

SUSTAINABLE WASTE MANAGEMENT POLICY IN KENYA

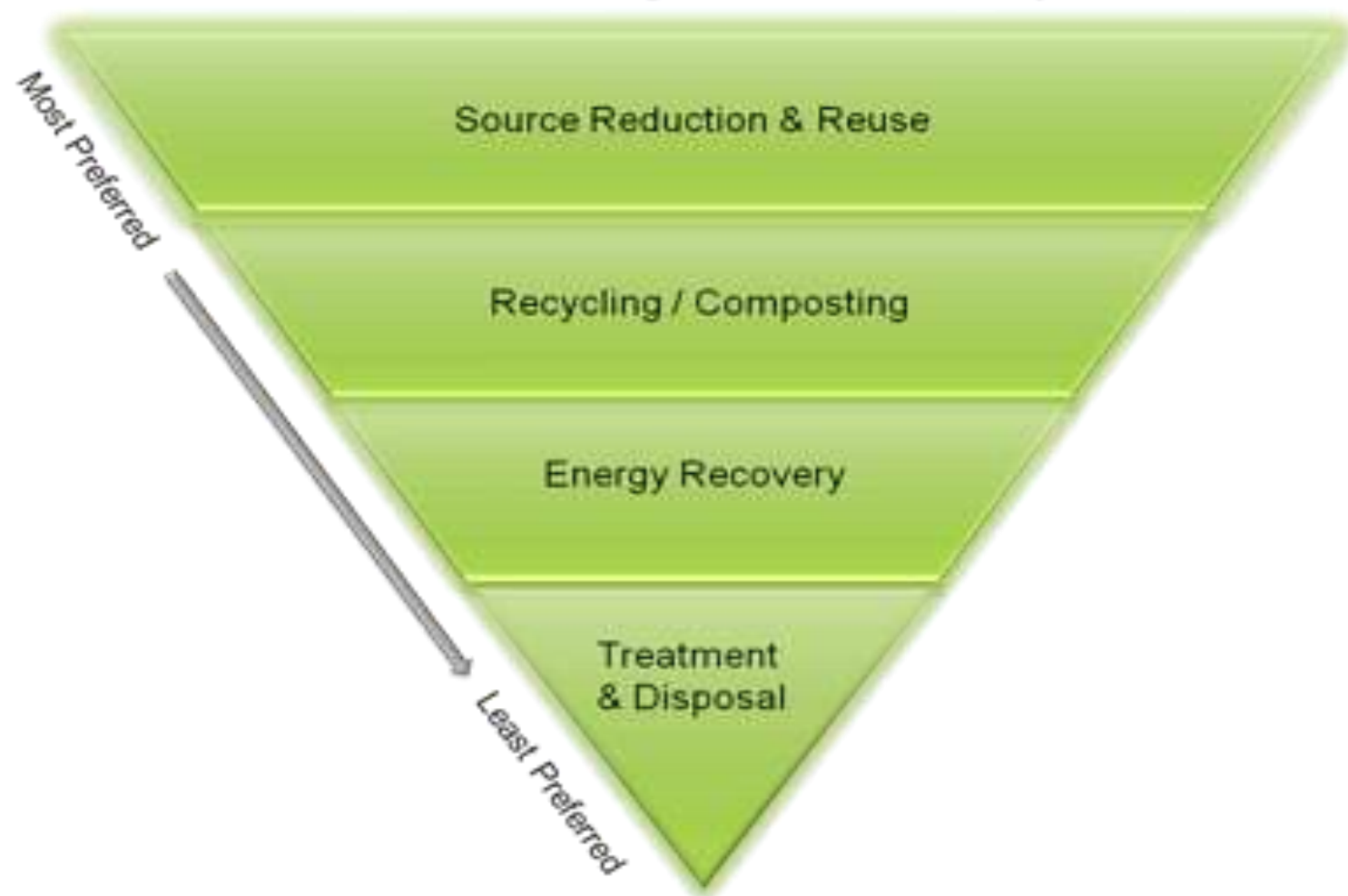
PRESENTED BY

MINISTRY OF ENVIRONMENT AND FORESTRY

PHILOSOPHY OF SUSTAINABLE MATERIALS MANAGEMENT

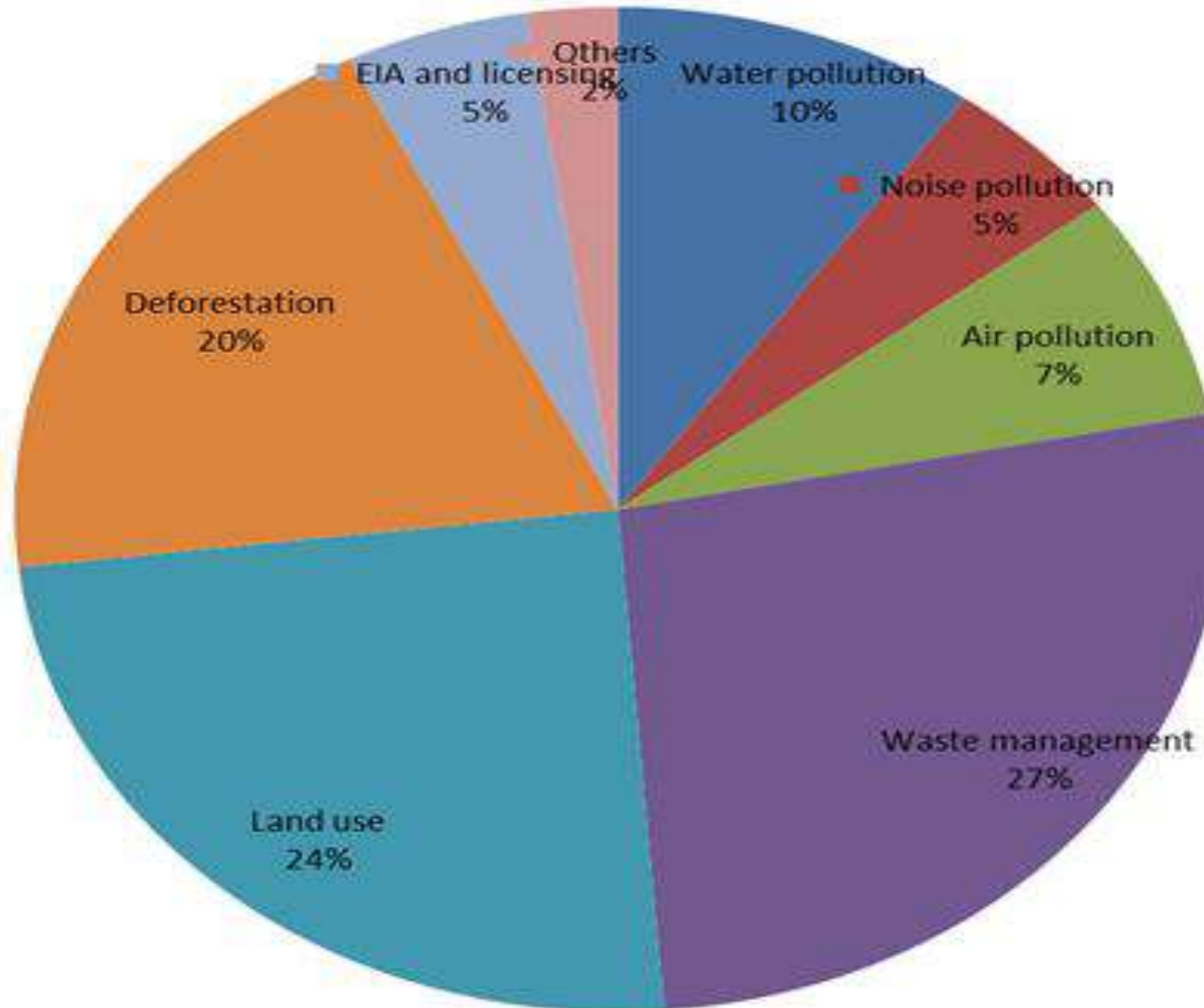
- Traditional approach to waste management is Reduce, Reuse, Recycle
- The globally accepted philosophy for sustainable materials management of non hazardous waste is known as the, “ WASTE MANAGEMENT HIERARCHY”.
- The Waste Management Hierarchy recognises that no single waste management approach is suitable for managing all materials and all waste streams in all circumstances.

