REVISED DRAFT

OUTCOME 10 MTSF 2014-2019

OUTCOME 10: PROTECT AND ENHANCE OUR ENVIRONMENTAL ASSETS AND NATURAL RESOURCES

1. National Development Plan (NDP) 2030 Vision and Trajectory

The NDP 2030 vision is that by 2030, South Africa's transition to an environmentally sustainable, climate-change resilient, low-carbon economy and just society will be well under way. The NDP 2030 envisages a phased trajectory over the three successive MTSF periods.

The first planning, piloting and investing phase (2014-2019) focuses on the creation of a framework for implementing the transition to an environmentally sustainable, low-carbon economy. This phase will include unblocking regulatory constraints, data collection and establishment of baseline information, and indicators testing some of the concepts and ideas to determine if these can be scaled up.

The second phase (2019-2024) focuses on the implementation of sustainable development programmes and targeting a peaking of greenhouse gas emissions. Socioeconomic development is beginning to make significant inroads into reducing poverty and unemployment. The third phase (2024-2029) involves the final steps in the transition and the realisation of the vision through poverty and unemployment having been reduced to socially sustainable levels and emissions reaching a plateau by 2030.

The desired trajectory to 2030 is one which results in thriving rural communities providing an economic and social base for a significant number of people. Urban development is more compact and energy efficient. Growing public awareness of the consequences of climate change and unconstrained consumption of our natural resources leads to a refocusing of political priorities towards the protection and rehabilitation of the region's natural assets.

2. Constraints and Strategic Approach

In order to realise the NDP 2030 Vision for Environmental Sustainability and Resilience there are a number of immediate constraints that must be addressed. South Africa faces the challenge of deteriorating environmental quality due to pollution and natural resource degradation, destruction and/or depletion. If the current challenges are not effectively addressed they will exacerbate the rate of environmental degradation and have the potential to undo

or undermine many of the positive advances made in meeting South Africa's own development goals and the Millennium Development Goals (MDGs) as well as the 2030 vision.

The strategic approaches to addressing the challenges are described below.

Inadequately informed decision-making and governance

Information management systems for environmental sustainability in particular are still inadequate. Although South Africa's environmental governance regime is considered to be world class, capacity constraints at different levels and especially in the areas of compliance monitoring and enforcement underpin many of the problems experienced. Inadequately informed decision-making will be addressed through harnessing research and information management capacity to identify, develop and maintain datasets to generate policy-relevant statistics, indicators and indices in collaboration with other key contributors outside the sector.

Natural resource degradation and depletion of ecological infrastructure

Competing land uses contribute to the overexploitation of natural resources and the subsequent degradation of these natural resources. This results in an overall negative impact on ecological infrastructure that undermines the provision of key ecosystem services such as water (both quality and quantity), soil formation and pollination, all of which underpin the economy and sustainable development.

Unsustainable production processes result in land and ecosystem degradation and soil erosion which continue to undermine the productive potential of the land and compromise water and food security. The increasing rate of alien species invasion threatens biodiversity, water availability, agriculture and rural livelihoods in general. The size, representativeness and quality of the current conservation estate is not sufficient.

All these necessitate integrated and innovative approaches to natural resource management which entail a careful balance between development imperatives and sustainable utilization. An environmental management framework is required to ensure that developments that have serious environmental or social effects are offset by support improvements in related areas. There is also a need to protect estuaries and coastal areas to ensure that a targeted amount of land and oceans is under protection.

The challenge for marine fisheries is to maintain the integrity of and balance in marine ecosystems while deriving sustainable economic benefits from living marine resources. The main constraints to achieve this are the productivity of key resources, which is influenced by the environment and impacted upon by illegal catches, and managing catches in each fishery in a sustainable way. The desired outcomes are to rebuild stocks of threatened species and to reduce illegal catches

Waste (e.g. hazardous waste, healthcare waste, mine dumps, leachate/sludge & general/solid waste management)

Increasing quantities of waste, poor waste management and lack of access to waste services lead to pollution and associated health impacts and environmental degradation. This is coupled to the fact that levels of recycling and re-use are relatively low and waste is not necessarily seen or considered as a resource with socio-economic potential.

To address challenges in this area the NDP identifies the implementation of the waste hierarchy strategy of reduce, re-use and recycle. This requires product stewardship (producer responsibility) and the rapid expansion of recycling infrastructure.

Air pollution

South Africa's continued reliance on fossil fuels is resulting in air pollution hotspots, especially in the winter months. Of particular concern are priority pollutants such as particulate matter and nitrates which leads to respiratory illness. To ensure realisation of everyone's right to air that is not harmful to health and well-being, it is imperative that there is the effective implementation of the Air Quality Act and the development and use of innovative approaches like air quality offsetting.

