



REPUBLIC OF KENYA

Ministry of Environment, Climate Change and Forestry
(MoECCF)

Draft National Circular Economy Strategy and Implementation Plan



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2027–2032

This report was commissioned by the Ministry of Environment, Climate Change and Forestry of Kenya. The road map was developed by Kenya Private Sector Alliance KEPSA and Intellectap, in collaboration with the EU Circular Economy Resource Centre (EU CERC) and the Danish Energy Agency.

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Foreword

[Foreword by the Cabinet Secretary, Ministry of Environment, Climate Change and Forestry, to be added in the published document]

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The development of CESIP reflects the collective commitment of government, the private sector, development partners, academia, civil society, and other stakeholders to advancing a resource-efficient, competitive, inclusive, and sustainable circular economy in Kenya. Their continued collaboration will be essential to translating the Strategy's priorities into practical actions and measurable outcomes.

Responsibility for the content of this document, including any errors or omissions, rests with the drafting team. As this version remains a **draft for validation**, the Ministry welcomes further input and recommendations from stakeholders during the validation workshop and county public participation processes. These contributions will inform the finalisation of the Strategy and strengthen its relevance, ownership, and effectiveness in guiding Kenya's circular economy transition.

National Steering Committee for Circular Economy Strategy and Implementation Plan

[To be added]

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List of Abbreviations

Acronym	Full term
AFA	Agriculture and Food Authority
AfCFTA	African Continental Free Trade Area
AFD	Agence Française de Développement
AfDB	African Development Bank
AMCEN	African Ministerial Conference on the Environment
ANDE	Aspen Network of Development Entrepreneurs
ASTGS	Agricultural Sector Transformation and Growth Strategy
AU	African Union
BETA	Bottom-up Economic Transformation Agenda
C&D	Construction and Demolition
CA	Communications Authority of Kenya
CAK	Competition Authority of Kenya
CBC	Competency Based Curriculum
CBK	Central Bank of Kenya
CBO	Community-Based Organisation
CDACC	Curriculum Development, Assessment and Certification Council
CE	Circular Economy
CEJAD	Centre for Justice and Accountability in Development
CERC	EU Circular Economy Resource Centre
CESIP	Circular Economy Strategy and Implementation Plan
CIDP	County Integrated Development Plan
CoG	Council of Governors
CO ₂	Carbon dioxide
CTA	National Cotton, Textile and Apparel Policy
DFI	Development Finance Institution
DOSHS	Directorate of Occupational Safety and Health Services
DRS	Deposit-Return Scheme
DVS	Directorate of Veterinary Services
EAC	East African Community
EACO	East African Communications Organisation
EEE	Electrical and Electronic Equipment
EMCA	Environmental Management and Coordination Act

Acronym	Full term
EPR	Extended Producer Responsibility
EPRA	Energy and Petroleum Regulatory Authority
EPROK	Electronic-waste Producer Responsibility Organisation of Kenya
EPZ	Export Processing Zone
EPZA	Export Processing Zones Authority
ESPR	EU Ecodesign for Sustainable Products Regulation
EU	European Union
EUR	Euro
FAO	Food and Agriculture Organisation of the United Nations
FGD	Focus Group Discussion
FRAMES	Framework for Resource and Materials Efficiency Scenarios
GCF	Green Climate Fund
GDP	Gross Domestic Product
GESIP	Green Economy Strategy and Implementation Plan
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GWh	Gigawatt-hour
GWP	Global Warming Potential
HAPROK	Hazardous Packaging Producer Responsibility Organisation of Kenya
HDPE	High-Density Polyethylene
ICIPE	International Centre of Insect Physiology and Ecology
ICT	Information and Communications Technology
ICVCM	Integrity Council for the Voluntary Carbon Market
ILRI	International Livestock Research Institute
IUCN	International Union for Conservation of Nature
JICA	Japan International Cooperation Agency
JKUAT	Jomo Kenyatta University of Agriculture and Technology
KALRO	Kenya Agricultural and Livestock Research Organisation
KAM	Kenya Association of Manufacturers
KBA	Kenya Bankers Association
KEBS	Kenya Bureau of Standards
KeFS	Kenya Fisheries Service
KENAS	Kenya Accreditation Service
KeNaWPWA	Kenya National Waste Pickers Welfare Association
KeNIA	Kenya National Innovation Agency

