>g</sup>	163
63. GDARD Programme 2: Research and Technology Services	GDARD's agriculture related research and technology outcomes and targets for research achieved	All GDARD's research and technology programmes implemented for research.	GDARD	8	10	12	-	Number of Research and technology development projects implemented to improve agricultural production <sup>d, e, g, l</sup>	164
			GDARD	5	6	6	-	Number of SMME and Biotech Companies supported with Business Incubation (Incl. BioFundi Awards) <sup>g</sup>	165
63. GDARD Programme 2: Research and Technology Services	GDARD's agriculture related research and technology outcomes and targets for technology transfer services achieved	All GDARD's research and technology programmes for technology transfer services implemented.	GDARD	40	40	40	-	Number of Research presentations made nationally or internationally <sup>g</sup>	166
			GDARD	3	3	3	-	Number of Agri-Expos organised <sup>g</sup>	167
			GDARD	800	800	800	-	Number of smallholder farmers attending Agri- Expos <sup>g</sup>	168
63. GDARD Programme 2: Research and Technology Services	GDARD's agriculture related research and technology outcomes and targets for technology transfer services achieved	All GDARD's research and technology programmes for technology transfer services implemented.	GDARD	80	80	80	-	Number of Farmers trained in water saving technologies <sup>d, e, g, h</sup>	169
			GDARD	5	5	5	-	Number of Scientific papers published nationally or internationally <sup>g</sup>	170
63. GDARD Programme 2: Research and Technology Services	GDARD's agriculture related research and technology outcomes and targets for infrastructure support services achieved	All GDARD's research and technology programmes for infrastructure support services implemented.	GDARD	1 report submitted	1 report submitted	1 report submitted	-	Number of research infrastructure managed <sup>g</sup>	171
			GDARD	2 500	2 500	2 500	-	Number of Hectares worked by GDARD tractors <sup>g</sup>	172
			GDARD	4	4	4	-	Number of Agri-parks established <sup>d, e, g</sup>	173

Programme number	Outcomes to be achieved	How (mean/ activities)	Organ of state	Medium-Term Targets				Indicators (Superscripts indicate the source of each indicator)	Indicator number
				2015/16	2016/17	2017/18	2018/19		
63. GDARD Programme 2: Research and Technology Services	GDARD's agriculture related research and technology outcomes and targets for infrastructure support services achieved	All GDARD's research and technology programmes for infrastructure support services implemented.	GDARD	4	8	10	-	Number of Agri-parks maintained <sup>g</sup>	174
			GDARD	5	10	15	-	Number of women benefiting from Agri-parks <sup>d, e, g</sup>	175
			GDARD	8	8	8	-	Number of Farm Plans developed <sup>g</sup>	176
63. GDARD Programme 2: Rural Development Coordination	GDARD's rural development outcomes and targets for social facilitation achieved	All GDARD's rural development programmes for social facilitation implemented.	GDARD	4	8	10	-	Number of Functional Council of Stakeholders <sup>b, d, e, g</sup>	177
			GDARD	5	5	5	-	Number of Projects implemented with signatories of Gauteng Rural Social Compact Plan to support social cohesion <sup>b, d, e, g</sup>	178
63. GDARD Programme 2: Rural Development Coordination	GDARD's rural development outcomes and targets for rural enterprises and industries development support achieved	All GDARD's rural development programmes for rural enterprises and industries development support implemented.	GDARD	1	1	1	-	Number of MEC-Industry AgriBEE Indaba/State of AgriBEE <sup>b, g</sup>	179
			GDARD	2	2	2	-	Number of AgriBEE/FWES Projects/ transactions supported <sup>b, d, e, g</sup>	180
24. GDARD Programme 3: Environmental Empowerment Services	Gauteng's natural resources and environment protected	All GDARD's natural resources and environment protection programmes for environmental capacity development and support implemented.	GDARD	506	516	516	-	Number or work opportunities created through environmental programmes <sup>d, e, g</sup>	181
			GDARD	185	190	190	-	Number of EPWP FTE jobs created <sup>c, d, e, g</sup>	182
24. GDARD Programme 3: Environmental Empowerment Services	Protect and manage Gauteng's natural resources and environment	All GDARD's natural resources and environment protection programmes for environmental communication and awareness implemented.	GDARD	100	89	89	-	Number of environmental awareness activities conducted <sup>c, d, e, g</sup>	183
			GDARD	1	1	1	-	Number of quality environmental education resources materials developed <sup>c, d, e, g</sup>	184

Programme number	Outcomes to be achieved	How (mean/ activities)	Organ of state	Medium-Term Targets				Indicators (Superscripts indicate the source of each indicator)	Indicator number
				2015/16	2016/17	2017/18	2018/19		
93. GDRT Programme 2	To preserve the status of the existing road to its original state	Promote road safety and expand the lifespan of existing networks.	GDRT	3000	3200	3500	3 700	Number of jobs created through maintenance projects <sup>c, d, e, m</sup>	185
			GDRT	350 00m <sup>2</sup>	380 00m <sup>2</sup>	400 00m <sup>2</sup>	420 000 m <sup>2</sup>	Number of m <sup>2</sup> of surface roads resealed <sup>m</sup>	186
93. GDRT Programme 2	To preserve the status of the existing road to its original state	Promote road safety and expand the lifespan of existing networks.	GDRT	102.32k m	80km	82km	84km	Number of kilometres of gravel roads re-gravelled <sup>m</sup>	187
			GDRT	125 000m <sup>2</sup>	134 000m <sup>2</sup>	145 000m <sup>2</sup>	150 000m <sup>2</sup>	Number of m <sup>2</sup> of blacktop matching <sup>m</sup>	188
93. GDRT Programme 2	To preserve the status of the existing road to its original state	Promote road safety and expand the lifespan of existing networks.	GDRT	1388km	1 388km	1 388km	1 388km	Number of kilometres of gravel roads bladed <sup>m</sup>	189
			GDRT	4	4	4	4	Number of weighbridges calibrated to SABS standard <sup>m</sup>	190
92. GDID Programme 2	Ensure that infrastructure is developed in compliance with the green agenda	Resource efficient buildings reduce the carbon footprint and utilise green compliant subsidies.	GDID	-	-	-	50%	Percentage of buildings utilising green technology <sup>o</sup>	191
92. GDID Programme 2	Decisive spatial transformation	Ensure that infrastructure is developed in compliance with the green agenda.	GDID	7%	10%	15%	-	Percentage of infrastructure budget allocated to Green procurement <sup>o</sup>	192
		Planned, unplanned and contingency maintenance schedules must be in place for all buildings.	GDID	35	35	35	-	Number of Maintenance schedule implemented to reduce maintenance backlog <sup>o</sup>	193
92. GDID Programme 2	Decisive spatial transformation	Compile a complete and accurate immovable asset register.	GDID	1	1	1	-	Number of compliant immovable asset registers compiled <sup>o</sup>	194
		Provide quality and consistent maintenance in accordance to the agreed standards faster and cost effective.	GDID	2 834	2 836	2 838	-	Number of condition assessments conducted on state-owned buildings <sup>o</sup>	195

Programme number	Outcomes to be achieved	How (mean/ activities)	Organ of state	Medium-Term Targets				Indicators (Superscripts indicate the source of each indicator)	Indicator number
				2015/16	2016/17	2017/18	2018/19		
91. GDHS Programme 3	Acquisition of suitable and well located land for human settlement development	Acquire suitable land for development	GDHS	10	10	10	10	A number of suitable and well located land parcels identified, packaged and acquired from private and public land owners. <sup>n</sup>	196
91. GDHS Programme 3	Acquisition of suitable and well located land for human settlement development	Acquire suitable land for development.	GDHS	1	1	1	1	Number of audit reports of suitable and well located land parcels owned by all spheres of government and public entities in Gauteng. <sup>n</sup>	197
<b>Municipal</b>									
21. CoJ IDP Programme: Access to Food	Promote access to safe and affordable food at a household level	Food vouchers, parcels, backyard gardens and programmes connecting citizens to income generating and affordable nutritious food.	GDSD	10%	-	-	-	Percentage increase in urban household food security <sup>b, f, r, t</sup>	198
		Food Bank.	GDSD	100%	-	-	-	Percentage of food insecure households in CoJ ESP database challenge addressed through accessing nutritious food packages <sup>b, f, r, t</sup>	199
21. CoJ IDP Programme: Access to Food	Promote access to safe and affordable food at a household level	Food Gardens.	GDSD	20	-	-	-	Number of Neighbourhood Food Gardens established <sup>b, f, r, t</sup>	200
21. CoJ IDP Programme: Access to Food	Promote access to safe and affordable food at a household level	Exchange waste for food in targeted areas.	GDSD	142	-	-	-	Number of households benefiting for food parcels in targeted areas <sup>b, f, r, t</sup>	201
		Priority areas and/or densification Land assembly for housing development.	CoJ	60%	-	-	-	Percentage of identified household being food-secured as per CoJ Food Security Index <sup>b, f, r, t</sup>	202
21. CoJ IDP Programme: Urban Farmer Support	Promote access to safe and affordable food at a household level	Support emerging farmers through training and establishment of storage facilities.	CoJ	5%	-	-	-	Percentage of market share at JM <sup>b, f, r, t</sup>	203