Water pollution

South Africa is a water-stressed country and faces future drying trends and weather variability with cycles of droughts and sudden excessive rains whilst the health of aquatic ecosystems is declining. Wastewater pollution in the marine environment has continued to worsen and inland water quality is declining due to pollution from chemical and bacteriological pollution and siltation.

Healthy catchments, rivers and wetlands provide crucial ecological infrastructure that supports water quality and quantity. Investing in this ecological infrastructure can play a key strategic role in supporting water security and preserving ecosystems.

Adapting to changing climate

South Africa is a significant contributor to greenhouse gas emissions and the country is also vulnerable to the impacts of climate change with adverse effects on inter alia socio-economic conditions, water, food security, health, natural resources and ecosystem services. In order to address increasing emissions of greenhouse gases, market-based instruments such as a carbon tax, carbon budgets and policy support for low-carbon technologies will be employed to ensure that greenhouse gas emissions peak, plateau and decline. There is also a need to enhance the resilience of people and the economy to adapt to the effects of climate change.

3. NDP Output Priorities to achieve the Vision

The NDP acknowledges that the transition to an environmentally sustainable future which is carbon constrained will require the decoupling of economic growth from natural resource degradation and depletion. There is therefore a need to build human capital and technological base for implementation of programmes that will grow the economy without increasing South Africa's emissions profile. The NDP has identified the following sub-outcomes and actions:

- Sub-outcome 1: Ecosystems are sustained and natural resource are used efficiently
- Sub-outcome 2: An effective climate change mitigation and adaptation response
- Sub-outcome 3: An environmentally sustainable, low-carbon economy resulting from a well-managed just transition
- Sub-outcome 4: Enhanced governance systems and capacity
- Sub-outcome 5: Sustainable human communities

4. Management of Implementation

In the implementation of the National Development Plan, to manage the transition to an environmentally sustainable low carbon economy, there is a need to strengthen institutional mechanisms. Environment is a concurrent and cross cutting function. The Department of Environmental Affairs is the coordinating department for Outcome 10. The monitoring and coordination of the implementation of deliverables as outlined in the Outcome 10 Delivery Agreement is conducted by the Intergovernmental Relations intergovernmental mechanisms known as MINMEC and MINTECH which have been extended to include nine provincial departments responsible for environmental affairs, sector departments, public entities and other partners such as South African Local Government Association (SALGA) that contribute to the achievement of outputs.

The Executive Implementation Forum, the extended MINMEC: Environment that is convened and Chaired by the Minister of Environmental Affairs, and technical Implementation Forum, Headcom or the extended MINTECH: Environment that is convened and Chaired by the DG of Environmental Affairs, are

therefore used. The MINTECH working groups are aligned per output to coordinate the output activities and report to the technical Implementation Forum that makes recommendations to the executive Implementation Forum.

5. MTSF sub-outcomes and component actions, responsible ministry, indicators and targets

Sub-outcome 01: Ecosystems are sustained and natural resources are used efficiently

Ecosystems will also be sustained through an increase in the conservation estate, the protection of biomes and endangered species, rehabilitation and restoration of degraded land and ecosystems as well as through sustainable exploitation of natural resources. The desired impact is to restore the ecological integrity of natural resources and environmental assets.

Sub-outcome 01: Ecosystems are sustained and natural resources are used efficiently				
Action	**Minister**	**Indicator**	**Baseline**	**Target**
Implement strategies for water conservation and demand management	Water and Sanitation	Percentage reduction of projected demand for 8 large water supply systems	9.6%	20% by 2019
Water resources protection	Water and Sanitation	Percentage of water use license applications processed	66%	80% Annually
		Number of water resources classified	Nil	10
		Number of sites with River Health Programme implemented	180	550 river sites
Identify and develop management interventions for reducing species loss	Environmental Affairs Provincial departments	Number of legislative tools to ensure the protection of species and ecosystems developed and implemented	National Environmental Management: Biodiversity Act, 2004 (and amendments); Threatened or Protected Species list and regulations	20 legislative tools