Waste Management Hierarchy



ENVIRONMENTAL COMPLAINTS INVESTIGATED BY THE NECC (JUNE, 2018)

Categories of Complaints investigated



The Sustainable Waste Management Policy 2019

SWM Policy Summary

- Every Kenyan generates 0.5 kgs of waste daily, equal to 22 million tonnes nationally.
- Kenyan waste is 60% organic, 30% recyclables and 10% others.
- Current waste management practice is linear
- The Sustainable Waste Management Policy 2019 aims to further Kenya's development goals by providing mechanisms for promote circular economy in waste management that promotes consideration of waste as a resource, extraction of maximum value and safe disposal of residual waste. This will create thousands of jobs for Kenyans.
- SWM Policy identifies sixteen (16) priority circular economy intervention areas namely Waste prevention and reduction; Re-use; Segregation; Mapping; Collection; Transportation; Service Providers; Material Recovery facilities (MRFs) and operators; Recycling; Composting; Waste treatment before disposal; Transiting from Dumpsites to landfills; Incineration; Waste Reporting and Audit.
- SWM Policy identifies eight (8) enablers namely strengthening the Institutional Framework; setting up financial mechanisms; education and public awareness, formalization of the informal sector; capacity development; mainstreaming of gender, youth and special needs; collaboration and stakeholders participation; and research and knowledge management.