Acronym	Full term
KEPRO	Kenya Extended Producer Responsibility Organisation
KEPSA	Kenya Private Sector Alliance
KES	Kenya Shillings
KESI	Kenya Education Staff Institute
KGBS	Kenya Green Building Society
KICD	Kenya Institute of Curriculum Development
KII	Key Informant Interview
KIPPRA	Kenya Institute for Public Policy Research and Analysis
KIRDI	Kenya Industrial Research and Development Institute
KNBS	Kenya National Bureau of Statistics
KNQA	Kenya National Qualifications Authority
KPLC	Kenya Power and Lighting Company
KRA	Kenya Revenue Authority
KS	Kenya Standard
KSG	Kenya School of Government
LN	Legal Notice
LSK	Law Society of Kenya
MARPOL	International Convention for the Prevention of Pollution from Ships
MCAK	Mitumba Consortium Association of Kenya
MDA	Ministries, Departments and Agencies
MEL	Monitoring, Evaluation and Learning
MoALD	Ministry of Agriculture and Livestock Development
MoECCF	Ministry of Environment, Climate Change and Forestry
MRF	Material Recovery Facility
MRV	Measurement, Reporting and Verification
MSEA	Micro and Small Enterprises Authority
MSME	Micro, Small and Medium Enterprise
MTEF	Medium-Term Expenditure Framework
MW	Megawatt
NACEA	National Advisory Committee on Environment and Audit
NACOSTI	National Commission for Science, Technology and Innovation
NAMA	Nationally Appropriate Mitigation Action
NCA	National Construction Authority
NCPB	National Cereals and Produce Board

Acronym	Full term
NDC	Nationally Determined Contribution
NEMA	National Environment Management Authority
NFSP	National Fertilizer Subsidy Programme
NGO	Non-Governmental Organisation
NITA	National Industrial Training Authority
NPAP	National Plastics Action Partnership
NRF	National Research Fund
NSSF	National Social Security Fund
OECD	Organisation for Economic Co-operation and Development
PAKPRO	Packaging Producer Responsibility Organisation
PCPB	Pest Control Products Board
PCR	Post-Consumer Recycled (material)
PELUM	Participatory Ecological Land Use Management
PET	Polyethylene Terephthalate
PETCO	PET Recycling Company of Kenya
PIR	Post-Industrial Recycled (material)
PP	Polypropylene
PPA	Power Purchase Agreement
PPE	Personal Protective Equipment
PPP	Public-Private Partnership
PPRA	Public Procurement Regulatory Authority
PRO	Producer Responsibility Organisation
PV	Photovoltaic
PVC	Polyvinyl Chloride
RIA	Regulatory Impact Assessment
SACCO	Savings and Credit Co-operative Organisation
SDECC	State Department for Environment and Climate Change
SEZ	Special Economic Zone
SEZA	Special Economic Zones Authority
SHA	Social Health Authority
SHIF	Social Health Insurance Fund
SME	Small and Medium Enterprise
SMS	Short Message Service
SWMA	Sustainable Waste Management Act

Acronym	Full term
TC	Technical Committee
TVET	Technical and Vocational Education and Training
TVETA	Technical and Vocational Education and Training Authority
TWG	Technical Working Group
UN	United Nations
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNIDO	United Nations Industrial Development Organisation
USD	United States Dollar
VAT	Value Added Tax
VSO	Voluntary Service Overseas
WEEE	Waste Electrical and Electronic Equipment
WRI	World Resources Institute
WRS	Warehouse Receipt System
WRSC	Warehouse Receipt System Council

Glossary of Key Terms

Technical terms are explained briefly where they first appear in the text and gathered here for reference.