Sub-outcome 01: Ecosystems are sustained and natural resources are used efficiently				
Action	**Minister**	**Indicator**	**Baseline**	**Target**
Integration of ecological infrastructure considerations into land-use planning and decision-making about new developments	Environmental Affairs Provincial departments Rural Development and Land Reform	Standard minimum environmental requirements for inclusion in the development of Spatial Development Frameworks (SDFs) developed	Draft standard	2016
	Competent Authorities (Environmental Affairs and Provincial Departments)	Percentage of environmental impact assessment applications finalised within timeframes, reported quarterly from the National Environmental Assessment System	87%	98%
Implement environmental regulations to mitigate negative environmental impacts in exploitation of mineral resources	Environmental Affairs supported by Water and Sanitation	Number of environmentally significant areas identified and published for restriction for mining activities	Matrix of biodiversity areas sensitive to mining identified	2 environmentally significant area identified, negotiated and published through NEMA by 2016
	Mineral Resources	Number of derelict and ownerless mine sites rehabilitated	50	250 (50 per year)
	Water and Sanitation	Number of catchments assessed for potential Acid Mine Drainage	Nil	6
	Water and Sanitation Supported by Mineral Resources	Number of mines monitored for non-compliance in accordance with water license conditions	289	450
Integrated environmental assessments for major infrastructure and provision of incentives for green economic activities	Environmental Affairs	Number of regulatory interventions developed to streamline the environmental authorisation process for SIP projects	3	8

Sub-outcome 01: Ecosystems are sustained and natural resources are used efficiently				
Action	**Minister**	**Indicator**	**Baseline**	**Target**
Combat land degradation	Agriculture, Forestry and Fisheries (forestry areas) Environmental Affairs (Working for programmes)	Hectares of land under rehabilitation/restoration	2,283, 340 hectares 3,573,201 hectares follow up treatment	3 858 533 (DEA) 152 500 (DAFF) **TOTAL (4 011 033 ha)** 3 230 271 ha (Follow up treatment by DEA)
	Environmental Affairs	Number of wetlands under rehabilitation	96	655
		Number of emerging invasive species targeted for early detection	60	350
Monitoring of the Oceans and Coast environmental integrity	Environmental Affairs with Support from Department of Water and Sanitation, and Agriculture Forestry and Fisheries	Oceans and Coasts Monitoring Programme	Nil	Oceans and monitoring programme with standards (Biodiversity, Water Quality and Physical environment
		Functional National Pollution Laboratory	Nil	National Pollution Laboratory (NPL)
Implementation of Operation Phakisa Aquaculture initiatives	Agriculture, Forestry and Fisheries	Number of aquaculture projects implemented	1	20
		Aquaculture Development Act in place	Aquaculture Development Policy Framework	Approved aquaculture Bill and signed into Act

Sub-outcome 01: Ecosystems are sustained and natural resources are used efficiently				
Action	**Minister**	**Indicator**	**Baseline**	**Target**
Effective knowledge and information management for the sector	Environmental Affairs	Online ocean and coastal information management system in place	Draft technical specifications and TOR prepared and discussed with SITA	2019
Coherent and aligned multi-sector regulatory system & decision support across government	Environmental Affairs	Ocean Act Promulgated	Ocean economy and Management implementation plans developed	2019
		Marine spatial plan and promulgation of an Oceans Act in SA developed	Ocean economy and Management implementation plans developed	2019

Sub-outcome 02: An effective climate change mitigation and adaptation response

South Africa has committed to implement mitigation actions that will collectively result in a 34% and 42% deviation below its "business as usual" emissions growth trajectory by 2020 and 2025 respectively. Actions will include interventions that will mitigate against the effects of climate change. The NDP also recognises that the actions related to adaptation will depend on strong policies supported by a sound technical understanding and operational capacity to deal with developmental challenges. The desired outcomes include a reduction in impacts of climate change, risk mitigation through appropriate disaster responses and the deployment of innovative technologies that combat the effects of climate change.

Sub-outcome 02: An effective climate change mitigation and adaptation response				
Action	**Minister**	**Indicator**	**Baseline**	**Target**
Strategic Policy/ Regulatory frameworks and programmes to promote a low carbon economy	Transport	Green Transport Strategy and Implementation Plan formulated.	Nil	2018
	National Treasury	Number of thematic areas in implementing environmental fiscal reform policy instruments	3	5 (carbon tax policy, carbon offsets scheme, energy efficiency tax incentive, wastewater discharge charge system, fuel levy system)
	Energy	Percentage of new build that is renewable power generation	Nil	42% (or 17 800 MW) by 2030 for renewable energy
		Percentage of energy efficiency improvement	Nil	12% by 2015
Development and Implementation of sector adaptation strategies/plans	Water and Sanitation; Agriculture, Forestry and Fisheries;	Number of sector adaptation strategies/plans completed	Scoping report to support policy alignment for climate change adaptation	5 Sectors by 2019 (Water, Agricultural & commercial

