



MICOA



Programme Document for Sustainable Consumption and Production in Maputo and Matola Cities



Prepared by: Mozambique National Cleaner Production Centre

With support of



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Facilitated by
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1. INTRODUCTION

The present program on Sustainable Consumption and Production in Maputo and Matola cities is a follow up of the African Ten Year Framework Programme on Sustainable Consumption and Production in Africa, which has identified the key priorities that could be undertaken under the thematic areas of energy, water, urban development, and industrial development. Each thematic area was considered in the context of NEPAD Environmental Action Plan and regional poverty reduction priorities.

The SCP programme for Maputo and Matola is also based on the Mozambican Agenda 2025 whose objective is to establish the ways for driving development in Mozambique. Key priorities that could be undertaken under the Environment Strategic plan and the Industrial Strategy policy are also considered.

Therefore the future development of the two cities depends on the way the Cities are able to exploit its resources, explore synergies and internal partnerships, as well as, on the ability to take full advantage of the opportunities that regional integration and globalisation offer in terms of services and businesses. Furthermore it should be stressed that proper co-ordination in the implementation of key programmes such as African 10YFP, NEPAD, PARPA, Agenda 2025, the Millennium Development Goals, constitutes a unique opportunity to launch sustainable consumption and production program for development in the Cities.

The SCP program should step up this global trend of human development based on sustainable consumption and production in development strategies.

1.1. The Preparation Process of the SCP Program for Maputo and Matola Cities

The development of the SCP program started with the establishment of a steering committee of stakeholders. The process led by the MNCPC was broad-based

consultation with all major stakeholders and a steering committee was constituted by the following entities:

- MICOA – Ministry for Environment Coordination
- FUNAB – National Environment Fund
- FEMA – Environment Business Forum
- CNPML – National Cleaner Production Centre
- FUNAE – National Energy Fund
- Maputo Municipal Council
- Matola Municipal Council
- MIC – Ministry of Industry and Trade
- MOPH – Ministry of Public Works and Housing
- MTC – Ministry of Transport and Communications

Two meetings with the steering committee have been organised for discussion of the draft document. The stakeholders were urged to provide the national and sectoral policies and strategies that would be used to support the preparation of the draft document.

1.2. The National Context

Mozambique is washed by the Indian Ocean along approximately 2,800 km of coast. It has a land border of about 4,330 km with Tanzania, Malawi, Zambia, Zimbabwe, Kingdom of Swaziland and South Africa. The surface of the territory is about 800,000 km². The total population exceeds 18 million inhabitants, distributed by 10 provinces and the city of Maputo, 128 districts, 394 administrative posts, 1072 localities and 10,025 villages.

Due to geographical, economic and historical reasons, these provinces are distributed by three major regions: the Northern region, comprising the provinces of Niassa, Cabo Delgado and Nampula, the Central region comprising the provinces of Zambezia, Tete and Sofala and Southern region which comprises the Inhambane, Gaza, Maputo provinces and Maputo city.

The country has good agricultural, agro-industrial, hydrological, mineral and tourism potential, as well as forest and marine resources and an excellent railway and port location within the Southern Africa geo-strategic space.

1. 3 The City Context

The Maputo city is the Capital of Mozambique and the population is more less 1200 thousands inhabitants, distributed by 6 Municipal districts: the Urban district 1 with about 154 thousands inhabitants, the Urban district 2 with about 160 thousands, urban district 3, 210 thousands, urban district 4 with about 230 thousands, urban district 5 with 211 thousands inhabitants and the urban district 6 of Inhaca 21 thousands.

The Matola city was designed as satellite of Maputo city and is situated about 20 km. It has a population of about 600 thousands inhabitants comprising a density of 1581 hab/km². The Matola city is located the main industrial park of Mozambique.

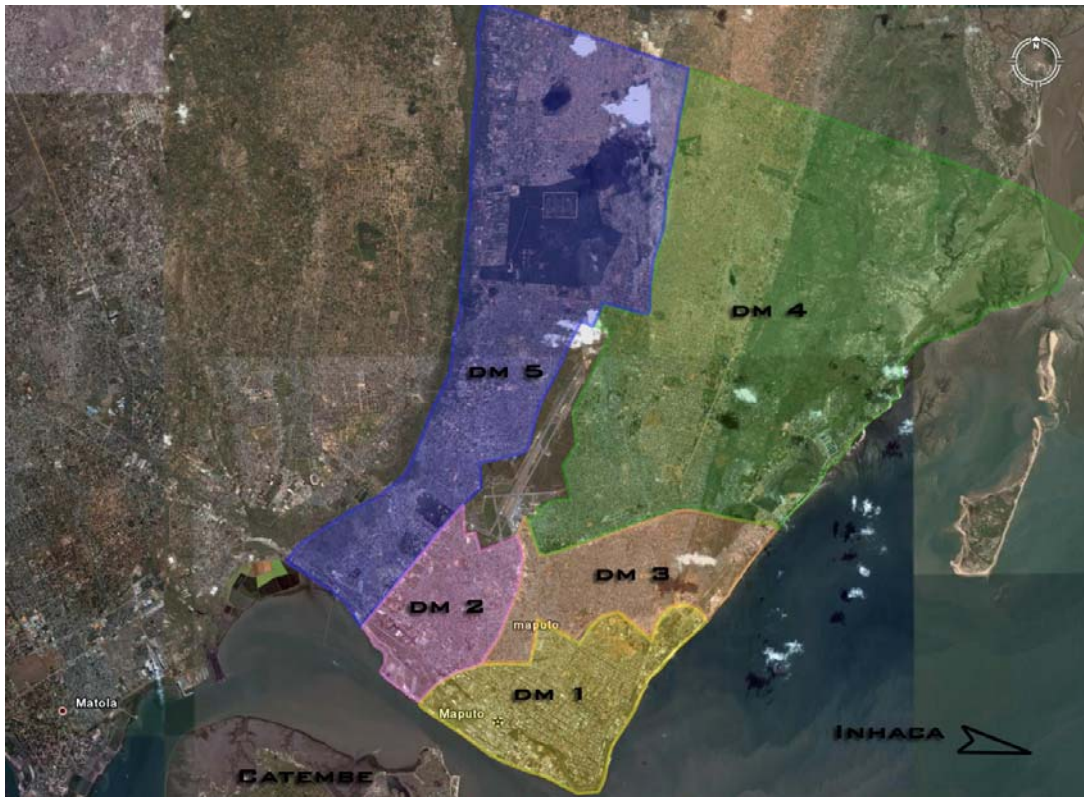


Fig 1. Map of Maputo and Matola Cities

2. 10-YEAR FRAMEWORK PROGRAMMES ON SUSTAINABLE CONSUMPTION AND PRODUCTION

2.1 The Global Process

Concern over unsustainable patterns of consumption and production was reinforced by the 2002 World Summit on Sustainable Development (WSSD) in Johannesburg, which devoted Chapter III of its Plan of Implementation to the issue.

Recognising that consumption and production patterns are increasingly global and that international co-operation is needed to address them in cost-effective ways, the Johannesburg Summit called for the “development of a 10-year framework of programmes in support of regional and national initiatives to accelerate the shift towards sustainable consumption and production patterns that will promote social and economic development within the carrying capacity of ecosystems.” This would require, among others, the following actions:

- Identify specific activities tools, policies, measures and monitoring and assessment mechanisms, including, where appropriate, life-cycle analysis and national indicators.
- Adopt and implement policies and measures aimed at promoting SCP patterns, applying, inter alia, the polluter-pays principle.
- Develop production and consumption policies to improve products and services.
- Develop awareness- raising programmes on the importance of sustainable consumption and production patterns, particularly among youth and relevant segments in all countries, through inter alia, education, public and consumer information, advertising and other media.
- Develop and adopt consumer information tools to provide the information related to SCP.

- Increase eco-efficiency, with financial support from all sources, where mutually agreed, for capacity-building and technology transfer.

The Marrakech Process is an international effort to formulate the 10-year Framework of Programmes on SCP. The Marrakech Process began in 2003 and will conclude in 2011 when the 10-year Framework will be launched at CSD 19. More than a series of meetings, the Marrakech Process is intended to promote implementation of sustainable consumption and production policies and measures at the national and regional levels, with coordinated international support, the “Marrakech Taskforces”. It is expected that the 10-year Framework that emerges will be broad in scope and will help to catalyze and guide the transition to a more sustainable global economy.