Term	Meaning
Aggregation layer	The middle of the value chain where collected material is sorted, baled, dried, cooled or stored before it goes to processors, such as sorting centres, cold stores and composting sites
Bio-slurry	The nutrient-rich residue left after organic matter is digested in a biogas digester, usable as fertiliser
Blended finance and first-loss	Combining public or concessional money with commercial finance; the first-loss portion absorbs early losses so that commercial lenders will invest
Characterisation study	A study that measures how much of each type of waste is generated and what it is made of
Chemical recycling	Processes that break plastics down into chemical building blocks or fuels, rather than melting and remoulding them
Circular economy	An economy that keeps products and materials in use for as long as possible and designs out waste and pollution
Clearing and allocation mechanism	A system that allocates each tonne collected to a single PRO so that it is not claimed twice
Cogeneration	Producing electricity and useful heat together from the same fuel, such as bagasse in sugar mills
Concessional finance	Loans or grants on terms better than the market, such as lower interest rates or longer repayment periods
Deposit-return scheme	A system in which consumers pay a small refundable deposit on a container and get it back when they return it
Design for disassembly	Designing buildings and products so that parts can be taken apart and reused at the end of their life
Digital product passport	A digital record of a product's materials, origin and environmental footprint that buyers and regulators can read
Dumpsite	A site where waste is deposited without engineered containment, leachate control or cover
Eco-modulated fee	An EPR fee that is higher for products that are hard to recycle or hazardous and lower for those designed for recycling
Ecodesign	Designing products to use fewer resources and to be easier to repair, reuse and recycle
Extended producer responsibility (EPR)	A policy that makes producers responsible, usually by paying fees, for managing the waste from the products and packaging they place on the market
Feedstock	Material used as an input to a process, such as sorted plastic for a recycler
Frass	The residue left by insects reared on organic waste, used as fertiliser
Hard-to-recycle streams	Wastes, such as multilayer packaging, that cannot be recycled economically with current technology and markets

Term	Meaning
Industrial symbiosis	Firms exchanging waste, by-products, energy or water so that one firm's residue becomes another's input
Leverage ratio	The amount of private or commercial capital mobilised for each unit of public or concessional capital
Material flow account	A record of the materials entering, used in and leaving an economy
Material recovery facility (MRF)	A facility where mixed recyclables are sorted and prepared for recycling
Mitumba	Imported second-hand clothing and footwear traded in Kenyan markets
Offtake agreement	A contract in which a buyer commits in advance to purchase a facility's output
Pay-as-you-go	A model in which customers pay for equipment, such as solar systems, in small instalments, often by mobile money
Pre-processing	Preparing collected material for recycling through sorting, dismantling, shredding, washing or baling
Producer responsibility organisation (PRO)	A body licensed to carry out EPR obligations on behalf of producers, collecting their fees and contracting collectors and recyclers
Product-as-a-service	A business model in which customers pay for the use of a product, such as leasing, while the supplier keeps ownership and responsibility for repair and take-back
Recycled concrete aggregate	Crushed concrete from demolition reused as a building material
Recycled content	The share of a product or package made from recycled material
Refurbishment	Restoring a used product to good working order so that it can be sold or used again
Rendering	Processing animal by-products such as blood and bone into meal, fat and other products
Results-based finance	Funding paid only when agreed results have been independently verified
Reverse logistics	Systems that move used products and packaging from consumers back to producers, recyclers or refurbishers
Sanitary landfill	An engineered disposal site that isolates waste from the environment through liners, leachate collection and daily cover
Source separation	Separating waste into streams, such as organic and dry recyclables, where it is generated
Take-back scheme	An arrangement in which retailers, producers or institutions accept used products for reuse, repair or recycling
The 10Rs and three Cs	The ten circular strategies from refuse to recover, ranked by how much value they retain, and the three value-chain categories they sit in (Section 2.4)
Type approval	The approval that electrical and communications equipment needs before it can be sold in Kenya
Upcycling	Turning waste materials or discarded products into new products of higher quality or value