Programme number	Outcomes to be achieved	How (mean/ activities)	Organ of state	Medium-Term Targets				Indicators (Superscripts indicate the source of each indicator)	Indicator number
				2015/16	2016/17	2017/18	2018/19		
21. CoJ IDP Programme: Urban Farmer Support	Promote access to safe and affordable food at a household level	Provide common space for local farmers to maximise their access to markets.	GDSD	240	-	-	-	Number of diversified farming activities involving emerging farmers <sup>b, f, r, t</sup>	204
		Establish a large farm to supply large retailers.	GDSD	1	-	-	-	Number of Food Empowerment Zones <sup>b, f, r, t</sup>	205
21. CoT IDP Programme: Basic Service Provision	Sustainable communities through improved access to basic services	Increase access to safe and sustainable water resources.	CoT MM	81.53%	TBD	TBD	-	Percentage of households with access to water (metered connections) <sup>d, e, t</sup>	206
		Increase efficient and effective waste removal.	CoT MM	100%	100%	100%	-	Percentage of households in formalised area with access to weekly waste removal services <sup>d, e, t</sup>	207
21. CoT IDP Programme: Basic Service Provision	Sustainable communities through improved access to basic services	Increase sanitation services.	CoT MM	78.38%	TBD	TBD	-	Percentage of households with access to sanitation <sup>d, e, t</sup>	208
		Increase access to electricity.	CoT MM	81.08%	TBD	TBD	-	Percentage of households with access to electricity <sup>d, e, t</sup>	209
21. CoT IDP Programme: Sustainable Service Provision	Reduced demand on services relying on natural resources	Reduce usage of non-revenue water.	CoT MM	23.05%	22.55%	22.05%	-	Percentage reduction of non-revenue water <sup>d, e, t</sup>	210
			CoT MM	<10%	≤9%	≤9%	-	Percentage reduction of average annual non-revenue energy <sup>d, e, t</sup>	211
21. CoT IDP Programme: Sustainable Service Provision	Improved mobility through provision of roads, storm water and public transport	Increase storm water drainage function.	CoT MM	46.23%	TBD	TBD	-	Percentage of required municipal storm water drainage network provided <sup>d, e, t</sup>	212
21. EMM IDP Programme: Transport	Increase access by EMM citizens to a regionally integrated public transport system	Increase efficient and effective facilities.	EMM	0	1	0	-	Number of intermodal facilities constructed <sup>d, e, t</sup>	213

Programme number	Outcomes to be achieved	How (mean/ activities)	Organ of state	Medium-Term Targets				Indicators (Superscripts indicate the source of each indicator)	Indicator number
				2015/16	2016/17	2017/18	2018/19		
21. EMM IDP Programme: Waste Management	Sustainable settlements and infrastructure	Increase investment in off-grid long-term infrastructure.	EMM	1	1	2	-	Number of constructed waste minimisation facilities <sup>d, e, t</sup>	214
			EMM	10	10	5	-	Number of public off-loading facilities operationally compliant <sup>c, t</sup>	215
			EMM	98%	99%	100%	-	Compliance level of active landfill sites <sup>c, t</sup>	216
21. EMM IDP Programme: Waste Management	Sustainable settlements and infrastructure	Increase investment in off-grid long-term infrastructure.	EMM	48 000	48 000	48 000	-	Number of 240l bins rolled-out <sup>t</sup>	217
			EMM	100%	100%	100%	-	Percentage of residential developments complying with waste management service plans <sup>c, t</sup>	218
21. EMM IDP Programme: Waste Management	Increase regularisation of informal settlements across EMM	Increase provision of waste management services to informal settlements.	EMM	100%	100%	100%	-	Percentage of informal settlements receiving a basic service <sup>d, e, t</sup>	219
21. EMM IDP Programme: Human Settlements	Increase access by EMM citizens to a regionally integrated public transport system	Increase procurement of well-located land in support of public transport.	EMM	75	100	120	-	Number of Hectares of land procured <sup>b, d, e, t</sup>	220
		Increase roll out of Human settlement developments aligned with the IRPTN.	EMM	4000	5500	6500	-	Number of units developed <sup>d, e, n, t</sup>	221
21. EMM IDP Programme: Human Settlements	Sustainable settlements and infrastructure	Increase compliance with green-building guidelines in the latest National Building Regulations.	EMM	30%	50%	80%	-	Percentage of approved building plans that comply with green-building guidelines in the latest National Building Regulations <sup>c, d, e, t</sup>	222
21. WRDM IDP Programme: Regional Planning & Economic Development	Implement the Green IQ Strategy and ensure compliance to air quality standards with a 5-year cycle	Regulate industry and air quality compliance in terms of legislated standards.	WRDM	25	30	35	40	Number of compliance inspections <sup>c, d, e, t</sup>	223

Programme number	Outcomes to be achieved	How (mean/ activities)	Organ of state	Medium-Term Targets				Indicators (Superscripts indicate the source of each indicator)	Indicator number
				2015/16	2016/17	2017/18	2018/19		
21. Merafong City IDP Programme: Basic Service Delivery	Provide basic services	Increase the efficiency and effectiveness of basic service delivery.	Merafong LM	95%	-	-	-	Percentage of water quality standards met <sup>c, t</sup>	224
			Merafong LM	14%	-	-	-	Percentage of unaccounted water loss reduction <sup>c, t</sup>	225
			Merafong LM	100%	-	-	-	Percentage of access to water planned versus provided (informal settlements) <sup>c, i, t</sup>	226
21. Merafong City IDP Programme: Basic Service Delivery	Provide basic services	Increase the efficiency and effectiveness of basic service delivery.	Merafong LM	60%	-	-	-	Percentage of bulk sanitation capacity planned versus actual <sup>c, i, t</sup>	227
			Merafong LM	5	-	-	-	Number of increased access to solid waste removal kerb site <sup>t</sup>	228
			Merafong LM	25%	-	-	-	Percentage of recycled waste versus total landfill waste <sup>t</sup>	229
21. Emfuleni IDP Programme: Water Services	An efficient, competitive and responsive economic infrastructure network	Address all water service delivery shortfalls and improve service delivery times and methods.	Emfuleni LM	265	2016/17: 265	-	-	Number of new water connections made <sup>c, i, t</sup>	230
			Emfuleni LM	WSDP reviewed	WSDP reviewed	-	-	Percentage of milestones achieved <sup>t</sup>	231
			Emfuleni LM	200	200	-	-	Number of pressure reducing vales maintained <sup>t</sup>	232
21. Emfuleni IDP Programme: Water Services	An efficient, competitive and responsive economic infrastructure network	Address all water service delivery shortfalls and improve service delivery times and methods.	Emfuleni LM	-1%	-1%	-	-	Percentage of KL water loss reduction <sup>t</sup>	233
			Emfuleni LM	684	684	-	-	Number of water pipes maintained <sup>t</sup>	234
21. Mogale City IDP Programme: Physical Infrastructure	Provide sustainable services to the community	Improve the efficiency and effectiveness of basic service delivery.	Mogale City LM	97%	97%	97%	-	Percentage of potable water quality standards met <sup>c, t</sup>	235
			Mogale City LM	40%	38%	35%	-	Percentage of potable water loss <sup>t</sup>	236
			Mogale City LM	96%	96%	96%	-	Percentage of new community water connections applied for vs. installed <sup>t</sup>	237

Programme number	Outcomes to be achieved	How (mean/ activities)	Organ of state	Medium-Term Targets				Indicators (Superscripts indicate the source of each indicator)	Indicator number
				2015/16	2016/17	2017/18	2018/19		
21. Mogale City IDP Programme: Physical Infrastructure	Provide sustainable services to the community	Improve the efficiency and effectiveness of basic service delivery.	Mogale City LM	100%	100%	100%	-	Percentage of water required in informal settlements versus provided <sup>t</sup>	238
			Mogale City LM	11 000	12 000	13 000	-	Number of prepaid meters installed <sup>t</sup>	239
21. Mogale City IDP Programme: Physical Infrastructure - Water	Provide sustainable services to the community	Improve the efficiency and effectiveness of basic service delivery.	Mogale City LM	95%	95%	95%	-	Percentage of water network maintenance planned versus performed <sup>t</sup>	240
			Mogale City LM	128	128	140	-	Cumulative amount of bulk water capacity available <sup>c, t</sup>	241
21. Mogale City IDP Programme: Physical Infrastructure - Sanitation	Provide sustainable services to the community	Improve the efficiency and effectiveness of basic service delivery.	Mogale City LM	68	74	74	-	Cumulative bulk sanitation capacity (ml/d) <sup>t</sup>	242
			Mogale City LM	67%	75%	75%	-	Percentage performance against Green Drop standards <sup>c, t</sup>	243
			Mogale City LM	95%	95%	95%	-	Percentage of new water borne sewer connections applied for vs. installed <sup>t</sup>	244
			Mogale City LM	100%	100%	100%	-	Percentage of access to sanitation required in informal settlements versus provided <sup>t</sup>	245
21. Midvaal IDP Programme: Physical Infrastructure & Energy Efficiency	Efficient and effective infrastructure and energy supply that will contribute to the improvement of quality of life for all citizens within Midvaal	Provide sustainable, reliable and affordable electricity to all residents by minimising losses.	Midvaal LM	11%	10.5%	10%	-	Minimised percentage of electricity loss <sup>t</sup>	246
		Plan, construct and maintain roads and stormwater infrastructure.	Midvaal LM	70 000 m <sup>3</sup>	70 000 m <sup>3</sup>	70 000 m <sup>3</sup>	-	Number of square meters of tarred roads resealed <sup>t</sup>	247
		Plan, construct and maintain water and sanitation.	Midvaal LM	100%	100%	100%	-	Percentage of informal households with access to water <sup>d, e, t</sup>	248