2.2. The Marrakech Task Forces

The Marrakech Task Forces are part of the Marrakech Process, which includes regular regional and global meetings, the Task Forces and other activities to promote progress of the 10-Year Framework Programme (10-YFP) on Sustainable Consumption and Production (SCP). A Marrakech Task Force is an informal group of countries and organisations coordinated by a lead country that have decided to work collaboratively on a specific issue of SCP committed to carry out a set of activities which support the implementation of projects of the Marrakech Process. The Marrakech Task Forces can be broadly categorised into: region-specific Task Forces, policy tools and programmes Task Forces, sector-specific Task Forces and Task Forces on social and behavioural issues.

Region-specific Task Forces

1. **Cooperation with Africa** – the main aim is to encourage and support African countries in the integration of SCP in existing plans and programmes and in developing national sub-regional and/or regional action plans on SCP that allow them to leapfrog, reducing poverty while adopting sustainable patterns of consumption and production in the early stages. Under its current work plan, the Task Force focuses on eco-labelling for Africa and supporting national action plans on SCP.

Policy tools and programmes Task Forces

2. **Sustainable Products** – the main objectives are to raise awareness of product policy as a means of achieving international development and environmental objectives; to seek common priorities and opportunities for practical cooperation in encouraging more innovation on product eco-design; and to establish and participate in open and transparent processes for improving product performance.
3. **Sustainable Public Procurement** – the main objective is to promote and support the implementation of sustainable public procurement by developing tools and supporting capacity building in both developed and developing countries. The activities include the development of a practical toolkit to provide an easy start for the implementation of the concept of sustainable public procurement.

Sector-specific Task Forces

4. **Sustainable Tourism** – the main objective is the implementation of activities that promote sustainable tourism, providing supporting tools and existing initiatives that may inspire pilot projects and good practice in other countries. The Task Force focuses on three main topics: tourism and climate change, biodiversity, and protection of cultural and natural heritage.
5. **Sustainable Buildings and Construction** – the main aim is to develop local and national policies and legislation to secure the sustainability of construction, use and maintenance of the built environment. The Task Force addresses the question on how public policies and legislation can promote energy efficiency, energy savings and use of renewable energy in the built environment. The activities include mapping out the baseline condition and internal exchange of best and worst practices.

Social and behavioural issues

6. **Education for Sustainable Consumption** – the objective is to achieve progress in introducing sustainable consumption and production issues in particular into formal curricula with the aim of supporting the Marrakech Process through initiatives, activities and pilot projects in this sector. A special focus of the Task Force is on the Mediterranean region, sharing its experiences globally.

7. **Sustainable Lifestyles** – the main goal is to develop and support the implementation of sustainable policies and projects that enable the adoption of sustainable lifestyles. The main activities are to support the implementation of projects at the sub-regional and national level; to develop tools and capacity building on education and communication for sustainability; and to assemble results and inspiring examples on sustainable lifestyle.

2.3 The African 10-Year Framework Programme

The Development of the African 10 Year Framework Programme on Sustainable Consumption and Production was facilitated by UNEP and UN-DESA in close consultation with the Secretariats of the African Ministerial Conference on Environment (AMCEN) and the Secretariat of the African Roundtable on Sustainable Consumption and Production (ARSCP) which has been established and supported by UNEP. The development of the African 10-Year Framework Programme was conducted in the following four stages.

- ***The First African Expert Meeting on the 10-YFP:*** this was held from 19-20 May in Casablanca, Morocco which identified the key issues that need to be addressed under a framework programme and identified four thematic focus areas.
- ***The Second African Expert meeting on the 10-YFP:*** this was held from 17-18 February 2005 in Nairobi, Kenya and it further deliberated on the four thematic areas identified by the First meeting and proposed the key activities that need to be undertaken under each area.
- ***Technical Segment of AMCEN:*** this was held from 19-20 February 2005 in Nairobi, Kenya. The meeting deliberated on the draft framework document that was developed by the Experts Meeting and endorsed it for submission to AMCEN's Ministerial Session for approval.
- ***AMCEN's Approval:*** the Regional Framework Programme developed through the above technical forums was approved by AMCEN in March 2005 in Dakar, Senegal.

The African 10-YFP on SCP was officially launched in May 2006 through a high-level launch session that was jointly organized by the African Union (AU), the United Nations Economic Commission for Africa (UNECA) and UNEP. A Regional Steering Committee that is co-chaired by AMCEN and ARSCP is constituted to facilitate the further development and implementation of the African 10-YFP. The Fourth African Roundtable on Sustainable Consumption and Production (ARSCP-4) that was held from 29-31 May 2006 further identified the specific priority areas upon which the regional follow-up should focus. The African Ministerial Conference on Environment, which approved the African 10-YFP on SCP through its Dakar Declaration

As part of the implementation mechanism under the International Marrakech Process on the 10-YFP, the Federal Government of Germany took the lead to establish the Marrakech Taskforce on Cooperation with Africa.

2.4 Maputo as a Pilot City

As part of the implementation mechanism under the International Marrakech Process on the 10-YFP, the Federal Government of Germany took the lead to establish the Marrakech Taskforce on Cooperation with Africa. One of the key activities that have been identified in the context of the German Taskforce on Cooperation with Africa and the Regional follow-up on the African 10-YFP is to assist a few African countries and cities to develop their programmes on sustainable consumption and production. The overall objective of this component of activity is to promote the further elaboration and implementation of the African 10 Year Framework Programme on Sustainable Consumption and Production at national and city level and generate region-specific experience that could be replicated in other countries and cities in the region.

The activities to be carried out under this component are expected to lead to the following key outputs:

- Improved understanding and appreciation about the importance of promoting sustainable consumption and production by the key stakeholders;

- Development of a national or city-wide Programme for the pilot countries/cities through an active multi-stakeholder consultation process and with a particular focus on implementable activities;
- Institutional endorsement and championing of the programme document by the relevant national and local government institutions as part of the broader sustainable development strategy and action plans;
- Additional input to the improvement of the existing methodology and approach in developing national and city-wide programmes on SCP.

Based on the criteria that have been developed for the selection of the pilot countries, Mauritius and Tanzania are selected as pilot countries while Cairo/Egypt and Maputo/Mozambique are selected as pilot cities for developing SCP programmes. The programme development has been initiated through an MOU that was signed with the implementing institution under the guidance of a National Steering Committee.

3. OVERVIEW REVIEW OF POLICIES, STRATEGIES AND NATIONAL PLANS

The SCP programme for Maputo and Matola is developed based on review of three groups of policies and strategies: the national policies and strategies comprising the Mozambican Agenda 2025 whose objective is to establish the ways for driving economic development in Mozambique, the National Sustainable Development Strategy, the Environment Strategic Plan and PARPA; the sectoral policies and strategies that include National Water Strategy, National Strategy for Industrial Development, National Energy Strategy and Urban Development Policy; and the city strategies which comprise the PROMAPUTO and the Maputo city Waste Management Strategy.

3.1. Overview of National Policies and Strategies

The national policies and strategies constitute the main guidelines for economic development of the country. For the purpose of development of the sustainable consumption and production programme the following documents have been reviewed: the Agenda 2025, the National Sustainable Development Strategy, the Environment Strategic Plan and the Absolute Poverty Reduction Action Plan (PARPA).

3.1.1. Agenda 2025

The Agenda 2025 was adopted in November 2003, and it establishes the nation's vision, ways for driving development in Mozambique as an enterprising and successful country by 2025, a country where the environment and natural beauty are conserved.

Agenda 2025 is a strategic exercise of reflection over the future of Mozambique with the following objectives:

- To create along-term National Vision through a participatory process,
- To prepare a National Development Strategy through a participatory process, defining the necessary policies and programmes for responding to the objectives identified in the national development strategies.

The main objective of the shared vision is an opportunity for developing SCP programmes by setting guidelines for medium and long-term action for leaders and decision makers in the public and private sectors and in the civil society.

3.1.2. National Sustainable Development Strategy

The role of government on the implementation of the environmental strategy for sustainable development is to establish, not only the vision and leadership of the process but also the institutional framework for successful partnership and collaboration between interested parties. The government responsibilities includes the establishment of policies, standards, institutions and program that assure a direction towards implantation of a culture for appropriate management and uses of available resources.

3.1.3. National Environment Strategy

The National Environment Strategy's mission is to coordinate the implementation of the Environmental Strategy for Sustainable Development of Mozambique for absolute poverty reduction, promoting the sustainable use of natural resources, improving the quality of the environment, the economic growth and social equity. And the strategy's vision is to lead the country on promotion of a healthy environment, towards achieving high quality of life and a social, environmental and economic development equitable.