Sub-outcome 02: An effective climate change mitigation and adaptation response				
Action	**Minister**	**Indicator**	**Baseline**	**Target**
	Human Settlements; Provincial departments; Local Authorities		and draft climate change adaptation sector plans	forestry, Health, Biodiversity & ecosystems, Human settlements)
Include climate change risks in the disaster management plans	Cooperative Governance	Number of disaster management plans that include climate change risks	National Climate Change Response Policy White Paper approved by Cabinet	40 (8 per financial year)
Research in Climate services	Science and Technology supported by Environmental Affairs	Functional climate change research network formalised through MoU's	Nil	2019
		Biennial report to Cabinet on state of climate change science and technology	Nil	2 reports approved by Cabinet
	Environmental Affairs supported by South African Weather Services	National framework for climate services established	Global Framework for Climate Services Roadmap for development of NFCS	2016/17
Monitor, report and verify greenhouse gas emissions	Environmental Affairs	Framework for reporting on greenhouse gas emissions by industry developed and reports provided	Nil	2015 and annual reports

Sub-outcome 03: An environmentally sustainable, low-carbon economy resulting from a well-managed just transition

South Africa faces the triple challenge of poverty, inequality and unemployment which are aggravated by the increasingly negative environmental footprint of developments. To promote a just transition, investments, economic and infrastructure developments will need to consider the resource efficiency and impact on the environment.

Sub-outcome 03: An environmentally sustainable, low-carbon economy resulting from a well-managed just transition				
Action	**Minister**	**Indicator**	**Baseline**	**Target**
Promote a just transition to an environmentally sustainable economy	Environmental Affairs Provincial Departments	Number of Environmental sustainability research projects commissioned	2013 South Africa green economy modelling report published 4 policies researched (SD, GE, and SCP) NSSD1/ NCCRP/ SCP and NSSD, NGP & NDP policy alignment reports finalised	5 environmental sustainability policy research project
	Environmental Affairs	Environmental sector evidence- policy interface system in place	Sector R,D&E thematic strategies	Revised, R, D&E framework implemented
	Environmental Affairs Provincial Departments	Number of environmental sustainability policies reviewed	NSSD1	1 progressively developed and implemented environmental sustainability policy action plan by 2019
Progressively develop, compile, transparently and accessibly report on a set of sustainable	Environmental Affairs	Environmentally sustainable development performance indicators published	Environmental Sustainability Indicators annually since 2008; NSSD1 indicators	2019

Sub-outcome 03: An environmentally sustainable, low-carbon economy resulting from a well-managed just transition				
Action	**Minister**	**Indicator**	**Baseline**	**Target**
development indicators and underlying natural resource and pollution / emission indicators		SA Environmentally Sustainable Development Indicators Policy Makers Outlook published	State of the environment analyses and produced reports in 1999 and 2006 respectively	2019
Enhanced environmental education; empowerment and job creation (including skills development)	Environmental Affairs Provincial Departments	Number of Full Time Equivalents (FTEs) created	233,482	EPWP-447 884
		Number of Work Opportunities created	817,588 (EPWP)	EPWP-1, 151 150 Non EPWP- 22 500 (DEA)
		Number of SMMEs used in environmental programmes	2 611	11 250 (DEA)
		Number of youth benefitting from the Youth Environmental Services (YES)	900	5 500 (DEA)
Implementation of the Environment Sector Skills Plan to address capacity requirements (gaps)	Environmental Affairs, Provincial Departments and SANBI	Number of learners mentored through various initiatives in the sector (including learnerships)	100	500 (DEA)
		Number of SETA sector skills plans with an environmental focus	6	21 by 2016
Increase investment in research, development and innovation to support the transition to a green economy	Science and Technology	Rand value of public and private sector investment in research and development to support a green economy	Nil	300% increase in the rand value of investment in R&D made in 2011

Sub-outcome 4: Enhanced governance systems and capacity

Managing the transition towards achievement of the vision will require strong institutional and governance mechanisms that create an enabling environment for stakeholders to contribute to the transition. The desired outcome includes the establishment of monitoring and evaluation mechanisms. Compliance mechanisms will also be improved to build a culture of compliance.