Term	Meaning
Warehouse Receipt System	A system that lets farmers store produce in certified warehouses and borrow against the receipt
Waste picker	A person who collects, sorts and sells recyclable materials from streets, households or dumpsites, usually informally

1. Executive Summary

The Kenya National Circular Economy Strategy and Implementation Plan (CESIP) focuses on five priority sectors, Agriculture and Food Systems (organic waste), Plastics and Packaging, Electrical and Electronic Equipment (e-waste), Textiles, Apparel and Fashion, and Mining, Quarrying and Construction. Across these sectors, CESIP applies a lifecycle approach that prioritises refusal, prevention, redesign, reduction, reuse, repair, refurbishment and remanufacturing before recycling and recovery. This is complemented by cross-cutting action on data, policy and regulation, public procurement, finance, skills, knowledge, infrastructure, behaviour change and institutional coordination. The Strategy is designed to build on Kenya's existing institutional architecture as much as possible rather than create parallel structures.

CESIP runs for five years, from 2028 to 2032, with 2027 as a preparatory year for validation, adoption and setting up the coordination mechanism. It is built to answer, for each commitment, what Kenya will do, by when, led by whom, at what cost and how success will be verified. The main body sets out the strategy and describes every intervention and activity. The implementation plan in Annex A carries the operating detail for each activity, and the results framework in Annex B defines how progress is measured. Delivery is governed through the Waste Management Council, supported by the CESIP Secretariat and five sector Technical Working Groups (Chapter 6), and progress is tracked through the monitoring, evaluation and learning framework in Chapter 8, including an Annual Progress Report and reviews at mid-term (2030) and at the end of the period (2032).

1.1 National Vision for Circular Economy in Kenya

Kenya's circular economy vision aims to shift the country from a traditional linear "take-make-dispose" model to a sustainable closed-loop system that eliminates waste, optimises resource efficiency, and drives green economic growth. The CESIP seeks to strengthen the circular activities already operating in Kenya, including the reuse and repair economy, informal collection and recovery networks, recycling enterprises and emerging circular businesses, while creating the conditions for these activities to become more productive, safer, investable and integrated into formal value chains. Kenya's transition is built on, and must protect the livelihoods of, the waste pickers, informal recyclers, repairers and traders who already carry out most of the country's material recovery.

1.2 Overall Goal and Strategic Objectives

Overall goal. Transition Kenya from a linear to a circular economy, reducing dependence on extraction and imports, retaining value in materials and products for longer, and cutting the pollution and waste that come from a short-cycle, disposal-driven economy.

The CESIP is anchored on the following four strategic objectives that together chart Kenya's shift towards a resource-efficient, resilient, and inclusive economy.

- i. **Consolidate fragmented CE policy into one actionable national framework.** Bring together existing laws, strategies, and initiatives into a single coherent framework with quantified targets, financing, and clear accountability, designed to avoid the "ambition without implementation" trap, and position the circular economy as an investment framework, with a strong role for the private sector, as well as an environmental priority.
- ii. **Drive transformation in five priority sectors.** Agriculture and food systems, plastics and packaging, e-waste and electronics, textiles and fashion, and mining, quarrying and construction, sectors prioritised for their environmental, economic, and job-creation potential.
- iii. **Build lasting institutional capacity for implementation.** Put in place a governance structure, data systems and skills that sustain momentum well beyond the launch.

- iv. **Anchor shared ownership through co-creation.** Build on the public consultations, county public participation sessions and validation through which CESIP has been developed, so that national government, counties, business, the informal sector and civil society own the strategy jointly, and the livelihoods of informal workers are protected as formalisation proceeds.