3.1.4. PARPA

In September 2006, the Government formally adopted the second Poverty Reduction Strategy (PARPA II). PARPA is the operational plan for the government five year's programme (2005-2009) and sets out a broad and ambitious agenda of reforms. PARPA was prepared through broad-based consultations with major stakeholders and civil society. While maintaining its commitment to improve quality and access to social services, PARPA recognise the rapid, sustainable and broad-based growth warrants more emphasis on the growth of the productive and private sectors. The strategy envisages small and medium enterprises (SMEs) as the engine of employment generation.

The overall objective of the Program of Action for Absolute Poverty Reduction is to reduce the incidence of poverty from 54% in 2003 to 45% in 2009, promote development of human potential, increase the ability to create wealth, create functioning institutional system and consolidation of national unity.

Detailed information of the priority areas, key actions or activities and its relevance to sustainable consumption production program are shown on table 1.

Table 1: An Overview of National Development Strategies

Strategies	Objectives	Priority areas	Key actions/activities	Relevance to SCP
<p>Agenda 2025: The nations vision and strategies (Adopted in November 2003)</p>	<p>Vision: Transforming Mozambique in an enterprising and continuously successful country by 2025: A country where the environment and natural beauty are conserved.</p>	<ul style="list-style-type: none"> •Human capital: comprehensive education with a focus on Knowing How to Be, Knowing How to Know, Knowing How to Do, and Knowing How to Live Together. •Social capital: building a prosperous, united, cohesive and peaceful country proud of its history, culture and diversity. •Economy and development: entrepreneurial sector is stimulated and capacities for scientific, technological research and innovation enhanced thereby promoting the production of wealth and social equity and consolidating the social and economic structure. •Governance: ensure justice, security, material and spiritual well being in which 	<ul style="list-style-type: none"> •Education: Massive expansion of basic education and strengthening of secondary education with the required social and scientific focus. •Health: provision of efficient and effective national health services through an expansion of the health infrastructure network and sustainable management of health units. •Social: Promote increased articulation between the various actors in the field of land management and promote proactive policies for the effective participation of women and youth. •Economy: ensure faster and better public services, promote the development of competitive household and entrepreneurial sectors, ensure competitiveness and modernisation of the private sector and provide incentives for the integration of the informal sector. •Governance: ensure multiparty 	<ul style="list-style-type: none"> •Adequate coverage of environmental issues in the vision elements but weak coverage under the strategic options. •Significant conformity with the African 10-Year Framework Programme on SCP in the coverage of the priority sectors under the strategic options for Economy and development.

Strategies	Objectives	Priority areas	Key actions/activities	Relevance to SCP
		the state plays a leading role of credible supervision.	democracy and the rule of law, promote decentralization and de-concentration of development administration and facilitate access to information and the role of the media.	
National Environmental Strategy: 2005-2015 (approved in June 2004)	Provide a national environmental framework that contributes to the national poverty reduction goals. <ul style="list-style-type: none"> •Promotion of rational use of natural resources and management of biodiversity •Reduction of pollution and causes for endemic diseases •Promotion of urban planning and water and sanitation services 	<ul style="list-style-type: none"> •Building national capacities for management and protection of natural resources. •Achieve a more efficient and integrated management of water and improvement of water quality. •Integration of environmental aspects in the planning and development of the economy and in urban development. •Develop and harmonize the environmental rules and regulations and enhance the institutional capacities for effective implementation. •Promote the adoption of cleaner production 	<ul style="list-style-type: none"> • Minimize the negative impact of floods and droughts and maximize the availability of water for drinking and irrigation. • Conduct formal and informal environmental education and awareness on environmental resource protection and management. • Promote job creation and self employment through facilitation of community-based environmental management programmes and activities • Promote system of waste management and recycling. • Promote effective public-private partnerships on the management of natural resources for mutual benefit. • Promote optimization of production processes that 	<ul style="list-style-type: none"> •Strong emphasis on inter-sectoral coordination of environmental issues. •The importance of linking environment with poverty reduction well-reflected. •Its SCP element could be further strengthened.

Strategies	Objectives	Priority areas	Key actions/activities	Relevance to SCP
		<p>processes by existing industries and enforce EIA requirement for new industrial projects.</p>	<p>promotes resource efficiency through programmes such as cleaner production.</p> <ul style="list-style-type: none"> • Enhance the technical and institutional capacities for monitoring and protection of environment quality. 	
<p>Action Plan for the Reduction of Absolute Poverty (PARPA) (April 2006)</p>	<p>Overall objective: Reduce the incidence of poverty from 54% in 2003 to 45% in 2009.</p> <p>Specific objectives:</p> <ul style="list-style-type: none"> • Developing each citizens human potential; • Increasing the ability to create national wealth; • Creating a functioning institutional system; • Consolidating national unity; 	<ul style="list-style-type: none"> • Governance: make the apparatus of the state a means of the development of human capital and the economy. • Human capital: Provide continuity for developing work-related technical and scientific skills and capacities and provision of basic social services to the poor. • Economic development: facilitate conditions basic to the pursuit of productive activity and promote sustainable and comprehensive economic growth oriented toward job creation. 	<ul style="list-style-type: none"> • Take measures to improve the quality of public services provided to citizens; • Consolidate a justice system that is accessible, transparent and inclusive; • Ensure quality education for everyone with special attention to primary education; • Improve access to quality health care services and priority programmes; • Increase the coverage of water and sanitation services and build dams to control floods and mitigate droughts; • Implement policies and action plans conducive to reduction of poverty keeping in mind the gender perspective, • Ensure the security in the right to 	<ul style="list-style-type: none"> • The document contains detailed actions that need to be taken under each area of priorities; • Compared to other policy documents, environmental issues addressed in more details at the relevant sections; • Provides good possibilities for SCP linkages.

Strategies	Objectives	Priority areas	Key actions/activities	Relevance to SCP
			<p>use and exploit land and housing durability;</p> <ul style="list-style-type: none"> • Guarantee rigorous macroeconomic management by maintaining appropriate levels of openness in the economy; • Create a conducive business environment for the development of the private sector; • Promote the creation of a strong, dynamic, competitive and innovative private sector; • Expand access to electricity for consumers, while curbing the environmental impacts of its use, and increase access to alternative sustainable energy sources; • Improve equitable access to natural resources for sustainable use and management; • Promote integrated management of the marine and coastal environment and of fishery resources; • Develop and position the country as a world-class tourist destination while maintaining the sustainability of its resource; • Guarantee environmentally 	

Strategies	Objectives	Priority areas	Key actions/activities	Relevance to SCP
			sustainable exploitation of the country's mineral resources by regulating the performance of the mining industry	
<p>National Sustainable development strategy (approved June 2007)</p>	<p>Overall objective: To create a framework that enables partnership and integrated planning with private sector and civil society, towards poverty alleviation and sustainable development.</p>	<ul style="list-style-type: none"> •Capacity building for implementation of strategies including establishment of goals at national and local level to achieve integrated management and protection of natural resources and ecosystems. •Create institutions with technical capacity for urban planning, development of infrastructures, waste management, and water and sanitation services. •Strengthen the country capacity to measure, reduce and evaluate the environmental pollution including impact on health and climate change and provide technical and financial support. •Keep population growth 	<ul style="list-style-type: none"> • Establish policies, institutions that ensure sustainable use of available natural resources and improve the planning, development, regulation, monitoring and control. • Build management capacity for efficient utilization of natural resources through appropriate technologies use of low cost sustainable materials. • Adopt integrated measures to mitigate the effect of drought and floods through relevant policies of land, water, energy and natural resources management. • Promote the availability of natural resources, in quality and quantity, for ecologically sustainable industrial development. • Promote programs for intensive and sustainable use of natural resources based on traditional knowledge of local communities. 	<ul style="list-style-type: none"> • The document contains detailed actions that need to be taken under each area of priorities; • Provides good basis for integration of SCP principles.

Strategies	Objectives	Priority areas	Key actions/activities	Relevance to SCP
		<p>within the limit of socio-economic goals and sustainable development objectives.</p>	<ul style="list-style-type: none"> • Adopt, where appropriate, policies, monitoring programs including regulations based on demand for land management, water supply towards poverty alleviation. • Prevent water pollution and health hazards through introduction of sustainable technologies of domestic and industrial waste treatment, recycling and monitoring programs. • Create capacity for research, information and management of natural resources • Develop educational and awareness programs for ecotourism development through partnership with private sector and local communities. • Create awareness of environmental costs and promote use of economic measures through “polluter/payer” principle. 	