Programme number	Outcomes to be achieved	How (mean/ activities)	Organ of state	Medium-Term Targets				Indicators (Superscripts indicate the source of each indicator)	Indicator number
				2015/16	2016/17	2017/18	2018/19		
MANAGING A JUST TRANSITION AND THE GREEN ECONOMY									
SOCIO-ECONOMIC									
Provincial									
63. GDARD Programme 2: Agricultural Economic Services	GDARD's Agricultural Economic Services outcomes and targets for agri-business and development achieved	All GDARD's Agricultural Economic Service and programmes implemented for agri-business and development.	GDARD	30	35	40	-	Number of Farmers accredited with HACCP scheme <sup>a, b, d, e, g</sup>	249
			GDARD	100	100	100	-	Number of clients who have benefitted from Agriculture economic advice <sup>b, d, e, g</sup>	250
			GDARD	30	30	30	-	Number of Agri- businesses supported with agricultural economic services to access markets <sup>a, b, d, e, g</sup>	251
63. GDARD Programme 2: Agricultural Economic Services	GDARD's Agricultural Economic Services outcomes and targets for agri-business and development achieved	All GDARD's Agricultural Economic Service and programmes implemented for agri-business and development.	GDARD	4	4	4	-	Number of Vegetables agro-processing infrastructure projects initiated <sup>b, g</sup>	252
			GDARD	1	1	1	-	Number of Herbs and Essential Oils agro- processing infrastructure projects implemented/initiated <sup>b, g</sup>	253
63. GDARD Programme 2: Agricultural Economic Services	GDARD's Agricultural Economic Services outcomes and targets for agri-business and development achieved	All GDARD's Agricultural Economic Service and programmes implemented for agri-business and development.	GDARD	1	1	1	-	Number of Maize Milling agro-processing infrastructure projects implemented/initiated <sup>b, g</sup>	254
63. GDARD Programme 2: Agricultural Economic Services	GDARD's Agricultural Economic Services outcomes and targets for agri-business and development achieved	All GDARD's Agricultural Economic Service and programmes implemented for agri-business and development.	GDARD	1	-	-	-	Number of sunflower oil extraction agro- processing infrastructure projects implemented/initiated <sup>b, g</sup>	255
			GDARD	2	2	-	-	Number of agro- processing infrastructure facilities implemented/initiated <sup>b, g</sup>	256

Programme number	Outcomes to be achieved	How (mean/ activities)	Organ of state	Medium-Term Targets				Indicators (Superscripts indicate the source of each indicator)	Indicator number
				2015/16	2016/17	2017/18	2018/19		
63. GDARD Programme 2: Agricultural Economic Services	GDARD's Agricultural Economic Services outcomes and targets for agri-business and development achieved	All GDARD's Agricultural Economic Service and programmes implemented for agri-business and development.	GDARD	1	1	-	-	Number of agro- processing infrastructure facilities implemented/initiated – abattoirs <sup>b, g</sup>	257
			GDARD	1	1	-	-	Number of agro- processing infrastructure facilities implemented/initiated - hides tanning <sup>b, g</sup>	258
			GDARD	25	50	75	-	Number of famers accredited with Global GAP (Good Agricultural Practice) <sup>a, b, g</sup>	259
63. GDARD Programme 2: Agricultural Economic Services	GDARD's Agricultural Economic Services outcomes and targets for agri-business and development achieved	All GDARD's Agricultural Economic Service and programmes implemented for agri-business and development.	GDARD	40	40	40	-	Number of farmers in the Maize Triangle supported <sup>b, g</sup>	260
			GDARD	31	40	45	-	Number of farmers supported with Barley production inputs <sup>b, g</sup>	261
			GDARD	20	25	30	-	Number of women benefiting from agro-processing <sup>a, b, d, e, g</sup>	262
63. GDARD Programme 2: Agricultural Economic Services	GDARD's Agricultural Economic Services outcomes and targets for macro-economic support achieved	All GDARD's Agricultural Economic Service and programmes implemented for macro-economic support.	GDARD	400	400	400	-	Number of agricultural economic information responses provided <sup>g</sup>	263
			GDARD	5	5	5	-	Number of economic reports compiled <sup>g</sup>	264
76. GDED Programme 2	Green industries contributing to energy security as an important element of radically transforming and reindustrialising Gauteng's economy	Focus on regional and local Economic Development.	GDED	3	3	3	-	Number of green initiatives linked to tourism <sup>a, b, d, e, s</sup>	265
108. GDED Strategic Programme 7: Transport	Develop a well-designed, integrated and well-maintained public transport system that is less dependent on fossil fuels	Purchasing and implementation of alternative fuel use for the government vehicle fleet.	GDRT	By 2020: 30%				Percentage of government vehicles converted to alternative fuels <sup>s, t</sup>	266

Programme number	Outcomes to be achieved	How (mean/ activities)	Organ of state	Medium-Term Targets				Indicators (Superscripts indicate the source of each indicator)	Indicator number
				2015/16	2016/17	2017/18	2018/19		
Municipal									
21. CoJ IDP Programme: Green Economy	Ensure a thriving green and competitive economy	Re-orientation programmes for HDIs (artisans & apprenticeships).	CoJ	200	-	-	-	Number of people re-orientated in green skills <sup>b, d, e, t</sup>	267
21. CoJ IDP Programme: Green Economy	Ensure a thriving green and competitive economy	Facilitation of new jobs.	CoJ	200	-	-	-	Number of new jobs created in all green sectors <sup>b, d, e, t</sup>	268
		Facilitation of access to green procurement fund.	CoJ	100	-	-	-	Number facilitated to partake in City Green Procurement <sup>b, d, e, t</sup>	269
		Green Economy & Incentives Policy.	CoJ	2	-	-	-	Number of industries facilitated to establish in marginalised areas <sup>b, d, e, t</sup>	270
16. Cradle Programme 5.5: Infrastructure	Develop infrastructure that easily identifies the site and promotes the heritage value	The site must be easily accessible by road and access points must be clearly designated to ensure that the physical parameters of the site are clear.	COHWHS	2020 (on-going)				Review of legislation (annual) <sup>q</sup>	271
			DEA					Review reports (quarterly) <sup>q</sup>	272
								METT review (annual) <sup>q</sup>	273
								UNESCO Periodic Reporting <sup>c, q</sup>	274

## **SECTION 7: Conclusion**

In terms of section 16(1)(b) of NEMA, every organ of state must report annually within four months of the end of the financial year on the implementation of its adopted EIP 2015-2020 to the Director-General of Environmental Affairs. The Gauteng EIP 2015-2020 would be able to ensure that the Province achieves the objectives as outlined in Section 12 of NEMA and the environment sector priorities driven by the long-term development strategies in Chapter 5 of the NDP. The EIP facilitated the alignment of policies, plans and programmes around the environmental issues in the province.

The one-on-one discussion meetings with the champions from each organ of state confirmed that there is a critical need for capacity building of sector departments and local government in environmental and sustainable development concepts and issues. The Gauteng Planning Forum and GDARD IGR Environment Technical Committee will be used as mechanisms for conducting the monitoring and reporting of the Gauteng EIP 2015-2020 implementation process with the relevant role players. All responsible authorities must submit their annual performance report to GDARD in line with this plan. Meetings of the forum shall be held on quarterly basis and should be attended by all role players identified in the implementation plan linked to the performance indicators for the next five years. Quarterly reports shall be consolidated into an annual report as required by Section 16(1)(b) of NEMA.

Successful environmental governance depends largely on the extent to which environmental issues are integrated into and addressed by a variety of sector departments and local authorities. In order to achieve efficient and effective environmental governance and management all organs of state must ensure that their five-year plans are aligned with national guidelines and reporting cycles. By 2020, cooperative governance at national, provincial and local level should have improved and achieved the protection and sustainable use of natural resources in the province.

## **SECTION 8: Limitations**

The development of the Gauteng EIP 2015-2020 encountered the following limitations:

- » The EIP was compiled with information available at the time, within the available timeframes.
- » There may be additional information that might strengthen the EIP, which should be used in addition to this document for monitoring and compliance.
- » Due to the limited time constraints the champions were offered an opportunity to provide their inputs into the EIP through one-on-one discussion meetings, email correspondence and telephonically. Due to the time of year and the stringent time constraints a few of the champions were unable to provide their input. However, the Draft EIP was circulated to the champions and they were requested to forward it on to any relevant colleagues for comment. All participants were provided with an opportunity to submit their comments on the EIP over a one-month review period.

## **SECTION 9: Acknowledgement**

The GDARD would like to thank all the government departments, municipalities and other stakeholders who actively participated in the development of the Gauteng EIP 2015-2020. Your valuable inputs in the future towards the Annual Reports will be much appreciated.