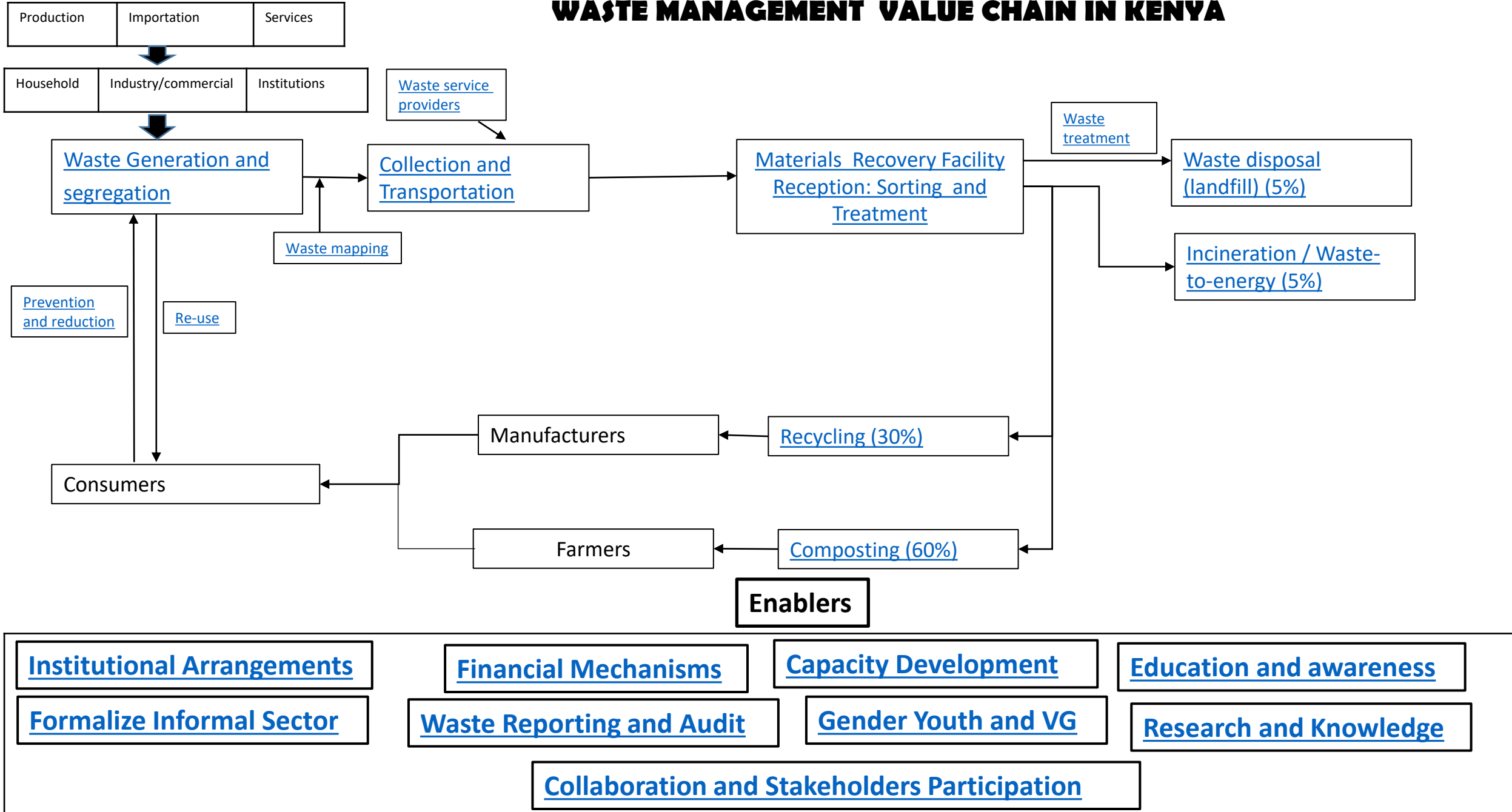
Objectives of the Policy

- Promote sustainable waste management through implementation of the waste hierarchy and circular economy concepts.
- Enhance mapping, planning, segregation, collection, transportation and audit of waste.
- Strengthen the institutional framework that enables and enforces integrated planning, budgeting, decision-making and implementation, at both the national and county level.
- Set up transparently managed financial mechanisms at national and county level to invest in waste management infrastructure.
- Engage, strengthen and build partnerships with all stakeholders, including private and informal sector, as well as the general public, including education for responsible waste management behaviour.

Guiding principles of the policy

- **Right to a clean and healthy environment**
- **Right to sustainable development**
- **Principle of Environmental Protection**
- **Principle of Proximity**
- **Precautionary Principle**
- **Polluter pays principle**
- **Zero Waste principle**
- **Extended producer responsibility**
- **System of deposit**
- **Partnership**
- **Devolution and Cooperative government**
- **Equity and social inclusion**
- **Integrity and transparency**

CONCEPTUAL MODEL FOR THE PROPOSED CIRCULAR ECONOMY FOR WASTE MANAGEMENT VALUE CHAIN IN KENYA



Delivering Sustainable Waste Management Policy 2019

Intervention areas

1. Promote Waste prevention and reduction
2. Promote Waste Re-use
3. Promote Waste Segregation
4. Prioritize Waste Mapping
5. Improve Waste collection
6. Improve Waste Transportation
7. Manage Waste Service Providers
8. Establish Material Recovery facilities (MRFs)
9. Regulate Materials Recovery Facility Operators
10. Upscale Waste recycling
11. Upscale Waste Composting
12. Ensure Waste treatment before disposal
13. Transiting from Dumpsites to Landfills
14. Establish Landfills-(Final Disposal)
15. Guide Incineration (Waste to Energy)
16. Upscale Waste Reporting and Audit

Delivering SWM Policy

Enablers

- 1. Strengthening the Institutional Framework
 2. Setting up financial mechanisms
 3. Education and public awareness
 4. Formalization of the informal sector
 5. Capacity Development
 6. Mainstreaming of Gender, Youth and Special Needs
 7. Collaboration and Stakeholders Participation
 8. Research and knowledge management

Delivery and Coordination Mechanisms

- Institutional Roles and Responsibilities (including establishment of Waste Management Council, County Coordination units, annual reports.
- Coordination of implementation of SWM Policy and Bill
- Monitoring and Evaluation
- *Nairobi City County Government has already prepared its Waste Management Action Plan. Other Counties expected to follow suit.*

Waste hierarchy -

• National Government

- Develop law that prioritises waste hierarchy
- Develop 10 year rolling national waste management plan
- Support county governments to establish waste management infrastructure.
- Review and align waste management regulations to this policy.

Counties

- Align county waste management laws and strategies to the waste hierarchy.
- Domesticate the national waste management action plan
- Set aside sufficient land for waste management activities
- Establish and improve waste management infrastructure.