3.2. *Overview of Sectoral Policies and Strategies*

Sectoral policies and strategies provide the framework for sectoral contribution towards achieving the national development goals. For the purpose of development of the SCP programme and considering the priorities defined by the African 10 YFP, the following sectoral policies and strategies have been reviewed: the National Water Strategy, National Strategy for Industrial Development, National Energy Strategy and the Urban Development Policy.

3.2.1. National Water Strategy

The National Water Strategy outlines the framework of the government for an effective and integrated management of water resources that contribute to socio-economic development: Promotion of basic water and sanitation services to contribute for poverty reduction, Promote efficient use of water resources for sustainable development and Promote water supply to rural communities and reduce vulnerability against floods and droughts

3.2.2. National Strategy for Industrial Development

The National strategy for industrial development of SMEs in Mozambique outlines the framework of the Government of Mozambique to stimulate the development of SMEs and therefore a contribution to the attainment of the goals established in PARPA II. However the analysis of the business environment related to the SME's is not encouraging. It recognises the existence of several obstacles that hinder the economic growth of SME's such as excessive regulatory barriers, high cost of funding, availability of qualified human resources, excessive taxes, access to markets, and lack of networks between companies. Therefore the following strategic objectives were defined: improvement of the business environment, management and technological capacity building and strategic support of SMEs.

3.2.3. National Energy Strategy

Promote the expansion of access to energy sources in the context of efficient utilization and environmental protection

- Contribute to poverty eradication
- Harmonize regional development

Facilitate the development of the private sector with a focus on SMIs

3.2.4. Urban Development Policy

Overall objective: create a legal framework for urban development of the country

Specific objectives:

- Promote rational and sustainable use of natural resources
- Reduce the difference in quality of life in urban areas

Improve housing, infrastructures and urban systems towards natural disasters

Detailed information of the priority areas, key actions or activities and its relevance to sustainable consumption production program are shown on table 2.

Table 2: An Overview of Sectoral Development Strategies

Strategies	Objectives	Priority areas	Key actions/activities	Relevance to SCP
<p>Water sector strategy (draft October 2006)</p>	<p>Develop an effective and integrated management of water resources that contribute to socio-economic development:</p> <ul style="list-style-type: none"> • Promotion of basic water and sanitation services to contribute for poverty reduction • Promote efficient use of water resources for sustainable development • Promote water supply to rural communities and reduce vulnerability against floods and droughts 	<ul style="list-style-type: none"> •Build capacity for water resources management •Develop infrastructures of water supply and sanitation services •Develop a framework for integrated management in order to ensure balanced use, conservation, sustainability and economic efficiency •Promote the adoption of policies for sustainable use of water resources for irrigation, power generation, industry, tourism, fishing, transport and other uses. 	<ul style="list-style-type: none"> •Develop capacity and skills for assessment and monitoring of water resources •Ensure protection and sustainable use through integrated and multi-sectoral planning of water resources •Promote sectoral use and allocation of water towards poverty alleviation and sustainable socio-economic growth •Promote development and maintenance of hydraulic infrastructures to ensure water availability and demand to mitigate the impacts of floods and droughts •Enhance the capacity to monitoring and management of trans-boundary water resources through implementation of SADC protocol •Develop institutional framework to ensure technical 	<ul style="list-style-type: none"> • Significant possibilities for demand-side management which have not been captured in the current strategies • Potential for implementation of water supply/ consumption policy and regulation in urban areas.

Strategies	Objectives	Priority areas	Key actions/activities	Relevance to SCP
			and legal capacity for monitoring water quality and environment pollution •Introduce user charges both for extraction from and discharge to water bodies taking into account the “polluter-pay” principle	
Energy sector strategy	Promote the expansion of access to energy sources in the context of efficient utilization and environmental protection <ul style="list-style-type: none"> • Contribute to poverty eradication • Harmonize regional development • Facilitate the development of the private sector with a focus on SMIs 	<ul style="list-style-type: none"> •Ensure low cost energy supply in order to satisfy the actual consumption needs for socio-economic development •Increase energy availability for domestic sector in particular of charcoal, kerosene, gas and electricity •Promote reforestation in order to increase biomass fuel availability •Strengthen institutional capacity of relevant stakeholders involved in energy supply in order to improve their performance •Promote feasible economical investment programs to develop energy resources (hydroelectricity, forestry, coal 	<ul style="list-style-type: none"> •Expand the grid system for improved access to energy services in rural and urban areas •Implementation of sustainable community management framework of forestry resources and production of bio-fuel and distribution into urban centre •Promote the substitution of conventional fuels such as kerosene, GPL, natural gas by renewable energy sources and improve the handling and commercialization of kerosene and GPL •Promote the role of private sector on energy supply in remote areas 	<ul style="list-style-type: none"> •Significant possibilities for demand-side management which have not been captured in the current strategies

Strategies	Objectives	Priority areas	Key actions/activities	Relevance to SCP
		and natural gas) •Promote development and use of renewable energy (solar, wind and bio-fuels)	•Develop a low cost electrification program to promote sustainable development for low income communities	
Urban development policy (approved July 2007)	Overall objective: create a legal framework for urban development of the country Specific objectives: •Promote rational and sustainable use of natural resources •Reduce the difference in quality of life in urban areas •Improve housing, infrastructures and urban systems towards natural disasters	•Ensure people’s right access to land and its resources •Re-qualification of urban soil degraded due to emergency occupation •Identification and valorisation of the socio-economic and cultural activities of rural population •Protect ecological quality and fertility of forestry soils, water resources and sea for the benefit of local communities and the environment •Develop a legal framework that optimizes the management of natural resource and its use and access.	•Develop the competence of the local government and communities to promote, coordinate and monitor urban planning •Establish urban planning structures and define norms and standards of land use •Develop and plan urban services such as roads, communication, water and power supply and sanitation •Establish classification of urban soil to ensure correct use and environment sustainability •Develop land management tools, geographic positioning system to enhance preferential use, protection and conservation •Develop EIA and socio-economic inventory	•Environmental issues and concerns well-covered in the policy document. •Provides good basis for integration of SCP principles.

Strategies	Objectives	Priority areas	Key actions/activities	Relevance to SCP
			instruments through collection and treatment of environmental data	
Industrial development policy and strategy (approved in August 1997)	<p>Overall objective: Create a modern, competitive industrial base that must increasingly reduce its external dependence</p> <p>Specific objectives:</p> <ul style="list-style-type: none"> • Support the value added use of natural resource; • Contribute to the balance of external trade; • Contribute to the satisfaction of basic needs; • Promote the development of labour intensive technologies. 	<ul style="list-style-type: none"> • Transforming industries with a priority focus on the food and agro processing industries; • Development of the extractive and mineral industries; • Sustainable development of the Tourism industry to ensure the maximum economic and social benefits from the sector; • Development of small and medium-sized industries (SMIs) that facilitate the expansion of the industrial network, growth of production and the creation of employment. 	<ul style="list-style-type: none"> • Promote the rehabilitation and restructuring of state-owned enterprises; • Take measures to de-bureaucratize the economy and to simplify the regulatory environment and procedures; • Facilitate a cohesive and competitive network of micro-industries and SMIs including the better integration of the informal sector in the economy; • Develop the required infrastructure and support services including the areas of industrial technology development, product quality assurance, development of human resource and access to industrial data; 	<ul style="list-style-type: none"> • Environmental issues given lateral consideration under the various elements; • Huge potential platform for integrating SCP principles which may assist in the fulfilment of the sectoral development objectives on a sustainable basis.

3.3. Overview of Programmes & Strategies of Maputo City

The programme and strategy under review in this section comprises two basic documents: the PROMAPUTO and Waste Management Strategy. The documents have been approved recently by the Maputo City Assembly.

3.3.1. PROMAPUTO

The Maputo City Development Program (PROMAPUTO) constitutes the main guideline for the Maputo Municipal Council to fulfil people's needs for better services. The program acknowledges the difficulties of the City due to lack of human and financial resources, within a poor institutional framework, where the majority of process (financial, strategic planning, urban planning, property registration and other) are inexistent or scarce.

The key objectives of the Maputo Municipal Development Program are to strengthen the capacity of the City Council (CMM) to develop, manage and maintain quality service delivery to its citizens. The development objective for Phase I is to strengthen the CMM's institutional and financial capacity to support achievement of long-term service delivery goals, and to implement selected priority investments. The project includes the following components: component A - institutional development and municipal governance; component B - municipal finance; and component C - planning and service delivery improvements.