## Section 10: Glossary

**Table 11:** Glossary

Acid Mine Drainage	The flow of acidic water from mine dumps and workings or shafts of old mines.
Biodiversity	The variability among living organisms from all sources including terrestrial, marine, and other aquatic ecosystems and the ecological complexes of which they are part and also includes diversity within species, between species, and of ecosystems.
Carbon Sequestration	The process involved in carbon capture and the long-term storage of atmospheric carbon dioxide. Carbon sequestration describes long-term storage of carbon to either mitigate or defer global warming and avoid dangerous climate change.
Climate Change	A change in the state of the climate that can be identified (e.g. using statistical tests) by changes in the mean and/or the variability of its properties, and that persists for an extended period, typically decades longer.
Climate Change Adaption	The process of adjustment to actual or expected climate and its effects. In human systems, adaptation seeks to moderate harm or exploit beneficial opportunities. In natural systems, human intervention may facilitate adjustment to expected climate and its effects.
Climate Change Mitigation	A human intervention to reduce the sources or enhances the sinks of greenhouse gases.
Conservation agriculture	Conservation agriculture (CA) is an approach to managing agro-ecosystems for improved and sustained productivity, increased profits and food security while preserving and enhancing the resource base and the environment
Co-operative Governance	The building of partnerships between government, the private sector and civil society in order to ensure co-responsibility for environmental management; and to empower stakeholders to participate effectively
Ecological goods and services	(e.g. timber) and abiotic sources (e.g. mineral deposits), while services are mainly provided by ecosystems
Ecomobile	Travel through integrated, socially inclusive, and environmentally friendly transport.
Ecosystem	A dynamic complex of animal, plant and microorganism communities and their non-living environment interacting as a functional unit.
Green Economy	A green economy is one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. In its simplest expression, a green economy can be thought of as one which is low carbon,
Governance	The systems of values, policies, and institutions by which society manages its economic, political, and social affairs through interactions within and among that state, civil society, and the private sector.
Industrial Symbiosis	The sharing of services, utility, and by-product resources among industries in order to add value, reduce costs and improve the environment.
Monitoring	Involves collecting, analysing, and reporting data on inputs, activities, outputs, outcomes and impacts as well as external factors, in a way that supports effective management.
Performance Indicator	Is a pre-determined signal that a specific point in a process has been reached or result achieved.
Renewable Energy	Energy that comes from sources which are naturally replenished on a human timescale, such as sunlight, wind, rain, tides, waves, and geothermal heat.
Resilience	The ability of a system to recover after change.
Sustainable Development	The integration of social, economic and environmental factors into planning, implementation and decision making so as to ensure that development serves present and future generations.
Volatile Organic Compound	Carbon-based chemicals that evaporate at room temperature under normal indoor atmospheric conditions, and which can be detrimental to human health.

## Section 11: Reference List

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## **ANNEXURE A: List of Departments**

- » The Department of Environmental Affairs
- » The Department of Water and Sanitation
- » The Department of Mineral Resources
- » The Department of Energy
- » The Department of Agriculture, Forestry and Fisheries
- » The Department of Rural Development and Land Reform
- » Gauteng Premier's Office
- » Gauteng Provincial Treasury
- » Gauteng Department of Education
- » Gauteng Department of Roads and Transport
- » Gauteng Department of Infrastructure Development
- » Gauteng Department of Human Settlements
- » Gauteng Department of Health
- » Gauteng Department of Social Development
- » Gauteng Department of Sports, Arts, Culture and Recreation
- » Gauteng Department of Agriculture and Rural Development
- » Gauteng Department of Economic Development
- » Gauteng Department of Community Safety
- » Gauteng Department of Finance
- » Gauteng Department of Co-operative Governance and Traditional Affairs
- » Gauteng City Regional Office (GRCO)
- » Sedibeng District Municipality
  - Lesedi Local Municipality
  - Midvaal Local Municipality
  - Emfuleni Local Municipality
- » West Rand District Municipality
  - Mogale Local Municipality
  - Randfontein Local Municipality
  - Merafong City Local Municipality
  - Westonaria Local Municipality
- » Ekurhuleni Metropolitan Municipality
- » City of Johannesburg Metropolitan Municipality
- » City of Tshwane Metropolitan Municipality
  - Cradle of Humankind World Heritage Site

## **ANNEXURE B: List of South Africa's laws**

### Framework Laws in South Africa:

- Constitution of the Republic of South Africa (No. 108 of 1996): the highest law in South Africa, Section 24 provides the overarching legislative foundation for environmental management in South Africa
- National Environmental Management Act (No. 107 of 1998): primary environmental framework Act in South Africa provides for cooperative environmental governance based on the principles that everyone has the right to an environment that is not harmful to his or her health or well-being, and enabling the administration and enforcement of other environmental management laws.

### Primary Environmental and Spatial Planning laws in South Africa:

- Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983)
- Environment Conservation Act, 1989 (Act No.73 of 1989), largely replaced by the NEMA but certain provisions still remain in force.
- Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act (Act No. 36 of 1947)
- Hazardous Substances Act (Act No. 15 of 1973)
- Land Use Planning Ordinance, 1985 (Ordinance 15 of 1985)
- Minerals and Petroleum Resources Development Act (Act No. 28 of 2002)
- Mountain Catchment Areas Amendment Act (Act No. 41 of 1976)
- National Energy Act (Act No. 34 of 2008)
- National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004)
- National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 200)
- National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008)
- National Environmental Management Laws Amendment, 2014 (Act No. 25 of 2014)
- National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003)
- National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008)
- National Forest Act (Act No. 84 of 1998)
- National Heritage Resources Act (Act No. 25 of 1999)
- National Land Transport Act, 2009 (Act No. 5 of 2009)
- National Water Act, 1998 (Act No. 36 of 1998)
- Spatial Planning and Land Use Management Act, 2013 (Act No. 16 of 2013)
- Subdivision of Agricultural Land Act, 1970 (Act No. 70 of 1970)

Relevant laws:

- Cultural Institutions Act (Act No. 119 of 1998)
- Development Facilitation Act (Act No. 67 of 1995)
- Electricity Regulator Act (Act No. 41 of 1987)
- Gas Act (Act No. 48 of 2001)
- Health Act (Act No. 63 of 1977)
- Less Formal Township Establishment Act, 1991 (Act No. 113 of 1991)
- Local Government: Municipal Systems Act, 2000 (Act No. 32 of 2000) (MSA)
- Municipal Finance Management Act, 2003 (Act No. 56 of 2003) (MFMA)
- National Heritage Council Act (Act No. 11 of 1999)
- Promotion of Access to Information Act, 2000 (Act No. 2 of 2000)
- Promotion of Administrative Justice Act, 2000 (Act No. 3 of 2000)
- Public Finance Management Act, 1999 (Act No. 1 of 1999)
- Public Service Act, 1994 (Proclamation No. 103 of 1994)
- Removal of Restrictions Act, 1967 (Act No. 84 of 1967)
- Special Economic Zones Act, 2014 (Act No. 16 of 2014)
- White paper on Energy Policy (1998)
- White paper on Renewable Energy Policy (2003)

## ANNEXURE C: Gauteng EIP 2015-2020 Database

**Table 12:** Gauteng EIP database

Organisation	Name	Designation
City of Johannesburg Metropolitan Municipality	Linda Kuhn	Deputy Director
City of Johannesburg Metropolitan Municipality	Tholoana Seotsanyana	DD: Strategic Planning and Reporting
City of Johannesburg Metropolitan Municipality	Lunelle Serobatse	Director
City of Tshwane Metropolitan Municipality	Nkoniseni Ramavhona	Deputy Director
Cradle of Human Kind World Heritage Site	Mags Pillay	Director
Cradle of Human Kind World Heritage Site	Hein Pienaar	Deputy Director
Department of Agriculture, Forestry & Fisheries	Shumani Dzivhani	DD: Forest Regulation
Department of Agriculture, Forestry & Fisheries	Martha Khwene	National Resource Specialist
Department of Energy	None provided	-
Department of Environmental Affairs	Thumeka Ntloko	Director: World Heritage Management
Department of Environmental Affairs	Ntsizi November	Director-General
Department of Health	Louisa Magabane	
Department of Mineral Resources	None provided	-
Department of Rural Development and Land Reform	Nozizwe Makgalemele	Deputy Director General: Spatial Land Use and Management
Department of Water and Sanitation	Anet Muir	Acting Chief Directorate: Compliance Monitoring
Department of Water and Sanitation	Marie Brisley	Policy & Strategy
Ekurhuleni Metropolitan Municipality	Elsabeth Van Der Merwe	Strategic Planning
Ekurhuleni Metropolitan Municipality	Freddie Aucamp	Environmental Resource Management
Emfuleni Local Municipality	Johannes Zamani Mabena	Environmental Management Inspector
Gauteng City Region Observatory	Kerry Bobbins	Researcher
Gauteng Department of Agriculture and Rural Development	Nkhumeleni Rammbasa	Deputy Director
Gauteng Department of Agriculture and Rural Development	Ndivhudza Sebei	Control Environmental Officer: Research and Development
Gauteng Department of Agriculture and Rural Development	Gerson Nethavhani	Control Environmental Officer: Climate Change
Gauteng Department of Agriculture and Rural Development	Abigail Kamineth	Control Environmental Officer: Bioregional Planning