1.3 Eight Foundations for the First Two Years

Kenya's circular economy will not scale on projects alone. Across all five sectors, the same few missing conditions stop good enterprises from growing and deter investors from entering. CESIP therefore puts eight foundations in place first, in 2028–2029. They are the platform every sector intervention builds on and the measure by which early progress should be judged.

1. **Quality standards and certification for secondary materials.** Kenya has no quality grades for most secondary materials and no certification route for uses such as food-contact packaging. Recovered materials will find buyers only if they can be trusted to perform as well as the virgin materials they replace. KEBS will need to work with industry players and sector regulators to set grades for secondary materials, from organic fertiliser, insect meal and recycled plastic to refurbished devices, sorted textiles and recycled aggregate, and to make product standards performance-based, so that a product containing recovered inputs is held to the same quality, safety and performance requirements as one made from virgin materials. Affordable testing and certification will then let these products be graded, priced and bought with confidence.
2. **A working, legally certain EPR system.** Extended producer responsibility (EPR), under which producers pay for managing the waste from what they sell, is the main source of money for collection and recycling, but it cannot work while its legal basis is contested. MoECCF and NEMA will need to settle that uncertainty through a consultative review with producers, licensed PROs and other industry players, keep the system running in the meantime, and agree common rules and fees that reward recyclable design and pay collectors for what they actually recover.
3. **An operational Waste Management Council.** The Sustainable Waste Management Act, 2022 provides for a Waste Management Council, but the Council is not yet operational. CESIP proposes to operationalise it as the anchor of CESIP governance, rather than create a separate steering body, so that it can coordinate national and county action, recommend recycling and recovery targets and incentives to the Cabinet Secretary, align investment in waste infrastructure and mobilise financing. Without it, CESIP's recovery targets have no statutory body to review progress or broker the inter-county arrangements that regional facilities depend on.
4. **A national material-flow baseline.** Without reliable figures, targets are guesses and investors cannot size a market. KNBS and NEMA will need to agree one national measurement method and publish a baseline covering all 47 counties and every priority stream, NEMA will need to build a national waste information system with counties and industry players, and the Waste Management Council will use the baseline to recommend national recycling and recovery targets, so that government and industry share a verified picture of material flows from which to set targets and track results.
5. **Demand for circular products.** Circular products struggle to compete while buyers default to cheaper goods made from virgin materials, and government is the largest single buyer in the economy. The National Treasury, which sets public procurement policy under the Public Procurement and Asset Disposal Act, 2015, will need to make circular criteria, lifecycle costing and leasing and product-as-a-service contracts part of that policy. The Public Procurement Regulatory Authority (PPRA), which issues procurement guidelines and standard tender documents and monitors compliance, will need to build these into tender documents that procuring entities can use. Together they will create early, reliable demand for certified recycled, refurbished and service-based products, giving industry players a market to invest against.

6. **Finance for circular enterprises.** Without access to capital, circular solutions in Kenya will stay as small pilots. Finance rarely reaches the businesses that design better products and materials, repair and reuse products, or recover materials at end of life. The National Treasury will need to establish a circular economy finance facility that uses first-loss capital to crowd in private investment and DFI lending across the value chain, while a single programme led by the State Department for MSMEs prepares at least 500 circular enterprises to become investment-ready. Aligned budgets, fiscal incentives and support for research and innovation will reduce the risk for private investors and help circular businesses grow beyond grant-funded pilots.
7. **Integration of the informal workforce.** Most of Kenya's recovery is done by waste pickers, repairers and informal traders, and the transition succeeds only if it builds on their work rather than displacing it. Government will need to work through existing waste-picker and informal-worker associations to register these workers, organise them into cooperatives that contract as recognised suppliers at fair prices, provide protective equipment and health screening, and certify 15,000 workers by 2032.
8. **Counties implementing the devolved waste management function.** Waste management is devolved, so much of the strategy will be delivered in the counties. County governments will need to align their waste laws with the Sustainable Waste Management Act, build circularity into county integrated development plans and budgets, prepare county waste management plans, and provide collection centres and material recovery infrastructure. The Council of Governors will need to support them through model legislation, peer learning and capacity building, and through inter-county arrangements where waste crosses county boundaries.