3.3.2. Maputo City Waste Management Strategy

The Maputo City Waste Management Strategy was adopted in September 2006 and its main objective is to implement and improve the system of solid waste management, based on the following specific strategies: adoption of the "polluter/payer" principle, develop a sustainable collection system and achieve an equilibrium cost/revenue.

Detailed information of the priority areas, key actions or activities and its relevance to sustainable consumption production program are shown on table 3.

Table 3: City Development Strategies/programmes for Maputo

Strategy	Objectives	Priority areas	Key actions/activities	Relevance to SCP
<p>Maputo development strategy: Pro-Maputo (approved December 2006)</p>	<p>To improve the quality of life of citizens and provide a three phase development strategy framework for the period 2007-2016</p>	<ul style="list-style-type: none"> • Ensure strategic, efficient and participative municipal management • Improve the revenue and promote efficient expenditure • Develop urban and sectoral planning services • Increase the quality and coverage of MSWM² services 	<ul style="list-style-type: none"> • Reform and institutional strengthening to provide better services • Improve the communication mechanism between city council and citizens • Improve urban infrastructures and ensure future expansion through partnership with private sector, communities and NGOs • Strengthening the capacity for MSWM through investments on management services • Establish legal framework for pollution control and ensure the adoption of 	<ul style="list-style-type: none"> • The document contains detailed actions that need to be taken under each area of priorities; • Potential to integrate SCP principles and sustainable development of SMEs

Strategy	Objectives	Priority areas	Key actions/activities	Relevance to SCP
			“polluters pay” principle	
Maputo city waste management strategy (September 2006)	To implement and improve the system of Municipal Solid waste (MSW) collection and its economic component <ul style="list-style-type: none"> • Adopt the polluter/pay principle • Develop a sustainable system • Achieve an equilibrium cost/revenue 	<ul style="list-style-type: none"> • Phase 1: Develop the institutional capacity for MSW collection in urban area • Phase 2: Expansion of the services to peri-urban areas • Phase 3: Achieve a sustainable system of MSW Management 	<ul style="list-style-type: none"> • Provide improved services through partnership with private sector • Adjustment of municipal taxes through the “polluters pay” principle • Expansion of the services to all urban districts • Funding municipal services through taxes collected 	<ul style="list-style-type: none"> • Potential to develop sustainable solutions for MSWM • Potential to integrate SCP principles and sustainable development of SMEs

4. SUSTAINABLE CONSUMPTION AND PRODUCTION PRIORITIES FOR MAPUTO AND MATOLA CITIES

The African 10-Year Framework of Programmes that was approved by the African Ministerial Conference on the Environment (AMCEN) identified four thematic areas as priorities for the region. These are Water and Sanitation, Energy Efficiency and Sustainable energy, Urban Development and infrastructure, and development of resource based industries. The proceeding review that was carried out on existing policies and strategies at national, sectoral and local level has clearly shown the complementarities between the priority activities that were identified at the regional level and the priorities identified at the national and local level. The following section highlights the key national and local objectives and priorities with respect to each of the thematic areas and the specific priorities that are identified for the promotion of sustainable consumption and production for Maputo city.

4.1 Water and Sanitation

Under this regional priority area, the following national priorities have been identified within Agenda 2025:

- Endow the country with more dams and weirs for storing water.
- Promote economic efficiency and social justice in pricing of water.
- Encourage management of small water supply systems by communities.

Specific activities/actions for SCP

- Rationalize the price structure of water and sanitation services in such a way that it promotes economic efficiency and social equity.
- Develop and implement **demand-side management** programmes that promote efficient water utilization and conservation.
- Promote awareness on the benefits of water harvesting and encourage the practice by urban communities.
- Encourage the development and implementation of **water saving & efficient utilization** by industries through cleaner production methods.

- Promote community-based water service provisions to be managed by local (women) committees.

4.2 Energy Efficiency and Sustainable Energy

Energy use is essential for human development, economic growth, health and education. National priorities identified for this thematic area are as follow:

- Expansion of the national power grid through the utilization of high hydropower production capacity of the country.
- Develop and utilize other forms of energy including natural gas and renewable energy resources.

Specific areas/activities for SCP

- Promote energy efficiency along the whole cycle of energy generation, transmission and distribution.
- Develop and implement **demand-side management programmes**, including efficient bulbs use, that promote efficient energy utilization and conservation.
- Rationalize the fiscal measure and price structure of energy services in such a way that it promotes efficient utilization and a shift to renewable energy.
- Promote the availability and increased utilization of efficient wood fuel stoves by households of low income groups.
- Develop and implement an **industrial energy efficiency** and conservation programmes that provides incentives for participating industries.

4.3 Urban Development and Infrastructure

Urban development and infrastructure has been identified as a priority theme within the African 10YFP on sustainable consumption and production. National priorities identified on the Agenda 2025 include:

- Developing a balanced multi-modal system of transportation through greater integration of the maritime, rail, road and aerial.
- Adoption of new technologies related to construction materials and/or processes.

Specific actions/activities for SCP

- Adopt an urban development planning that ensures efficient infrastructure planning, development and management.
- Develop and implement an **Integrated Solid Waste Management (ISWM) programme** based on the Three R principles and promoting waste-to-resource conversion.
- Introduce a standard for the promotion of sustainable building design & construction that ensures energy and material efficiency over a life time of a building.
- Regulate the importation of second-hand cars and the emission levels of cars on the street.
- Develop and implement **slum upgrading programmes** that include the improvement of the productive capacities of communities under informal settlements.

4.4 Development of Resource-Based Industries

National priorities identified under this thematic group:

- Formulation of comprehensive industrial policy that ensures competitiveness of industries.
- Development of industrial capacity with special emphasis on SMIs.
- Promotion of initiatives conducive to the development of local industry maximising the use of local products.

Specific actions/activities

- Strengthen the environmental sustainability element of the industrial development policy.
- Develop and implement a **compliance assistance programme** with a particular focus on improving the resource efficiency of SMIs.
- Develop and implement a pilot programme on **Sustainable Tourism in Maputo** with a purpose of enhancing the contribution of the sector to the economy and reducing its adverse impact.

- Implement a programme that promotes the adherence to cleaner production and corporate social responsibility principles by multinational companies.
- Actively pursue the labelling of industrial products under existing and/or emerging eco-labelling programmes to targeted niche markets.

The detailed profile and implementation modalities of the identified priority activities are presented in the following tables. Accordingly, Table 4.1 presents the preliminary list of SCP priorities for Maputo and Matola cities with an indication of the specific institutions that could take a leading role in developing and implementing the specific recommended activities while Table 4.2 presents the profile of the proposed pilot activities covering their respective objectives, activities, results/outcomes and the target groups or sectors. Finally, Table 4.3 presents the implementation and monitoring mechanisms including partner implementing institutions, verifiable indicators and possible source of funding.

Table 4.1 Preliminary list of SCP priorities for Maputo & Matola cities in the context of the African 10-YFP

Regional priority areas	National priorities ¹	City-wide priorities	Specific actions/activities for sustainable consumption and production	Responsible lead institution (s)
<p>Water and sanitation</p>	<ul style="list-style-type: none"> • Endow the country with more dams and weirs for storing water. • Promote economic efficiency and social justice in pricing of water. • Encourage management of small water supply systems by communities. 	<ul style="list-style-type: none"> • Build capacity for water resources management • Develop infrastructures of water supply and sanitation services • Develop a framework for integrated management in order to ensure balanced use, conservation, sustainability and economic efficiency • Promote the adoption of policies for sustainable use of water resources for irrigation, power generation, industry, tourism, fishing, transport and other uses. 	<ol style="list-style-type: none"> 1. Rationalize the price structure of water and sanitation services in such a way that it promotes economic efficiency and social equity. 2. Develop and implement demand-side management programmes that promote efficient water utilization and conservation. 3. Promote awareness on the benefits of water harvesting and encourage the practice by urban communities. 4. Encourage the development and implementation of water saving & efficient utilization by industries through cleaner production methods. 5. Promote community-based water service provisions to be managed by local (women) committees. 	<p>Council of Water Regulation (CRA) & Mozambique Water (AdM)</p> <p>Mozambique Water and Maputo Municipality</p> <p>Foundation for Community Development (FDC) & Maputo Municipality</p> <p>Mozambique NCPC & Eduardo Mondlane University</p> <p>Foundation for Community Development (FDC) & Maputo Municipality</p>

¹ Extracted from Agenda 2025.