Waste prevention and reduction

National Government

- Develop a 5 year rolling national solid waste management strategy
- Develop framework for adoption of green procurement in public sector.
- Develop economic instruments that promote waste prevention.
- Develop regulations on use of eco-friendly raw materials, cleaner production technologies and manufacture eco-friendly products and packages.
- Develop regulations on declaration of lifecycle environmental impact of products and packaging.
- Develop sustainable packaging regulations
- Develop labelling guidelines

• Counties

- Prioritise waste prevention and minimisation in conformance to the waste hierarchy when developing waste management plans and legislation.

Waste Re-use - using again components or the product

National Government

- Develop a national re-use framework for unutilised or excess goods
- Develop regulations and standards for central collection system, storage, re-use

Counties

- Provide well managed central collection centres for materials that can be harvested from waste that can be reused.

Waste recycling -

National Government

- Review all laws, regulations and reclassify waste as “unsegregated” and “recyclable”.
- Review and align licencing regime of waste management service providers to harmonize categorization, fees.
- Develop regulations on handling end of life vehicles, machinery and equipment.
- Enhance market for recycled materials.
- Develop quality standards for recycled materials.
- Promote functional market for waste and recycled materials.
- Develop economic instruments in favour of local recyclable materials.
- Exempt recycling business from taxes.
- Enforce recycling through licensed service providers.
- Develop co-processing guidelines to encourage the use of waste as raw material e.g for energy sector.

County

- Promote a functional market for waste and recycled materials.
- Initiate a market and mechanism within the county procurement system to prioritise recycled materials.
- Develop county regulations to require county institutions to recycle through licensed service providers.

Waste Composting

National Government

- Provide technical support to county governments and private sector.
- Develop guidelines and standards and review legislation to recognise compost and organic fertiliser.
- Support market development of compost - to 40 % quota system for organic fertilizer in national and county fertilizer subsidy program.
- Public awareness campaign on composting.

County

- Carry out feasibility study to identify potential sites for setting up composting plants and financial requirements.
- Establish composting sites.
- Establish procedures for providing incentives to private sector in composting ventures.

Waste treatment before disposal

National Government

- Develop regulations for residual waste to be pre-treated to remove key recyclables.
- Inert waste be treated to reduce toxicity, volume and negative impact before final disposal.
- Review and align regulations for treatment of toxic and hazardous waste.
- Prescribe the form and contents of license application for waste handling.
- Put in place a framework for enhancing access to both local and internationally best practices.
- Develop health and safety standards for all waste treatment facilities.
- Develop standard competency based training curricula for waste treatment operators.

County

- Domesticate waste treatment before disposal in County legislation.
- Recyclers, bio-waste processors and material recovery facilities to obtain environmental compliance licences from NEMA.

Transiting from Dumpsites to Landfills

National Government

- Develop guidelines for closure and decommissioning of existing dumpsites.
- Ban all open burning of all waste.
- Ban disposal of toxic, hazardous, unsorted, recyclables and biodegradable waste in dumpsites and landfills.

County

- Develop a 3 year plan to transit from dumpsites to landfills.
- Develop regulations and levying structure to promote the closure of open dumpsites
- Establish engineered landfills.
- Implement the ban imposed by the national government.

Landfilling-(Final Disposal)

National Government

- Develop standards and engineering and design of landfill sites.
- Develop landfilling regulations
- Develop regulations on special conditions for disposing waste.
- Develop guidelines for landfills operations, automation and management.

County

- Designate landfills according to the national and county waste management plan.
- Ensure that landfills are only used for residual waste.
- Establish an engineered landfill in its county boundaries.
- Engage in inter-county or county economic bloc agreement for common disposal of waste in a jointly managed engineered landfill.
- Develop a public private partnership and concession framework for establishment and operation.
- Impose landfill fee to deter waste from landfills and dumpsites.
- Domesticating national guidelines and regulations on landfilling.

Incineration (Waste to Energy)

- Develop incineration guidelines and regulations.
- All incinerators to acquire environmental licences from NEMA.

Waste Mapping

National Government

- Develop a national data collection system and baselines for all waste types.
- Develop a national reporting system for monitoring and enforcement.
- Maintain a regularly updated waste management database.
- Incorporate waste management indicators into the National Integrated Monitoring and Evaluation System
- Map the waste value chain

County

- Set up data collection system of the county waste streams, volumes and handlers.
- Incorporate waste management indicators into the County Integrated Monitoring and Evaluation System.
- Put in place measures to harness the waste value chain.