<b>Organisation</b>	<b>Name</b>	<b>Designation</b>
Gauteng Department of Agriculture and Rural Development	Fainiz Gassiep	EO SP: EPPC
Gauteng Department of Agriculture and Rural Development	Jacob Legadima	Director: Air Quality
Gauteng Department of Agriculture and Rural Development	Mmberegeni Munzhelele	Agriculture: Director: RTDS
Gauteng Department of Agriculture and Rural Development	Basani Ndindani	Director: Environmental Policy, Planning & Coordination
Gauteng Department of Agriculture and Rural Development	Marie-Louise Palayandi	Personal Assistant Directorate EPPC
Gauteng Department of Agriculture and Rural Development	Tshildzi Netshisaulu	Environmental Officer: Specialised Production EPPC
Gauteng Department of Agriculture and Rural Development	Hlamalani Khosa	Control Environmental Officer: Environmental Policy, Planning and Coordination
Gauteng Department of Agriculture and Rural Development	Emmanuel Takalani	Deputy Director: Waste Management
Gauteng Department of Agriculture and Rural Development	Refiloe Seturumane	RTOS
Gauteng Department of Agriculture and Rural Development	Rhulani Chauke	EOSP: Waste Management
Gauteng Department of Agriculture and Rural Development	Mpho Kadi	Environmental Officer
Gauteng Department of Agriculture and Rural Development	Ntombizodwa Zwane	Rural Development
Gauteng Department of Agriculture and Rural Development	Rina Taviv	Deputy Director: Climate Change & Information Management
Gauteng Department of Agriculture and Rural Development	Sizakele Ndzhukula	Control Environmental Officer:: Legislative Development
Gauteng Department of Agriculture and Rural Development	Albertina Setsiba	EIA Scientist (Biodiversity Management)
Gauteng Department of Agriculture and Rural Development	Patrick Duigan	Deputy Director: Biodiversity Management
Gauteng Department of Agriculture and Rural Development	Nontokoza Mahlalela	Environmental Officer: Specialised Production EPPC
Gauteng Department of Agriculture and Rural Development	Dan Motaung	Deputy Director: Impact Management
Gauteng Department of Agriculture and Rural Development	Rabelani Rambau	Agriculture: Disaster Risk Management
Gauteng Department of Agriculture and Rural Development	Lydia Muditambi	Deputy Director: Air Quality
Gauteng Department of Agriculture and Rural Development	Simon Mafu	Deputy Director: EPPC
Gauteng Department of Agriculture and Rural Development	Malesotse Makgalemele	EPPC: Environmental Officer

<b>Organisation</b>	<b>Name</b>	<b>Designation</b>
Gauteng Department of Community Safety	Sipho Thanjekwayo	Chief Director
Gauteng Department of Cooperative Governance and Traditional Affairs	Patrick Ngoepe	Chief Director Gauteng COGTA
Gauteng Department of Cooperative Governance and Traditional Affairs	Nhlakanipho Nkontwana	Head of Department
Gauteng Department of Economic Development	Ronald Chauke	Chief Director: Economic Infrastructure
Gauteng Department of Education	Mahlako Mmola	DD: Land & Property
Gauteng Department of Finance	None provided	-
Gauteng Department of Health	Paul Brits	Director: Health Care Waste & Occupational Hygiene Risk
Gauteng Department of Health	Azeeza Rangunwala	Assistant Director
Gauteng Department of Human Settlement	None provided	-
Gauteng Department of Infrastructure Development	None provided	-
Gauteng Department of Roads and Transport	Lezanne Alexander	-
Gauteng Department of Roads and Transport	Angela Andrews	Transport Planning Commission
Gauteng Department of Roads and Transport	Ernest Mashaba	Director
Gauteng Department of Social Development	Mosimanegape Andrew Manoto	Director: Population & Development
Gauteng Department of Sports, Arts, Culture and Recreation	None provided	-
Gauteng Department Premiers Office	Khululekile Mase	DD General: Development Planning
Gauteng Provincial Treasury	Njabulo Ntuli	
Gauteng Provincial Treasury	Matshepo Msibi	Chief Director: Strategy Management
Lesedi Local Municipality	Mnimumuzi Ncala	Environmental By-Law Enforcement Officer
Merafong Local Municipality	Itani Mashamba	Environmental Officer
Midvaal Local Municipality	Jako Verster	Assistant Director: Municipal Health Services
Mogale City Local Municipality	Samukelisiwe Mdlalose	Environmental Manager
Randfontein Local Municipality	Madiba Ramatlhape	Waste and Environmental Management
Sedibeng District Municipality	Musa Mahlatji	Acting Director: Environment
South African Local Government Association (SALGA)	Telly Chauke	-
West Rand District Municipality	Susan Stoffberg	Environmentalist: Waste Management and Biodiversity
Westonaria Local Municipality	None provided	-

## ANNEXURE D: National Draft Guidelines Template for the Preparation of Environmental Implementation Plans

**Table 13:** National Draft guideline template for EIPs

<b>SECTION 1: INTRODUCTION</b>						
<b>SECTION 2:</b> <i>a description of policies, plans and programmes that may significantly affect the environment</i>						
<hr/> <p><b>EXPLANATORY NOTE:</b> <i>This section of the EIP should be focused on giving an idea of or depicting those existing and new policies, plans and programmes of the department that when implemented may significantly affect the environment both positively and negatively. Although all governmental functions are likely to have some effect on the environment, for the purposes of the EIP, these should be prioritized in terms of:</i></p> <ul style="list-style-type: none"> <li><i>the extent and/or severity of the impacts (nationally or provincially), and</i></li> <li><i>the degree of control that the relevant department exercises on the impact, through that function.</i></li> </ul>						
Name of policy, plan or programme	Status (i.e. is it in process of development or adopted or being implemented)	What is the policy, plan or programme about?	Scope of policy, plan or programme (i.e. provincially or nationally implemented)	How will the policy, plan or programme affect the environment?	What degree of control does the department has on the impact?	Name of implementing organ of state
1.						
2.						
3.						
<b>SECTION 3:</b> <i>a description of the manner in which the relevant national department or province will ensure that the policies, plans and programmes referred to in section 2 above will comply with the principles set out in chapter 1 of NEMA as well as any national norms and standards as envisaged under section 146(2)(b)(i) of the Constitution and set out by the Minister, or by any other Minister, which have as their objective the achievement, promotion, and protection of the environment</i>						
<hr/> <p><b>EXPLANATORY NOTE:</b> This section requires the department or province to demonstrate how it will ensure that the identified priority policies, plans and programmes (i.e. in section 2 above) comply with the environmental management principles for sustainable development outlined in Section 2 of NEMA, and with any national norms and standards set by departments with a mandate for environmental management. Compliance may be indicated by whether and how the principles and norms &amp; standards were considered during the formulation of existing policies, plans or programmes, and/or whether those departments mandated with environmental management were consulted. In terms of cooperative governance, a brief indication of the way in which the formulation of proposed (future) policies, plans and programmes will consider these principles or norms and standards, and will be aligned (harmonized) with the relevant policies, plans and programmes of other departments.</p>						
Name of policy, plan or programme	List of relevant norms and	Description of how the department will ensure that development and/or implementation of policies, plans and programmes comply with environmental management principles for sustainable development			Is there any consultative forum	

	standards	outlined in Section 2 of NEMA, and with any national norms and standards set by departments with a mandate for environmental management	established? (If so give name of the structure)
1.			
2.			
3.			

**SECTION 4:** a description of the manner in which the relevant national department or province will ensure that its functions are exercised so as to ensure compliance with relevant legislative provisions, including the principles set out in section 2 of NEMA, and any national norms and standards envisaged under section 146(2)(b)(i) of the Constitution and set out by the Minister, or by any other Minister, which have as their objective the achievement, promotion, and protection of the environment

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**EXPLANATORY NOTE:** This component of an EIP is at the heart of cooperative governance around environmental management. It should indicate the way in which the relevant department or province (and organs of state) gives effect to the priority policies, plans and programmes (described above), through exercising the priority functions (identified above). However, any other relevant legislative requirements governing the priority functions in terms of environmental management also need to be identified, together with an indication of the manner of compliance. For the priority functions, the manner of compliance with relevant legislative provisions should be described in terms of the:

- institutional mechanisms (such as committees, procedures and MOUs) which ensure coordination between the relevant department and other departments that are mandated with environmental management;
- institutional mechanisms to ensure coordination with and compliance by organs of state that have been assigned, delegated or contracted with priority functions; and
- capacity (in terms of people and budget) to perform the priority functions, and particularly to ensure effective implementation and functioning of the mechanisms, systems and procedures for coordination.
- 

(a) Identification of institutional mechanism for coordination in place (i.e. is it a committee, procedures, MoU, etc.)	Does the institutional mechanism have a limited lifespan? If so, what is its lifespan?	Description of the purpose of the mechanism	(b) What is the capacity (in terms of people and budget) of the department to coordination	
			Human resources	Budget
1.			1.	
2.			2.	
3.			3.	

**SECTION 5:** recommendations for the promotion of the objectives and plans for the implementation of the procedures and regulations referred to in Chapter 5

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**EXPLANATORY NOTE:** **Chapter 5** of NEMA concerns the tools and instruments required to ensure the integrated environmental management of activities, which affect the environment. The **Schedule 1** departments and provinces, that are required to prepare EIPs, are mandated with promoting, managing or conducting many of these activities. This requirement therefore provides them with an opportunity to make recommendations about the most effective ways in which to implement integrated environmental management (IEM) in their sector. This also highlights the difference between the focus of EIPs (or EMPs) on cooperative governance (under **Chapter 3**), and the tools (plans, procedures and regulations) that give effect to environmental management (under **Chapter 5**).