1.4 Headline Targets

CESIP is measured by thirteen national headline targets (H1 to H13), set out in Section 4.1 and linked in Section 8.2 to the interventions that contribute to each. Each is currently graded provisional (an estimated baseline that the 2028 baseline studies will confirm) or developmental (CESIP must first establish the baseline), and becomes confirmed once its baseline is approved. Where no measured baseline exists, targets are set relative to the 2028 baseline and are reviewed under CC-6 (iv) once the baseline studies report. Table 1 shows a selection.

Table 1 Selected headline targets

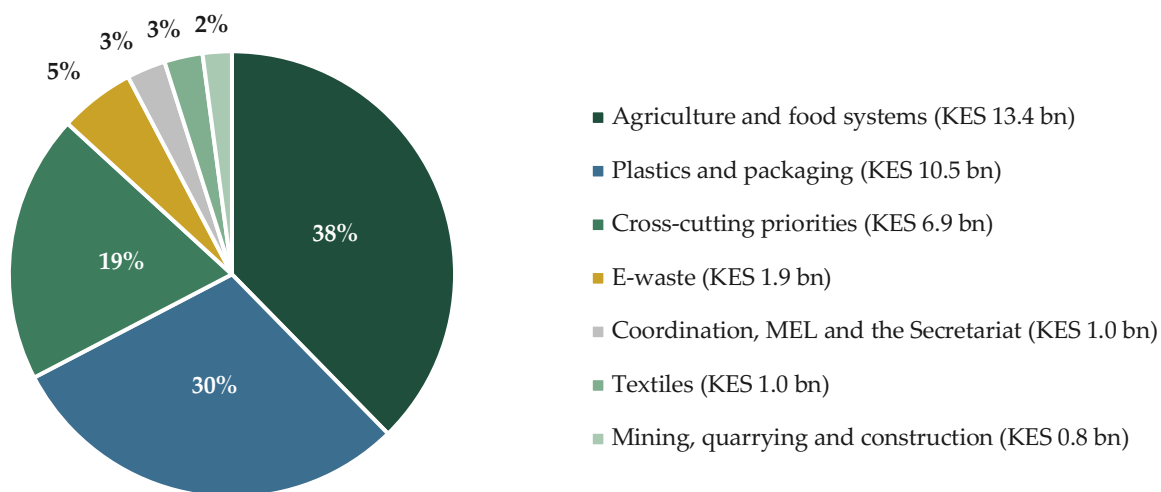
Indicator	Baseline	2030 milestone	2032 target	Class
Plastics recycling rate	About 9% (2024)	20%	30%	Provisional
Share of municipal waste separated at source	About 5% of generators	15% of generators	30% of generators	Provisional
E-waste formally collected and recycled	Under 5% (2025)	15%	25%	Provisional
Construction and demolition waste recovery rate	Near zero; no measured baseline	Baseline verified (CC-6 (ii))	20%, aligned with the NCA Strategy	Developmental
Share of public procurement meeting circular criteria	0%	10%	20%	Developmental
Circular economy jobs, including formalised informal workers, women and youth	Upwards of 46,000 (2023 estimate); confirmed in 2028	15,000 above the 2028 baseline, by sex and age	30,000 above the 2028 baseline, by sex and age	Developmental

1.5 Investment Requirement

The economic opportunity from circularity and the cost of delivering CESIP are different figures and are kept separate. Modelled estimates suggest circular approaches could unlock more than USD 700 million across the five sectors and add around 0.5 per cent to GDP by 2030 (Section 5.1). The cost of implementing CESIP is the capital and operating expenditure in Annex A, summarised by sector, year and source in the investment plan in Annex A4.