Regional priority areas	National priorities	City-wide priorities	Specific actions/activities for sustainable consumption and production	Responsible institution (s)
<p>Energy efficiency and sustainable energy</p>	<ul style="list-style-type: none"> •Expansion of the national power grid through the utilization of high hydropower production capacity of the country. •Develop and utilize other forms of energy including natural gas and renewable energy resources. 	<ul style="list-style-type: none"> •Ensure low cost energy supply in order to satisfy the actual consumption needs for socio-economic development •Increase energy availability for domestic sector in particular of charcoal, kerosene, gas and electricity •Strengthen institutional capacity of relevant stakeholders involved in energy supply in order to improve their performance •Promote feasible economical investment programs to develop energy resources (hydroelectricity, forestry, coal and natural gas) <p>Promote development and use of renewable energy (solar, wind and bio-fuels)</p>	<ol style="list-style-type: none"> 1. Promote energy efficiency along the whole cycle of energy generation, transmission and distribution. 2. Develop and implement demand-side management programmes, including efficient bulbs use, that promote efficient energy utilization and conservation. 3. Rationalize the fiscal measure and price structure of energy services in such a way that it promotes efficient utilization and a shift to renewable energy. 4. Promote the availability and increased utilization of efficient wood fuel stoves by households of low income groups. 5. Develop and implement an industrial energy efficiency and conservation programmes that provides incentives for participating industries. 	<p>Mozambique Electricity Company (EDM) & Minister of Energy (ME)</p> <p>National Energy Fund (FUNAE) Mozambique NCPC & Eduardo Mondlane University</p> <p>Minister of Energy & Ministry of Finance</p> <p>National Energy Fund (FUNAE) & Eduardo Mondlane University</p> <p>Mozambique NCPC & Eduardo Mondlane University</p>

Regional priority areas	National priorities	City-wide priorities	Specific actions/activities for sustainable consumption and production	Responsible institution (s)
Urban development and infrastructure	<ul style="list-style-type: none"> • Developing a balanced multi-modal system of transportation through greater integration of the maritime, rail, road and aerial. • Adoption of new technologies related to construction materials and/or processes. 	<ul style="list-style-type: none"> • Ensure people’s right access to land and its resources • Re-qualification of urban soil degraded due to emergency occupation • Improve housing, infrastructures and urban systems towards natural disasters • Develop the institutional capacity for MSW collection in urban area • Expansion of the services to peri-urban areas • Achieve a sustainable system of MSW Management 	<ol style="list-style-type: none"> 1. Adopt an urban development planning that ensures efficient infrastructure planning, development and management. 2. Develop and implement an Integrated Solid Waste Management (ISWM) programme based on the Three R principles and promoting waste-to-resource conversion. 3. Introduce a standard for the promotion of sustainable building design & construction that ensures energy and material efficiency over a life time of a building. 4. Regulate the importation of second-hand cars and the emission levels of cars on the street. 5. Develop and implement slum upgrading programmes that include the improvement of the productive capacities of communities under informal settlements. 	<p>Maputo Municipality & Ministry of Public Works (MOPH)</p> <p>Maputo Municipality & Ministry of Environment</p> <p>Ministry of Public Works & Maputo Municipality</p> <p>Ministry of Transport & Ministry of Environment</p> <p>Maputo Municipality & Foundation for Community Development (FDC)</p>

Regional priority areas	National priorities	City-wide priorities	Specific actions/activities for sustainable consumption and production	Responsible institution (s)
<p>Development of resource-based industries</p>	<ul style="list-style-type: none"> •Formulation of comprehensive industrial policy that ensures competitiveness of industries. •Development of industrial capacity with special emphasis on SMIs. •Promotion of initiatives conducive to the development of local industry maximising the use of local products. 	<ul style="list-style-type: none"> •Transforming industries with a priority focus on the food and agro processing industries; •Sustainable development of the Tourism industry to ensure the maximum economic and social benefits from the sector; •Development of small and medium-sized industries (SMIs) that facilitate the expansion of the industrial network, growth of production and the creation of employment. •Promote the creation of a strong, dynamic, competitive and innovative private sector 	<ol style="list-style-type: none"> 1. Strengthen the environmental sustainability element of the industrial development policy. 2. Develop and implement a compliance assistance programme with a particular focus on improving the resource efficiency of SMIs. 3. Develop and implement a pilot programme on Sustainable Tourism in Maputo with a purpose of enhancing the contribution of the sector to the economy and reducing its adverse impact. 4. Implement a programme that promotes the adherence to cleaner production and corporate social responsibility principles by multinational companies. 5. Actively pursue the labelling of industrial products under existing and/or emerging eco-labelling programmes to targeted niche markets. 	<p>Ministry of Industry & Trade (MIC) & Ministry of Environment (MICOA) Mozambique NCPC & Ministry of Industry & Trade (MIC)</p> <p>Maputo Municipality, Ministry of Tourism & Mozambique NCPC</p> <p>Mozambique NCPC & Business Forum for Environment (FEMA)</p> <p>Ministry of Industry & Trade (MIC) & Mozambique NCPC</p>

Table 4.2. Profile of pilot activities for the promotion of sustainable consumption and production

Pilot activity	Objective	Activities	Results/Outcomes	Target groups/sectors
Demand-side management programme on energy use	To promote energy efficiency and conservation in residential houses and service enterprises	<ul style="list-style-type: none"> • Identify the key areas which have significant energy loss; • Develop the major steps and practices that need to be adopted to address the inefficiency points; • Conduct public awareness and education programmes to promote energy efficient use and practices; • Provide technical support to communities and entities that have high potential saving. 	<ul style="list-style-type: none"> • Increased ability of providing electricity to more people with the available capacity; • Household and business benefit from reduction of electricity bill; • Reduction of green house gas from supplementary diesel-based generation 	<ul style="list-style-type: none"> • Municipality and the public sector; • Hotels and related service industries; • Manufacturing industries and SMEs; • Residential areas
Pilot activity	Objective	Activities	Results/Outcomes	Target groups/sectors

Education for sustainable consumption and production	To develop a new culture of consumption and production that is sustainable	<ul style="list-style-type: none"> • Develop locally adopted education materials on sustainable consumption and production; • Disseminate the education materials with a primary target on primary and secondary school students; • Facilitate establishment of sustainable consumption and production clubs in schools; • Promote general public awareness through media programmes and public events. 	<ul style="list-style-type: none"> • Increased public awareness about sustainable consumption and production; • Creation of a new generation that could serve as change agent within the society; • Development of a sustainable consumption and production culture. 	<ul style="list-style-type: none"> • Primary and secondary schools • Media professionals • General public
Pilot activity	Objective	Activities	Results/Outcomes	Target groups/sectors
Integrated Solid Waste Management Programme	To address the growing problem of waste management on an integrated basis that results in environmental and socio-economic benefits	<ul style="list-style-type: none"> • Conduct the characterization of waste streams with a focus on identifying the potential for reduction, recycling and reuse; • Promote segregation of waste at the source and 	<ul style="list-style-type: none"> • Improved awareness about waste generation and its impacts; • Adoption of integrated waste management by local authorities; • Improved health and sanitation condition; 	<ul style="list-style-type: none"> • Government agencies • Local authorities • Households • SMEs and businesses • Service institutions • Recycling companies • CBOs & NGOs • Waste handlers

		<p>waste-to-resource conversion activities including composting;</p> <ul style="list-style-type: none"> • Promote an integrated mechanism for the effective collection and transfer of waste; • Promote the appropriate disposal methods • Conduct public awareness and education on the ‘3-R’ principles; • Review of tax incentives • Establish solid waste management system in tourism sector 	<ul style="list-style-type: none"> • Creation of employment and income generation for local communities; • Encouragement of organic farming; • Increased life-span of existing land fills; 	
Pilot activity	Objective	Activities	Results/Outcomes	Target groups/sectors
Sustainable tourism programme	To enhance the national benefits to be obtained from the development of the Tourism sector on a sustainable basis	<ul style="list-style-type: none"> • Identify the key issues and hot spots related to the sector; • Build upon the work of existing initiatives including the Tour Operator’s Initiative; • Conduct training and education on sustainable tourism 	<ul style="list-style-type: none"> • Improvement in the general awareness of the public and sector operators; • Reduction of environmental pollution and degradation; • Improved profile of the tourism sector which 	<ul style="list-style-type: none"> • Tourism operators; • Sectoral associations • Government agencies responsible for the sector; • Tourists • Local communities