Waste Segregation

National Government

- Develop regulations to demand source segregation receptacles at premises.
- Design standard waste segregation receptacles to be mainstreamed in building designs.
- Develop food waste regulations.
- Develop harmonised regulations and guidelines for the minimum waste fractions.
- Develop regulations requiring all hazardous and radioactive waste to be sent to a licensed recycling and recovery facility locally and abroad.
- Carry out national public awareness on waste segregation, colour codes.

County

- Streamline and harmonise national and county regulations on licensing of sorting sites.
- Enforce waste fractions segregation at source.
- Ensure waste service providers provide separate waste segregation containers.
- Carry out county public awareness on waste colour codes and sorting.

Waste collection

National Government

- Develop regulations on design, size, construction and maintenance of public waste receptacles.
- Develop regulations on construction waste.
- Develop extended producer responsibility regulations.
- Develop regulations for deposit return system
- Develop regulations and standards for refund marking of products and containers.
- Specify materials and packaging subject to be managed under compulsory deposit return system.
- Develop regulations that all bottle containers and cans to have ISSN number or re-use/recycling mark.
- Develop and formalize trade-in, take-back schemes, and innovative approaches for collection.
- Develop economic incentives to incentivise reverse vending machines, balers and compactors.
- Ensure labelling of products or containers with a refund marking.

County

- Establish “public collection centres” guided by the principle of proximity.
- Ensure citizens have access to waste collection services and receptacles
- Develop regulations and guidelines for county cleaning, collection and transportation schedules
- Adopt nationally prescribed design, the size, construction and maintenance of public waste receptacles.
- Authorise placing of waste receptacles on county public places.
- Enforce requirement that property owners, landlords and caretakers be responsible for waste dumped in front and around their facilities.
- Ensure all public places within their jurisdiction are clean.
- Foster cooperation with Resident Associations
- Ensure public event organisers submit waste management plan of waste generated.

Waste Transportation

National Government

- Develop segregated waste transportation designs for trucks and waste transportation vehicles and handcarts, GPS tracking device in waste collection trucks.
- Develop guidelines requiring all legal entities or individuals to provide identification and waste manifest.
- Review and align all existing waste and recovered materials transport regulations to this policy.
- Ensure waste transportation trucks adhere to air quality regulations.
- All waste transportation shall be licenced by NEMA.

County

- Review and harmonise waste transportation charges.
- Develop designs, guidelines for operations for Material Recovery Facility (MRF).
- Develop guidelines for waste transportation that is aligned to national regulations.

Waste Service Providers

National Government

- Establish a national integrated network of waste service providers
- Develop guidelines, standards and regulations and licensing requirements to harmonize waste management services
- Publish annually locations and managers contacts of established and licensed waste facilities.

County

- Ensure waste collectors and transporters take their collected waste to materials recovery facilities.
- Publish annually a list of licensed waste service providers.
- Supervise and regulate waste management service providers operating in their jurisdiction.

Waste Service Providers Collectors and Transporters

- Collect and transport waste from locations specified in their contracts
- Adhere to determined collection and transportation schedules.
- Submit a 3 year waste management plan.
- Develop customer charters and provide protective equipment and proper identification of their employees/waste handlers.
- Provide health safety information to all staff and visitors.

Material Recovery facilities (MRFs)

National Government

- Develop regulations on operations of MRFs
- Material Recovery facilities be licensed by NEMA
- Ban unsorted waste dumping.

County

- Redesign existing dumpsites into Materials Recovery Facility (MRFs).
- Facilitate establishment of materials recovery facilities (MRFs).
- Establish MRFs.
- Domesticated and enforce national regulations and guidelines on MRFs.
- Consolidate an annual report of the MRFs and submit to the Ministry responsible for environmental matters.
- Collect and transport residual waste from MRF to the landfills.
- Ensure MRFs be the only facilities allowed to take waste to engineered landfills.
- Provide enabling environment for private sector to establish MRFs
- Enforce ban on unsorted waste dumping

Materials Recovery Facility Operators

- To submit a 3 year waste management plan with clear linkages to waste collectors, recycler and landfills for the area of coverage as part of the licensing requirements.
- Automate their operations and record keeping.
- Provide data on waste handled quarterly to county governments.