The total indicative cost of implementing CESIP over 2028–2032 is about KES 35.5 billion (about USD 273 million) at constant 2026 prices, of which KES 4.8 billion falls in 2028–2029 and KES 30.7 billion in 2030–2032 as capital investments come on stream. Agriculture and food systems (KES 13.4 billion) and plastics and packaging (KES 10.5 billion) account for two-thirds of the total, followed by the cross-cutting priorities (KES 6.9 billion) and coordination, MEL and the Secretariat (KES 1.0 billion). Indicative sources are development finance institutions and development partners (KES 10.7 billion), private investment (KES 6.0 billion), national government (KES 3.5 billion), EPR fees (KES 2.8 billion) and counties (KES 2.4 billion).

Indicative cost of CESIP by sector, 2028–2032 (KES 35.5 billion)



1.6 Summary of Priority Interventions

The strategy sets out a comprehensive set of interventions across the five priority sectors, as detailed in Chapter 4, with each intervention identifying the key activities. The completed implementation matrix in Annex A assigns a lead, milestones, costs, funding source, indicator and verification method to each activity. Interventions are sequenced across three horizons, short term (2028–2029), medium term (2030–2032) and long term (starting in the period and delivering beyond 2032). The interventions are deliberately designed to build on existing institutions and initiatives rather than create parallel structures.

Eight cross-cutting priorities (Section 4.4) carry the national actions behind these foundations and show how each applies in every sector. Alongside policy and regulation, the strategy is delivered through direct support to the enterprises that run circular business models (CC-8), drawing on the sector mapping in Section 3.3 and Annex F. The table below sets out the priority interventions for each sector, with their time horizons and lead institutions.

Table 2 Priority interventions for each sector, with horizon and lead institution

Code	Intervention	Horizon	Lead institution
Priority sector 1. Agriculture and Food Systems (Organic Waste)			
ORG-1	Implement organic fertiliser certification standards and market development	 	KEBS
ORG-2	Formulate and publish circular feed ingredient standards	 	KEBS
ORG-3	Invest in first-mile storage, drying and cold chain infrastructure		Warehouse Receipt System Council and county governments
ORG-4	Implement livestock by-product value retention and recovery	 	MoALD State Department for Livestock Development
ORG-5	Strengthen crop and agro-industrial residue valorisation	  	MoALD and Ministry of Energy and Petroleum
ORG-6	Formalise, facilitate and encourage value addition to agricultural byproducts		MoALD and Kenya Fisheries Service
ORG-7	Establish household and market-level organic waste segregation and community collection		County governments
Priority sector 2. Plastics and Packaging			
PLA-1	Adopt phased standards for recyclability, reuse and recycled content		KEBS and NEMA
PLA-2	Assess and introduce deposit-return and reuse systems	 	NEMA
PLA-3	Develop aggregation, recovery, and disposal infrastructure	 	County governments and NEMA
PLA-4	Regulate hard-to-recycle and hazardous streams	  	NEMA
Priority sector 3. Electrical and Electronic Equipment (E-waste)			
EEE-1	Implement circularity obligations at market entry through type approval reform		Communications Authority of Kenya
EEE-2	Scale repair, refurbishment and technician certification		KEBS
EEE-3	Mandate retailer take-back and incentivise consumer collection		EPROK and licensed e-waste PROs
EEE-4	Build domestic E-waste material recovery capacity	 	NEMA
EEE-5	Establish a regional (East Africa) e-waste processing hub	 	NEMA and MoECCF
Priority sector 4. Textiles, Apparel and Fashion			
TEX-1	Prepare Kenyan textile exporters for ecodesign and digital product passport requirements		State Department for Industrialization