1.

2.

3.

**SECTION 6: OUTCOMES AND KEY PRIORITY INDICATORS FOR EIP OVER A FIVE YEAR PERIOD (including NSSD headline indicators)**

Outcomes to be achieved	How (mean/activities)	Who (Responsibilities)	Proposed Targets (What and by when)	Indicators
1.				
2.				
3.				

**SECTION 7: GLOSSARY**

## ANNEXURE E: DEA Annual Reporting Guidelines for Environmental Implementation Plans – Information Requirements and Reporting Format

### SECTION 1: INTRODUCTION

A brief **overview** of the progress made, the main achievements, highlights and trends in implementation of the EIP / EMP since the last year's EIP/EMP annual report, as well as challenges. This section should also address any departmental or provincial shifts in priorities (e.g. from last year to the following year) so that changing trends and shifting departmental/provincial environmental priorities can be easily identified and tracked over the years.

**Table 14:** DEA Annual Reporting Guidelines for EIPs

<b>SECTION 2: Overview of progress made regarding co-operative governance:</b> A brief description of recent progress made regarding cooperation between departments and spheres on issues of the environment.							
Co-operative governance partners or structures	Measurable Objective	Output (End Product)	Cost Measure (Budget)	Progress made?	Monitoring / control mechanism (Verification)	Timeline Measures (time frames)	Challenges (including Capacity problems, lack of resources etc.)
<b>SECTION 3: EIP/EMP Implementation</b> (Compare against objectives set in the annual business plans)							
Responsible department , program or unit	Measurable Objective	Output (End Product)	Cost Measure (Budget)	Progress made?	Monitoring / control mechanism (Verification)	Timeline Measures (time frames)	Challenges (Including Capacity problems, lack of resources etc.)
<b>For example</b>	Issue authorisations, e.g. EIA regs.	What is the final output for the function (RODs)	Estimate budget to conduct Function	Is there any improvement on the commitment made	Annual Reports. Documentations etc.	Response time set in regulations and EIPs/EMPs	What are existing problems or gaps
<b>SECTION 4: Adjustments made to the EIPs/EMPs</b> ( please see definition for Adjustments to EIP )							
<ul style="list-style-type: none"> <li>• These include new priorities in the current year business plan</li> <li>• New objectives</li> <li>• Changes in timeframe</li> <li>• Additional commitments and programmes etc.</li> </ul>							
<b>SECTION 5: Progress made regarding Indicators?</b>							

<ul style="list-style-type: none"> <li>• Has your department/province developed indicators?</li> <li>• If yes! List the type of indicators ( e.g. social, economic, biophysical/ecological)</li> <li>• If not! What are the proposed plans, including time frames, to develop indicators?</li> </ul>					
<b>SECTION 6 : Compliance with EIP Commitments by the Local Government</b>					
1. Process followed to bring municipalities on board with their EIP requirements	<b>WORKSHOPS</b>	<b>ENGAGEMENT AT FORUMS (at which municipalities are represented)</b>	<b>NUMBER OF MUNICIPALITIES TARGETED (how many out of the total)</b>	<b>PROPOSED ACTION (mechanism to get other municipalities on board)</b>	<b>TIME FRAMES</b>
2. Have municipalities received copies of your adopted EIPs	<b>YES (tick appl. box)</b>	<b>NO</b>	<b>HOW MANY MUNICIPALITIES</b>	<b>PROPOSED ACTION</b>	<b>TIME FRAME</b>
3. Assistance given to municipalities to adhere to EIPs	<b>GUIDELINES/ CHECKLIST</b>	<b>OTHER</b>	<b>HOW MANY MUNICIPALITIES TARGETED</b>	<b>PROPOSED ACTION</b>	<b>TIME FRAME</b>
4. Have municipalities made use of EIP information during the IDP process (to the best of your knowledge)	<b>YES</b>	<b>NO</b>	<b>HOW MANY MUNICIPALITIES</b>	<b>PROPOSED ACTION</b>	<b>CHALLENGES</b>

**FOR ENQUIRIES CONTACT:**  
**DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND TOURISM**  
 Call Centre: 086 111 2468, Tel: (012) 310-2682  
 Website: [www.environment.gov.za](http://www.environment.gov.za)

## ANNEXURE F: List of Sustainable Development Indicators

**Table 15:** Sustainable development indicators from the Gauteng EIP 2015-2020

Indicator no.	Performance Indicator	REPORTING REQUIREMENT					REPORTING APPLICABLE			REPORTING FREQUENCY		
		NDP/MTSF	NSSD1	Outcome 10	Outcome 7	APP/ Strategic Plan	National	Province	Local	Quarter	Annual	Other
ENHANCING GOVERNANCE SYSTEMS AND CAPACITY												
GOVERNANCE												
1.	Number of Quarterly performance review sessions coordinated					X		X		X		
2.	Number of Performance Plans submitted (Treasury & DPME)					X		X			X	
3.	Number of Legislative or oversight performance Reports submitted	X				X		X			X	
4.	Number of programme/ projects evaluated					X		X			X	
5.	Number of Strategic and Fraud Risk Assessments Conducted	X				X		X			X	
6.	Number of Operational Risk Assessments Conducted	X				X						
7.	Number of Reviews conducted (Key Internal Controls)					X		X			X	
8.	Approved IGR Strategy and Implication Plan	X				X				X		
9.	Approved partnership strategy					X				X		
10.	Percentage of invoices received paid within 14 days of receipt					X		X			X	
11.	Percentage of total procurement that targets South Africa manufactured goods					X		X			X	
12.	Percentage of total procurement that targets businesses owned by: Women	X		X		X		X			X	
13.	Percentage of total procurement that targets businesses owned by: Youth	X		X		X		X			X	
14.	Percentage of total procurement that targets businesses owned by: Persons with disabilities	X		X		X		X			X	
15.	Percentage variance between budget and expenditure	X				X		X			X	
16.	Percentage of financial audit findings resolved	X				X		X			X	
17.	Number of estimates Capital Expenditure Reports submitted within legislation timeframes	X				X		X			X	
18.	Number of inter-governmental sector tools reviewed			X		X		X			X	

Indicator no.	Performance Indicator	REPORTING REQUIREMENT					REPORTING APPLICABLE			REPORTING FREQUENCY		
		NDP/MTSF	NSSD1	Outcome 10	Outcome 7	APP/ Strategic Plan	National	Province	Local	Quarter	Annual	Other
19.	Number of legislative tools developed	X		X		X		X			X	
20.	Number of environmental research projects undertaken	X		X		X		X			X	
21.	Number of functional environmental information management systems	X		X		X		X			X	
22.	Number of enforcement actions finalised for non-compliance with environmental legislation			X		X		X			X	
23.	Number of compliance inspections conducted	X		X		X		X			X	
24.	Number of S2gG applications received					X		X			X	
25.	Number of S24G fines paid					X		X			X	
26.	Number of received S24G applications finalised					X		X			X	
27.	Number of designated Environmental Management Inspections (EMI) in provincial departments and local government	X		X		X		X			X	
28.	Percentage of EIA Applications finalised within legislated timeframes	X		X		X		x			X	
29.	Number of new construction designs					X		X			X	
30.	Number of upgrades designs					X		X			X	
31.	Number of rehabilitation designs					X		X			X	
32.	Number of existing Driver Learner Testing Centres refurbished					X		X			X	
33.	Number of compliance inspections conducted					X		X			X	
34.	Number of completed new infrastructure projects to contribute towards socio-economic development	X				X		X			X	
35.	Number of air emissions licenses issued	X		X					X		X	
36.	Percentage of compliance with ambient standards on air quality	X		X					X		X	
37.	Number of environmental audits conducted versus planned	X		X					X		X	
38.	Percentage of non-compliance detected versus compliance notices issued	X		X					X		X	
39.	Percentage of environmental compliance facilitation services planned versus provided	X		X					X		X	

Indicator no.	Performance Indicator	REPORTING REQUIREMENT					REPORTING APPLICABLE			REPORTING FREQUENCY		
		NDP/MTSF	NSSD1	Outcome 10	Outcome 7	APP/ Strategic Plan	National	Province	Local	Quarter	Annual	Other
SUSTAINING SOUTH AFRICA'S ECOSYSTEMS AND USING NATURAL RESOURCES EFFICIENTLY												
WATER												
40.	Percentage completion of the integrated water quality management strategy	X		X		X	X					
41.	Number of river systems with determined resource quality objectives	X		X		X	X					
42.	Percentage completion of the review of existing water monitoring networks			X		X	X					
43.	Number of water courses rehabilitated			X					X		X	
44.	Reduction in water demand of bulk water supply (mega litre)			X					X		X	
45.	Percentage of compliance to norms and standards	X		X					X		X	
46.	Number of km of natural watercourses upgraded and protected			X					X		X	
47.	Amount of authorised water consumption reduced	X		X					X		X	
48.	Percentage of Real or Physical Loss reduced <sup>1</sup>	X		X					X		X	
49.	Percentage of apparent Loss reduced	X							X		X	
50.	Percentage compliance with Blue Drop standard	X		X					X		X	
51.	Percentage compliance	X		X					X		X	
52.	Review baselines studies						X					Every 5 years
53.	Review monitoring plans for ground and surface water			X			X				X	
54.	Keep a register of tour groups and cave clubs						X				X	
55.	Undertake METT assessment						X				X	
56.	UNESCO Periodic Reporting			X			X					Every 6 years
WASTE												
57.	Percentage of waste licence applications finalised within legislated timeframes			X		X		X			X	
58.	Number of Waste management co-ops assisted with registration with the DTI in the priority townships	X		X		X		X			X	