		<p>practices and approaches targeting both operators and tourists;</p> <ul style="list-style-type: none"> • Develop peripheral suburbs as tourism destinations • Build capacity in the local communities • Develop/adopt a code of conduct that could be abided by the industry; • Promote labelling and recognition mechanisms that recognizes continuous improvement; • Promote sustainable building and design in the sector; • Collaborate with the Marrakech Taskforce on Sustainable Tourism; 	<p>leads to national economic benefit;</p> <ul style="list-style-type: none"> • Possibilities of new business development including community-based businesses; 	
Pilot activity	Objective	Activities	Results/Outcomes	Target groups/sectors
Demand- side management and water harvesting	To improve the availability of water and promote efficient utilization of water	<ul style="list-style-type: none"> • Identify the key areas which have significant water loss; • Develop the major steps and practices that need 	<ul style="list-style-type: none"> • Improved awareness about water as important resource; • Increased ability of providing water to 	<ul style="list-style-type: none"> • Local government and water utility companies; • Hotels and related service industries;

		<p>to be adopted to address the inefficiency points;</p> <ul style="list-style-type: none"> • Conduct public awareness and education programmes to promote efficient use and practices; • Encourage institutions and households to collect rain water for domestic utility; • Promote water pricing that encourages efficient water use; • Promotion of community-managed water supply systems; • Promote the use of recycled water for irrigation after treatment. 	<p>more people with the available capacity;</p> <ul style="list-style-type: none"> • Household and business benefit from reduction of water bill; • Possibility for avoiding water scarcity and stress; 	<ul style="list-style-type: none"> • Manufacturing industries and SMEs; • Residential areas and local communities
Pilot activity	Objective	Activities	Results/Outcomes	Target groups/sectors
A programme on sustainable building and construction	To ensure the development of the building and construction sector on a sustainable basis	<ul style="list-style-type: none"> • Identify locally available knowledge on sustainable building and promote their replication; • Promote the 	<ul style="list-style-type: none"> • Improved resource efficiency over the life cycle of a building; • Health benefits from improved in-house conditions; 	<ul style="list-style-type: none"> • Universities and R & D Institutions • Professional association of Architects, Engineers, etc;

		<p>introduction of sustainable building and construction principles and approaches in institutions of higher learning curriculum;</p> <ul style="list-style-type: none"> • Conduct on-job training for practicing engineers and designers both in private and public institutions; • Promote resource efficient building materials through public procurement and infrastructure developers; • Collaboration with the Taskforce on SBC and the Sustainable Building and Construction Initiative. 	<ul style="list-style-type: none"> • Engineers and designers with improved skills and knowledge about SBC; • Possible economic savings and benefits; 	<ul style="list-style-type: none"> • Construction sector • Regulatory institutions;
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Table 4.3. Implementation and monitoring mechanisms for the pilot activities

Pilot activity	Implementing institutions	Verifiable indicators	Possible source of funding
Demand-side management programme on energy use	<ul style="list-style-type: none"> • MNCPC • UEM/FE • FUNAE • EDM 	<ul style="list-style-type: none"> • Number of institutions and households covered by the programme; • Total KWh of electricity saved; • The economic saving per household and institutions. 	<ul style="list-style-type: none"> • Local/National • Bilateral/Development agencies • Multilateral/international • Small Grant programmes
Education for sustainable consumption and production	<ul style="list-style-type: none"> • MEC • UEM/FLCS • MNCPC • NGOs 	<ul style="list-style-type: none"> • Number of students and public reached by the programme; • Number of SCP clubs established; • SCP-related initiatives undertaken; 	<ul style="list-style-type: none"> • Noruega • Danida • Oxfam • Italy
Integrated Solid Waste Management Programme	<ul style="list-style-type: none"> • Maputo Municipality • MICOA • MNCPC • Interwaste • MISAU • FUNAB 	<ul style="list-style-type: none"> • The volume of waste taken out of the stream • The value made out of recycling and reusing waste; • The number of employments generated through recycling; • The number of 	<ul style="list-style-type: none"> • GTZ, DANIDA, FUNAB

		<p>cases/fines for littering and pollution;</p> <ul style="list-style-type: none"> • The number of reported medical cases related to environmental hygiene; • The number of people reached through the awareness programme; 	
Sustainable tourism programme	<ul style="list-style-type: none"> • MITUR • MNCPC • FEMA • UEM(Faculty of Engineering) • MEC • Maputo and Matola Municipality 	<ul style="list-style-type: none"> • Number of operators signed-up for the code of conduct; • The amount of savings (energy, water) realized from improvement programmes; • Number of operators recognized as champions; • Results of survey on the perception of the destination by tourists; 	<ul style="list-style-type: none"> • USAID, • Netherlands, • France Cooperation
Demand- side management and water harvesting	<ul style="list-style-type: none"> • UEM • MNCPC • Maputo Municipality • FDC 	<ul style="list-style-type: none"> • Number of institutions and households covered by the programme; • Total water volume saved and collected through harvesting; 	<ul style="list-style-type: none"> • CIDA • Netherlands • UNICEF

		<ul style="list-style-type: none"> • The economic saving per household and institutions; • Volume of recycled water reused for different purposes; 	
A programme on sustainable building and construction	<ul style="list-style-type: none"> • MEC • UEM(FE, Faculty of Architecture • ORDEM • CTA • FDC 	<ul style="list-style-type: none"> • Number of graduates with sufficient knowledge on SBC; • Number of professionals participated in the on-job training; • Number of locally available knowledge and practices identified and promoted; • Total volume of savings on resource over a life cycle of building; • The number of dwellers in slums; 	<ul style="list-style-type: none"> • Finland, • UK, • Italy, • Japan

5. CONCEPT NOTES ON CONCRETE PROJECTS

The selection of priorities for the development as pilot projects was done on the meeting of the Steering Committee on 31st of March 2008 followed by the organisation of wide workshop on the 08th of August 2008 where main stakeholders were invited . On this meeting, the members of the Steering Committee selected six priorities to be developed as pilot projects and are as follow:

1. Integrated Solid Waste Management Programme,
2. Education for Sustainable Consumption and Production Programme
3. Sustainable Tourism Programme,
4. Demand-side Management Programme on energy use,
5. Demand-side management and water harvesting programme,
6. Programme on Sustainable Building and Construction

The members of the Steering Committee have shown some concerns regarding the challenges facing the Maputo and Matola cities on Integrated Solid Waste Management Programme and the capacity of the present programme on solving some of the problems such as:

- Collection of solid waste system,
- Economic and institutional sustainability of the councils, need for capacity building of human capital, resources for the implementation of the Integrated Solid Waste Management Programme,
- Focus on concrete programmes of recycling,
- Create an appropriate environment for the development of national enterprises on recycling of plastics, metal, paper and ensure the implementation of the system of solid waste segregation.

On the other hand, on the meeting with main stakeholders, the following comments were made regarding the proposed activities on each pilot program.

1. Integrated Solid Waste Management Program:

The following were recommended to be included:

- Review of tax incentives for the promotion of solid waste segregation
- Establishment of solid waste segregation system in the tourism sector

- Incineration of solid waste should not be considered due to high costs and low calorific value.

2. Education for Sustainable Consumption and Production Program

The following activities were recommended to be included:

- Creation of a database on good practice of Sustainable Consumption and Production

3. Sustainable Tourism

The objective should be to consider local communities as main actors and beneficiaries on the development of tourism taking in consideration the existing potential on culture and traditional cuisine.

The following activities were recommended to be included:

- Develop peripheral suburbs as tourism destinations/route which has history and cultural potential
- Build capacity in the communities on tourism guide matters, traditional cuisine, sanitation and Mozambican culture

5.1 INTEGRATED SOLID WASTE MANAGEMENT PROGRAMME

Matola Municipality has a population of about 600.000 people and generates about 320 tons of household waste per day, while Maputo Municipality has a population of about 1.200.000 inhabitants and generates about 1134 tons of waste per day. Of this, about 40% is organic matter, and 2% is of recyclables (2003). No research on markets waste has ever been carried out, but it is assumed that this waste has a much higher percentage of organic material, and the total amount going to dumpsite is of course higher than the mentioned 40%. This creates a great potential for the production of compost, which can be used in the urban farming and nurseries.