Sub-outcome 4: Enhanced governance systems and capacity				
Action	**Minister**	**Indicator**	**Baseline**	**Target**
Enhance compliance monitoring and enforcement capacity within the sector	Environmental Affairs Provincial departments	Number of compliance inspections conducted	14145	19 750
		Number of enforcement actions undertaken for non-compliance with environmental legislation	1587	2025 completed criminal investigations handed to the NPA for prosecution (for EMI Institutions)
			3084	5527 administrative enforcement notices issued for non-compliance with environmental legislation
		Number of Joint Partnerships with external role players	Nil	40 (8 per annum)
Enhance global cooperation	Environmental Affairs supported by International Relations and Cooperation	Number of country positions prepared for multilateral agreements approved	COPs for MEAs (39) Chemicals and waste: 16 Biodiversity: 15 Sustainable Development: 3 Climate Change:5	COPS for MEAs (46) Chemicals &Waste – 14 Biodiversity - 22 Sustainable Development- 7 Climate Change-5

Sub-outcome 4: Enhanced governance systems and capacity				
Action	**Minister**	**Indicator**	**Baseline**	**Target**
Improvement in air quality	Environmental Affairs Provincial departments District Municipalities	Percentage of compliance with National Annual Ambient Air Quality Standards (National Air Quality Indicator – NAQI less than 1)	93%	100% compliance by 2030
		Percentage of Atmospheric Emission Licenses with complete applications issued within legislated timeframes	Nil	100% of AELs with complete applications
		Percentage of facilities with Atmospheric Emission Licences reporting to the National Atmospheric Emissions Inventory System (NAEIS)	50%	100% of facilities reporting annually by 2020
Less waste that is better managed	Environmental Affairs Provincial Departments Municipalities	Percentage of waste license applications finalised within legislated timeframes	63%	80% of all complete applications
		Survey of unlicensed landfill sites completed	341	2014/15
		Number of unlicensed landfill sites licensed	Findings of the 2014/15 survey of unlicensed landfill sites	58
Impacts of chemicals better managed	Environmental Affairs Sector Stakeholders	National Chemicals Management Act developed	Regulatory framework from government departments, including Multilateral Environmental Agreements on chemicals management	2018

Sub-outcome 5: Sustainable human communities

Development planning should ensure the management of natural resources and environmental risks in order to pursue development planning goals. The desired outcome is a built environment that is low carbon, energy efficient, and that minimises waste.

Sub-outcome 5: Sustainable human communities				
Action	**Minister**	**Indicator**	**Baseline**	**Target**
Expand use of renewable energy through off-grid electrification	Energy	Number of solar home systems (PV) installed	82 517	105 000
Local Government Support and Engagement	Environmental Affairs Provincial departments	Percentage implementation of the Local Government Support Strategy	Approved Local Government Strategy and Action Plan	100% (implementation of the plan per financial year)

6. Impact Indicators

The table below reflects the key impacts expected from the actions described above. These impact indicators will be monitored to assess whether or not the actions described in this MTSF chapter are having the desired impact on the environment. This will assist in on-going improvements and revision to our plans when necessary.

Impact Indicator	**Minister Responsible for reporting on the indicator**	**Baseline**	**2019 Target**
Number of hectares (ha) in the conservation estate	Environmental Affairs Provincial departments	13, 016 461 ha (10.7%)	16, 121 794 ha (13.2%)
Number of biodiversity stewardship sites		Stewardship guidelines	30 additional stewardship sites (3 per Province and 3 National)
Percentage of area of state managed protected areas assessed with a METT score above 67%	Environmental Affairs	85% of area of state managed protected areas assessed with a METT score above 67%	90% of area of state managed protected areas assessed with a METT score above 67%
Number of square kilometres in Marine Protected Areas (MPAs)		4 287.532 sq. km (0.4% of EEZ)	53 594.15 sq. km (5% of EEZ)
Percentage level of compliance of mines in accordance with water license conditions	Water and Sanitation	35%	60%
Percentage Biomass increase of stock levels in Deep-water Hake, Abalone and West Coast Rock Lobster	Agriculture, Forestry and Fisheries	3 sectors identified (Deep-water hake, Abalone, West Coast Rock	Deep-water hake at 22% of pre-fished biomass
			Abalone at 27% above the pre-fished level
			West Coast rock lobster at 26% above the 2006 level
Percentage of energy efficiency improvement	Energy	Nil	12% by 2015
Annual Energy Balances		Energy Balances 2010	5

Impact Indicator	**Minister Responsible for reporting on the indicator**	**Baseline**	**2019 Target**
Percentage of recyclables diverted from landfill for re-use, recycle and recovery	Environmental Affairs	10%	20%
Reduced total emissions of Green House Gases	Environmental Affairs	Mitigation Potential Analysis Report	Mitigation system in place
Reduced vulnerability and risks associated with climate change impacts	Environmental Affairs Water and Sanitation Agriculture, Forestry and Fisheries Human Settlements Health COGTA	National Climate Change Response Policy White Paper approved by Cabinet	Climate Change Response for 5 key sectors implemented