Strengthening the Institutional Framework

National Government

- Review and align current national waste management strategy to the waste management hierarchy and circular model.
- Establish an inclusive National Waste Management Council.
- Establish a secretariat of the Council under the Environment Secretary.
- License materials recovery facilities, waste treatment facilities and landfills.
- Establish public legal redress on waste management matters.

County

- Ensure waste management enforcement and inspection regime is robust and well resourced.
- Domesticated the national waste management plan.
- Mainstream county waste management oversight in the county environment committee.
- Individuals and households shall contribute to the costs of providing the waste services provided.

Setting up financial mechanisms

National Government

- Adopt a sustainable waste management finance strategy and eligibility criteria.
- Attract internal and external sustainable waste management finance
- Ensure sufficient resources for institutions engaged in sustainable waste management education and public awareness.
- Provide incentives, removal of investment barriers.
- Prepare and implement a comprehensive, full costing of the national waste management action plan.

County

- Set up a 5 year waste Infrastructure delivery programme.
- Allocate resources for sustainable waste management actions in county budgetary processes.
- Build capacity to mobilise and enhance absorption of resources.
- Promote the creation of green jobs
- Support waste management enterprises at county level.
- Waste generators shall contribute to the cost of waste management services.

Waste Reporting and Audit

National Government

- Publish bi annual national report on waste management
- Prescribe standards for waste auditors and accreditation of bodies eligible for waste assessment and audit.
- Establish annual consultative forum for Waste Management
- Development and stock taking towards the set waste hierarchy priority targets.

County

- Provide semi-annual waste data reports to the national waste management council.
- Waste management utilities to submit quarterly waste handling operational report to Counties.
- Waste management utilities to keep records of waste related transactions.

Education and public awareness

National Government

- Develop a training and certification curriculum for waste management professionals.
- Enhance the mainstreaming of sustainable waste management in education curriculum at all levels.

Concurrent

- Incorporate waste management knowledge into governments public awareness initiatives
- Support, media, private sector and civil society in incorporating waste management into their advocacy and public awareness raising programmes
- Encourage smart purchasing.
- Provide timely information on waste management using diverse platforms including their websites.

Formalization of the informal sector

- Translate the waste hierarchy campaign in local languages for easier understanding.
- Support establishment and formalization of the informal sector including waste pickers groups.
- Train the informal groups on waste management and safety
- Strengthen linkage between informal sector with markets for recycled materials.
- Assign communal waste collection centres and transfer stations to formalised groups.
- Support waste management initiatives of the formalized groups through County Waste Funds.

Capacity Development

National Government

- Develop and implement a sustainable waste management capacity development strategy targeting all players.

County

- Prioritize proximity in capacity building and waste management interventions.
- Domesticating the national sustainable waste management capacity development strategy.

Mainstreaming of Gender, Youth and Special Needs

- Ensure and enhance the participation of the youth and vulnerable groups in sustainable waste management decision-making and implementation.
- Engender all activities of the SWM policy
- Undertake a systemic analysis of the various special needs to guide inclusion and provision of job opportunities and incentives for people with such needs.

Collaboration and Stakeholders Participation

- Promote international collaboration to harness best practices, technology and resources for waste management.
- Strengthen partnerships for implementation of the waste management hierarchy
- Direct industry to align their waste management approaches and priorities to this policy.
- Develop and implement a partnership strategy
- Promote and facilitate regional waste management approaches for certain types of wastes where economic viability is a challenge.

Research and knowledge management

- Enhance the capacity of stakeholders to develop and utilise technological innovations for waste management.
- Establish waste and material recovery research and training institution to build professional waste management capacity in the country.
- Develop a portal to share waste related data and information.
- Identify research and technology needs and promote strategic and systematic waste management-related research, impact and vulnerability assessments, and technology development and diffusion.
- Enhance linkages between government, academia, private sector, civil society and global sustainable waste management innovation institutions.

END

THANK YOU