Compost protects and nourishes plants and soil. It reduces overall water requirements. For the preferred cereal and other crops grown in Mozambique, compost is the solution of the future in terms of a simultaneous improvement in both crop

productivity and soil fertility. The basic requirement for real development in the country is an increase in the production of food crops. The drive toward self-sufficiency in food production is a top priority in Mozambique. Teaching composting techniques should be high on the list of means toward this end.

The 2% of recyclables, while a small figure in absolute terms, it amounts to a total of about 872,4 tons per month, which can be significant for some families who make their living as *scavengers*. This is excluding the waste coming from industries, which is not accounted for, as there is no reliable data yet. Currently, there are people involved in the collection of these recyclables (*scavengers*) and some small-scale production of compost.

A substantial proportion of people in Matola and Maputo use firewood for their cooking, which plays a big role in forest devastation in the region with its negative consequences. By using paper and wood waste to fabricate charcoal (*briquettes*), less forest could be devastated for the purposes of firewood. Briquettes burn better, produce less smoke than most of the conventional biomass used for cooking.

One important goal of this project is to handle correctly 100% of recyclables and organic waste in Matola and Maputo. The achievement of that objective would dramatically reduce the cost of waste management and would add value to waste, contributing strongly to poverty alleviation and to a cleaner environment.

5.1.1 OBJECTIVE:

To address the growing problem of waste management on an integrated basis that results in environmental and socio-economic benefits

5.1.2 ACTIVITIES

- Conduct the characterization of waste streams with a focus on identifying the potential for reduction, recycling and reuse;
- Promote segregation of waste at the source and waste-to-resource conversion activities including composting;
- Promote an integrated mechanism for the effective collection and transfer of waste;

- Promote the appropriate disposal methods including incineration of hazardous waste.
- Conduct public awareness and education on the ‘3-R’ principles; Review of tax incentives for the promotion of solid waste segregation.
- Establishment of solid waste segregation system in the tourism sector

5.1.3 OUTCOMES

- Improved awareness about waste generation and its impacts;
- Adoption of integrated waste management by local authorities;
- Improved health and sanitation condition;
- Creation of employment and income generation for local communities;
- Encouragement of organic farming;
- Increased life-span of existing land fills.

5.1.4 TARGET GROUPS

Target groups will be the Government agencies and local authorities, households, SMEs and businesses, Service providers, Recycling companies, CBOs & NGOs and Waste handlers

5.1.5 VERIFIABLE INDICATORS

- The volume of waste taken out of the stream
- The value made out of recycling and reusing waste;
- The number of employments generated through recycling;
- Solid waste segregation system in place in the tourism sector

5.1.6 PROJECT MANAGEMENT

The Mozambique National Cleaner Production Centre will coordinate the SCP programme for integrated solid management in close cooperation with the keys actors such as Maputo and Matola municipalities, Eduardo Mondlane University, MICOA, Interwaste, FUNAB and the Ministry of Health.

5.2 EDUCATION FOR SUSTAINABLE CONSUMPTION AND PRODUCTION

5.2.1 BACKGROUND

As part of the development of the 10 Year Framework Programme on Sustainable Consumption and Production for Maputo and Matola Cities, the Steering Committee meeting on 31.03.08 selected three activities to be developed as pilot project for implementation. One of the activities is Education for Sustainable Consumption and Production.

The area of education is one of the strategic options defined in the Agenda 2025, as part of the scope of human capital. The Agenda 2025 is particularly concerned with the education and training in its various aspects emphasising, inter alia, Basic Education, Technical and Vocational Training, Education for Science and Technology as well as Civic, Moral and Ethical Education.

The secondary education is of strategic importance within the scope of comprehensive training in the fact that it is attended both by young persons about to enter the productive market and by people who are simultaneously engaged in productive activities and in school.

The challenge in the implementation of education for sustainable consumption and production is to include this strategic option in the development of human capital.

This could be achieved by:

1. Ensuring the inclusion of aspects of sustainable consumption and production in the comprehensive education for the Mozambican
2. Ensuring that aspects of sustainable consumption and production are included in the development of science and technology as one of the determining factors for improving the quality of human capital and for increasing its use as a production factor. Science and technology constitute a potential input for economic growth, for the eradication of poverty, and for improving the living conditions.

3. Ensuring implementation of sustainable consumption and production in Basic Education for all young people in school age, thus honouring the commitment taken in DAKAR during the meeting of the AMCEN.
4. Improving economic, social, environmental and educational conditions, as to provide population with an acceptable awareness on sustainable consumption and production standards.
5. Supporting populations in Maputo City as to increase production and productivity through training in aspects of sustainable consumption and production.

5.2.2 AIMS AND OBJECTIVES

The aim of this activity is to integrate sustainable consumption and production aspects into all aspects of education with focus in the following specific objectives:

- Development of locally adopted education materials on sustainable consumption and production
- Disseminate the education materials with primary target on primary and secondary school students
- Facilitate establishment of sustainable consumption and production clubs in schools
- Promote general public awareness through media programmes and public events

5.2.3 DESCRIPTION OF ACTIVITIES AND INDICATORS

Description	Indicators
Develop of locally adopted education materials on SCP	1 manual developed, 5 posters and leaflets
Printing of developed manual, posters and leaflets	50 manuals, 250 posters and 500 leaflets
Awareness workshop on SCP	5 for secondary school and 5 for primary schools
Establishment of SCP clubs	10 clubs established
Public awareness through media programmes on SCP	Newspapers, TV

5.2.4 TARGET GROUPS

General public, primary and secondary schools, media professionals, NGOs and CBOs.

5.2.5 PROJECT MANAGEMENT

The project will be coordinated by the Mozambique National Cleaner Production Centre in close cooperation with other relevant stakeholders such as Ministry of Education, University Eduardo Mondlane/ Faculty of Social Sciences and NGOs

5.3 SUSTAINABLE TOURISM

5.3.1 Background

The most recent trends and forecasting studies by the World Tourism Organisation indicate that cities will continue to be in high demand by tourists of all sorts, and the problems associated with the handling of these tourists will have to be more systematically tackled by all parties concerned.

Cities face, therefore, a double challenge. Firstly, they have to be able to respond to the expectations and needs of the growing numbers of tourists who are attracted to their rich and varied array of cultural, business, entertainment, shopping, sports and other attractions; furthermore, they need to continuously renovate and improve such facilities in order to maintain their share in the competitive tourism market and the benefits resulting from it. Secondly, cities have to ensure that tourism is developed and managed in such a way that it benefits the resident population, does not contribute to the deterioration of the urban environment but rather to its enhancement, and does not become a financial burden to the local authority.

Some of the key stakeholders in urban tourism include:

- Private Sector i.e. airlines, hotel chain operators and owners, tour operators, credit card companies, tourist attraction operators (theme parks, events etc.), real estate agencies;
- Public Sector i.e. city managers (from the historic city to the seaside resort), transportation planners, bus and train operators, information departments, economic development agencies, national parks, national tourist organisations;
- Tourist Institutions i.e. museums, art galleries, historic facilities (e.g. the national trust) and educational organisations.

5.3.2 AIMS AND OBJECTIVES

Consider local communities as main actors and beneficiaries on the development of tourism taking in consideration the existing potential on culture and traditional cuisine.

5.3.3 DESCRIPTION OF ACTIVITIES AND INDICATORS

Objective:	
Description of activities	Indicators
Conduct training and education on sustainable tourism practices and approaches targeting both operators and tourists;	Numbers of operators and tourists trained, training materials developed
Develop/adopt a code of conduct that could be abided by the industry	Code of conduct developed and numbers of operators
Promote labelling and recognition mechanisms that recognizes continuous improvement	Number of operators receiving awards
Capacity building in collaboration with the Marrakech Task Force on Sustainable Tourism	At least one training activity
Develop peripheral suburbs as tourism destinations/route which has history and cultural potential	At least one suburb developed as tourism destination
Build capacity in the communities on tourism guide matters, traditional cuisine, sanitation and Mozambican culture	At least one community trained in aspects of guidance, traditional cuisine, sanitation and local culture

5.3.4 TARGET GROUPS

Tourism operators, sectoral associations, community based organisations, government agencies responsible for the sector, tourists, Ministry of Education and Culture.

5.3.5 PROJECT MANAGEMENT

The project will be coordinated by the Mozambique Cleaner Production Centre working in close collaboration with other stakeholders such as Maputo and Matola Municipal Councils, Ministry of Tourism, Business Forum for Environment, UEM/Faculty of Engineering, Ministry of Education and Culture (ARPAC, CNCD)

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