Indicator no.	Performance Indicator	REPORTING REQUIREMENT					REPORTING APPLICABLE			REPORTING FREQUENCY		
		NDP/MTSF	NSSD1	Outcome 10	Outcome 7	APP/ Strategic Plan	National	Province	Local	Quarter	Annual	Other
59.	Number of Recycling Facilities and Buy-back centres supported with recycling equipment	X		X		X		X			X	
60.	Number of Waste Management Recycling Co-operatives in townships trained	X		X		X		X			X	
61.	Number of Waste Certificates issued			X		X		X			X	
62.	Number of Health Care Waste Approvals issued			X		X		X			X	
63.	Number of reports on percentage of waste diverted from landfill			X		X		X			X	
64.	Number of monitoring reports issued on cleanliness levels of municipalities			X		X		X			X	
65.	Percentage waste reduction								X		X	
66.	Number of job opportunities	X							X		X	
67.	Percentage reduction of GHG emission	X	X						X		X	
68.	Percentage of compliance	X		X					X		X	
69.	Number of campaigns								X		X	
70.	Percentage reduction								X		X	
71.	Percentage of recyclable waste reclaimed								X		X	
72.	Number of wastewater works complying with 90% against the applicable standards	X		X					X		X	
73.	Mega litres per day of treatment capacity								X		X	
74.	Number of wastewater treatment works refurbished								X		X	
75.	Number of wastewater treatment works constructed/extended/upgraded								X		X	
76.	Number of new houses built with access to basic level of waste removal	X							X		X	
77.	Percentage of formal houses with access to basic level of solid waste collection	X							X		X	
78.	Number of wheelie bins delivered								X		X	
79.	Volume of solid waste removal								X		X	
80.	Number of cleaning campaigns								X		X	
81.	Percentage of landfill compliance to minimum requirements	X		X					X		X	

Indicator no.	Performance Indicator	REPORTING REQUIREMENT					REPORTING APPLICABLE			REPORTING FREQUENCY		
		NDP/MTSF	NSSD1	Outcome 10	Outcome 7	APP/ Strategic Plan	National	Province	Local	Quarter	Annual	Other
82.	Number of industries inspected for compliance	X		X					X		X	
<b>AIR QUALITY</b>												
83.	Percentage of atmospheric emission licences with complete applications issued within legislated timeframes			X		X		X			X	
84.	Percentage of facilities with Atmospheric licences reporting to the National Atmospheric Emissions Inventory System (NAES)		X	X		X		X			X	
85.	Number of designated organs of state with approved and implemented AQMPs		X	X		X		X				
86.	Number of municipalities supported to develop air quality monitoring infrastructure		X	X		X		X				
87.	Number of industries reporting their GHG emissions		X	X		X		X				
88.	Percentage reduction in PM10 (particulate matter count)		X	X					X		X	
89.	Number of air emission licenses issued			X					X		X	
90.	Percentage of compliance with ambient standards on air quality								X		X	
<b>BIODIVERSITY</b>												
91.	Number of hectares in the conservation estate		X	X		X		X			X	
92.	Number of Permits issued within legislated timeframes			X		X		X			X	
93.	Percentage of area of state managed protected areas within a METT score above 67%		X	X		X		X			X	
94.	Percentage of metropolitan area protected								X		X	
95.	Percentage completion of biodiversity audit and information management tool			X					X		X	
96.	Percentage of regularisation process completed			X					X		X	
97.	Number of greening initiatives								X		X	
98.	Total hectares of land with ecological value formally protected			X					X		X	
99.	Number of rehabilitation projects completed			X					X		X	
100.	Number of regional parks provided			X					X		X	
101.	Number of residential parks provided			X					X		X	

Indicator no.	Performance Indicator	REPORTING REQUIREMENT					REPORTING APPLICABLE			REPORTING FREQUENCY		
		NDP/MTSF	NSSD1	Outcome 10	Outcome 7	APP/ Strategic Plan	National	Province	Local	Quarter	Annual	Other
102.	Percentage of park services planned versus provided			X					X		X	
103.	Maintain a record of all scientific research applications						X				X	
104.	Assess specific management plans						X				X	
105.	Undertake an annual METT assessment						X				X	
106.	UNESCO Periodic Reporting			X			X					Every 6 years
LAND RESOURCES												
107.	Number of hectares protected/ rehabilitated to improve agricultural production	X			X	X	X				X	
108.	Number of green jobs created	X			X	X	X				X	
109.	Number of hectares of agricultural land protected through guiding subdivision/rezoning/change of agricultural land use	X			X	X	X				X	
110.	Extent (ha) of additional protected areas declared in the terrestrial 'spatial priority areas for protected area expansion	X	X				X				X	
111.	Percentage of illegal land uses registered versus action taken								X		X	
112.	Register of all development applications and authorisations						X				X	
113.	System/structure for the MA to undertake compliance and enforcement actions						X				X	
114.	Signed service level agreements with GDARD and DEA						X				X	
115.	Register of all compliance and enforcement inspections						X				X	
116.	Undertake an annual METT assessment						X				X	
117.	UNESCO Periodic Reporting			X			X					Every 6 years
118.	Review management plans						X				X	
119.	Register al excavations sites with the MA and SAHRA						X				X	
120.	Fossil site reports						X					biannua l

Indicator no.	Performance Indicator	REPORTING REQUIREMENT					REPORTING APPLICABLE			REPORTING FREQUENCY		
		NDP/MTSF	NSSD1	Outcome 10	Outcome 7	APP/ Strategic Plan	National	Province	Local	Quarter	Annual	Other
121.	Report to SAHRA and DEA						X				X	
122.	METT assessment						X				X	
123.	UNESCO Periodic Reporting			X			X					Every 6 years
RESPOND EFFECTIVELY TO CLIMATE CHANGE (MITIGATION & ADAPTION)												
CLIMATE CHANGE & ENERGY												
124.	Number of green companies incubated at the Climate Innovation Centre	X	X			X		X		X		
125.	Number of coal boilers converted to GAS	X	X	X		X		X			X	
126.	Number of boilers supplied with GAS	X	X	X		X		X			X	
127.	Number of institutions to be installed with solar panels	X	X	X		X		X			X	
128.	Number of trigeneration and cogeneration plans in compliance with Treasury Regulation Systems in health institutions					X		X			X	
129.	Number of inefficient lights replaced with energy saving lights	X	X	X		X		X			X	
130.	Percentage reduction in the GHG emissions		X	X					X		X	
131.	Percentage reduction in energy demand through diversification		X	X					X		X	
132.	Percentage of carbon emissions reduced		X	X					X		X	
133.	Amount of landfill gas flared		X	X					X		X	
134.	Amount of extracted gas converted to energy		X	X					X		X	
135.	Amount of extracted gas converted to biofuel		X	X					X		X	
136.	Number of MegaWatts of energy generated from renewable sources		X	X					X		X	
137.	Number of MegaWatts of energy generated from waste		X	X					X		X	
BUILDING SUSTAINABLE COMMUNITIES												
SOCIAL												
138.	Number of Disaster Relief Schemes managed	X			X	X		X			X	

Indicator no.	Performance Indicator	REPORTING REQUIREMENT					REPORTING APPLICABLE			REPORTING FREQUENCY		
		NDP/MTSF	NSSD1	Outcome 10	Outcome 7	APP/ Strategic Plan	National	Province	Local	Quarter	Annual	Other
139.	Number of disaster risk reduction programmes managed	X			X	X		X			X	
140.	Number of agricultural infrastructure established	X			X	X		X			X	
141.	Number of smallholder producers receiving support	X			X	X		X			X	
142.	Number of women farmers supported	X			X	X		X			X	
143.	Number of smallholder producers supported with agricultural advice	X			X	X		X			X	
144.	Number of households benefiting from agricultural food security initiatives	X			X	X		X			X	
145.	Number of hectares cultivated for food production in communal areas and land reform projects	X			X	X		X			X	
146.	Number of individual homestead gardens supported	X			X	X		X			X	
147.	Number of school food gardens supported	X			X	X		X			X	
148.	Number of community food gardens supported	X			X	X		X			X	
149.	Number of women benefitting from community food gardens	X			X	X		X			X	
150.	Number of participants trained in agricultural skills development programmes	X			X	X		X			X	
151.	Number of smallholder farmers trained	X			X	X		X			X	
152.	Number of commercial farmers trained	X			X	X		X			X	
153.	Number of epidemiological units visited for veterinary interventions				X	X		X			X	
154.	Number of Primary Animal Health Care (PAHC) veterinary interventions to small scale farmers (animal identification, vaccinations, basic treatment, skills transfer)				X	X		X			X	
155.	Number of mobile Veterinary services in Townships (basic treatments, vaccinations, sterilisations and awareness)				X	X		X			X	
156.	Number of animal health regulatory veterinary interventions with emerging and commercial farmers				X	X		X			X	
157.	Percentage completion of Aquaculture Programme				X	X		X			X	
158.	Percentage completion of the Nguni Project					X		X			X	
159.	Number of clients serviced for animal and animal products export control					X		X			X	

Indicator no.	Performance Indicator	REPORTING REQUIREMENT					REPORTING APPLICABLE			REPORTING FREQUENCY		
		NDP/MTSF	NSSD1	Outcome 10	Outcome 7	APP/ Strategic Plan	National	Province	Local	Quarter	Annual	Other
160.	Number of Export Value Reports providing Amount and Rand Value (Tonnage/Quantities) information of animal and animal products					X		X			X	
161.	Percentage level of abattoir compliance to meat safety legislation					X		X			X	
162.	Number of Mobile Slaughter facilities established					X		X			X	
163.	Number of tests performed the quality of which meets the ISO 17025 standard and OIE requirements					X		X			X	
164.	Number of Research and technology development projects implemented to improve agricultural production	X				X		X			X	
165.	Number of SMME and Biotech Companies supported with Business Incubation (Incl. BioFundi Awards)					X		X			X	
166.	Number of Research presentations made nationally or internationally					X		X			X	
167.	Number of Agri-Expos organised					X		X			X	
168.	Number of smallholder farmers attending Agri- Expos					X		X			X	
169.	Number of Farmers trained in water saving technologies	X			X	X		X			X	
170.	Number of Scientific papers published nationally or internationally					X		X			X	
171.	Number of research infrastructure managed					X		X			X	
172.	Number of Hectares worked by GDARD tractors					X		X			X	
173.	Number of Agri-parks established	X				X		X			X	
174.	Number of Agri-parks maintained					X		X			X	
175.	Number of women benefiting from Agri- parks	X				X		X			X	
176.	Number of Farm Plans developed					X		X			X	
177.	Number of Functional Council of Stakeholders	X				X		X			X	
178.	Number of Projects implemented with signatories of Gauteng Rural Social Compact Plan to support social cohesion	X				X		X			X	
179.	Number of MEC-Industry AgriBEE Indaba/State of AgriBEE				X	X		X			X	

Indicator no.	Performance Indicator	REPORTING REQUIREMENT					REPORTING APPLICABLE			REPORTING FREQUENCY		
		NDP/MTSF	NSSD1	Outcome 10	Outcome 7	APP/ Strategic Plan	National	Province	Local	Quarter	Annual	Other
180.	Number of AgriBEE/FWES Projects/ transactions supported	X			X	X		X			X	
181.	Number or work opportunities created through environmental programmes	X				X		X			X	
182.	Number of EPWP FTE jobs created	X		X		X		X			X	
183.	Number of environmental awareness activities conducted	X		X		X		X			X	
184.	Number of quality environmental education resources materials developed	X		X		X		X			X	
185.	Number of jobs created through maintenance projects	X		X		X		X			X	
186.	Number of m <sup>2</sup> of surface roads resealed					X		X			X	
187.	Number of kilometres of gravel roads re-gravelled					X		X			X	
188.	Number of m <sup>2</sup> of blacktop matching					X		X			X	
189.	Number of kilometres of gravel roads bladed					X		X			X	
190.	Number of weighbridges calibrated to SABS standard					X		X			X	
191.	Percentage of buildings utilising green technology	X				X		X			X	
192.	Percentage of infrastructure budget allocated to Green procurement	X				X		X			X	
193.	Number of Maintenance schedule implemented to reduce maintenance backlog					X		X			X	
194.	Number of compliant immovable asset registers compiled					X		X			X	
195.	Number of condition assessments conducted on state-owned buildings					X		X			X	
196.	A number of suitable and well located land parcels identified, packaged and acquired from private and public land owners.					X		X			X	
197.	Number of audit reports of suitable and well located land parcels owned by all spheres of government and public entities in Gauteng.					X		X			X	
198.	Percentage increase in urban household food security				X				X		X	
199.	Percentage of food insecure households in CoJ ESP database challenge addressed through accessing nutritious food packages				X				X		X	
200.	Number of Neighbourhood Food Gardens established				X				X		X	
201.	Number of households benefiting for food parcels in targeted areas				X				X		X	

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202.	Percentage of identified household being food-secured as per CoJ Food Security Index				X				X		X	
203.	Percentage of market share at JM				X				X		X	
204.	Number of diversified farming activities involving emerging farmers				X				X		X	
205.	Number of Food Empowerment Zones				X				X		X	
206.	Percentage of households with access to water (metered connections)	X							X		X	
207.	Percentage of households in formalised area with access to weekly waste removal services	X							X		X	
208.	Percentage of households with access to sanitation	X							X		X	
209.	Percentage of households with access to electricity	X							X		X	
210.	Percentage reduction of non-revenue water	X							X		X	
211.	Percentage of average annual non-revenue energy	X							X		X	
212.	Percentage of required municipal storm water drainage network provided	X							X		X	
213.	Number of intermodal facilities constructed	X							X		X	
214.	Number of constructed waste minimisation facilities	X							X		X	
215.	Number of public off-loading facilities operationally compliant			X					X		X	
216.	Compliance level of active landfill sites			X					X		X	
217.	Number of 240l bins rolled-out								X		X	
218.	Percentage of residential developments complying with waste management service plans			X					X		X	
219.	Percentage of informal settlements receiving a basic service	X							X		X	
220.	Number of Hectares of land procured	X			X				X		X	
221.	Number of units developed	X						X			X	
222.	Percentage of approved building plans that comply with green-building guidelines in the latest National Building Regulations	X		X					X		X	
223.	Number of compliance inspections	X		X					X		X	
224.	Percentage of water quality standards met			X					X		X	

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225.	Percentage of unaccounted water loss reduction			X					X		X	
226.	Percentage of access to water planned versus provided (informal settlements)			X					X		X	
227.	Percentage of bulk sanitation capacity planned versus actual			X					X		X	
228.	Number of increased access to solid waste removal kerb site								X		X	
229.	Percentage of recycled waste versus total landfill waste								X		X	
230.	Number of new water connections made			X				X			X	
231.	Percentage of milestones achieved								X		X	
232.	Number of pressure reducing vales maintained								X		X	
233.	Percentage of KL water loss reduction								X		X	
234.	Number of water pipes maintained								X		X	
235.	Percentage of potable water quality standards met			X					X		X	
236.	Percentage of potable water loss								X		X	
237.	Percentage of new community water connections applied for versus installed								X		X	
238.	Percentage of water required in informal settlements versus provided								X		X	
239.	Number of prepaid meters installed								X		X	
240.	Percentage of water network maintenance planned versus performed								X		X	
241.	Cumulative amount of bulk water capacity available			X					X		X	
242.	Cumulative bulk sanitation capacity (ml/d)								X		X	
243.	Percentage performance against Green Drop standards			X					X		X	
244.	Percentage of new water borne sewer connections applied for versus installed								X		X	
245.	Percentage of access to sanitation required in informal settlements versus provided								X		X	
246.	Minimised percentage of electricity loss								X		X	
247.	Number of square meters of tarred roads resealed								X		X	
248.	Percentage of informal households with access to water	X							X		X	

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MANAGING A JUST TRANSITION AND THE GREEN ECONOMY												
SOCIO-ECONOMIC												
249.	Number of Farmers accredited with HACCP scheme	X	X		X	X		X			X	
250.	Number of clients who have benefitted from Agriculture economic advice provided	X			X	X		X			X	
251.	Number of Agri- businesses supported with agricultural economic services to access markets	X	X		X	X		X			X	
252.	Number of Vegetables agro-processing infrastructure projects implemented/initiated				X	X		X				Multi - year
253.	Number of Herbs and Essential Oils agro- processing infrastructure projects implemented/initiated				X	X		X				Multi - year
254.	Number of Maize Milling agro-processing infrastructure projects implemented/initiated				X	X		X				Multi - year
255.	Number of sunflower oil extraction agro- processing infrastructure projects implemented/initiated				X	X		X				Multi-year
256.	Number of agro- processing infrastructure facilities implemented/initiated – soya bean processing for animal and human consumption				X	X		X				Multi-year
257.	Number of agro- processing infrastructure facilities implemented/initiated – abattoirs (multi-year)				X	X		X				Multi-year
258.	Number of agro- processing infrastructure facilities implemented/initiated - hides tanning				X	X		X				Multi - year
259.	Number of famers accredited with Global GAP (Good Agricultural Practice)		X		X	X		X			X	
260.	Number of farmers in the Maize Triangle supported				X	X		X			X	
261.	Number of farmers supported with Barley production inputs				X	X		X			X	
262.	Number of women benefiting from agro- processing	X	X		X	X		X			X	
263.	Number of agricultural economic information responses provided		X			X		X			X	
264.	Number of economic reports compiled					X		X			X	
265.	Number of green initiatives linked to tourism	X	X		X	X		X			X	

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266.	Percentage of government vehicles converted to alternative fuels		X					X			X	
267.	Number of people re-orientated in green skills	X			X				X		X	
268.	Number of new jobs created in all green sectors	X			X				X		X	
269.	Number facilitated to partake in City Green Procurement	X			X				X		X	
270.	Number of industries facilitated to establish in marginalised areas	X			X				X		X	
271.	Review of legislation						X				X	
272.	Review reports						X			X		
273.	METT review						X				X	
274.	UNESCO Periodic Reporting			X			X					Every 6 years



**GAUTENG PROVINCE**  
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