Code	Intervention	Horizon	Lead institution
TEX-2	Strengthen local manufacturing, resale and fibre-recovery capacity	  	State Department for Industrialization
TEX-3	Strengthen textile standards for textile materials and natural-fibre content		KEBS
TEX-4	Establish a textile sorting and aggregation hub	 	Textile PRO and Nairobi City County
TEX-5	Set up a PRO for textiles	 	Textile PRO and NEMA
Priority sector 5. Mining, Quarrying and Construction			
CON-1	Mainstream design for disassembly and scale material-recovery and circular mining models		National Construction Authority and Ministry of Mining
CON-2	Standards, testing and certification for recycled and secondary materials		KEBS
CON-3	Flagship Nairobi C&D waste sorting and processing facility	 	National Construction Authority and Nairobi City County
CON-4	Align CESIP with, and resource, the NCA's C&D Waste Management Strategy	 	National Construction Authority

2. Introduction and Context

2.1 Rationale for a Circular Economy in Kenya

Kenya stands at a defining economic and ecological juncture. Its economy remains predominantly linear, built on a take, make and dispose model, in which the country generates approximately 22,000 tonnes to 24,000 tonnes¹ of waste daily and properly manages only about 25% of that volume; the rest overwhelms dumpsites, pollutes waterways or is burned in the open. Every priority sector shows the same pattern of high material loss and low recovery; the sector evidence is consolidated in Chapter 3 so that a single set of figures is maintained across the document. The circular economy is not a peripheral environmental agenda. It is a significant pathway for Kenya to economic resilience, reduced import dependence and inclusive job creation, and the case for it rests on three mutually reinforcing arguments.

Table 3 The three arguments for a circular economy in Kenya

Argument	Evidence
The economic case	Recovering domestic secondary materials reduces reliance on imported virgin inputs and retains value that is currently buried, burned or leaked. Circularity is projected to add around 0.5% to GDP. ²
The environmental case	With more than 75% of waste mismanaged ³ , circular recovery directly reduces dumpsite overflow, waterway pollution and open burning, and delivers on sustainable waste management as a named mitigation priority in Kenya's climate commitments (Section 2.3). It can also help halt and reverse biodiversity loss, and it is key to mitigating climate change.
The social and employment case	The transition is projected to create upwards of 46,000 green jobs, ⁴ and offers a route to formalise the informal workers, most of them women and youth, who already perform the bulk of Kenya's material recovery. The national waste-picker association alone reports more than 46,000 members across all 47 counties (stakeholder-reported).

These three arguments reinforce each other. The economic and environmental gains are achievable only if the informal waste sector, which performs most of the material recovery that currently happens, is structurally integrated into formal value chains rather than displaced by them. CESIP's rationale is therefore simultaneously economic, environmental and social, and the transition must be designed to be just, or it will be neither durable nor equitable. The transition also has to reach upstream. By the time a product is discarded, most of its environmental impact and value has already been fixed by decisions on design, materials and business models, which is why CESIP gives design, standards and business models the same weight as recycling and waste management.⁵

Taken together, the evidence in this strategy points to five key benefits for Kenya of moving from a linear to a circular economy:

¹National Environment Management Authority. (2025). Carbon market trading in Kenya. Ecoflash, Issue 1, 2025–2026.

²Karcher, S.Y., et al. (2020). Circular Economy in the Africa-EU Cooperation – Country Report for Kenya. Trinomics B.V., Tomorrow Matters Now Ltd., adelphi Consult GmbH and Cambridge Econometrics Ltd. Available at: [Access here](#)

³Kim, S., Davidson, A., Simmons-Stern, L., Almaguer, F., & Kyalo, D. (2023). Building the Green Economy: Trends and Opportunities for Green Entrepreneurship in Kenya. Aspen Network of Development Entrepreneurs. [Access here](#)

⁴Kenya National Plastics Action Partnership, National Action Roadmap Executive Summary, Metrics Advisory Group Meeting 4, August 2026. Preliminary results, subject to final validation. [confirm source]

⁵ UNIDO (2026), Addressing the Source: A Policy Guide for Upstream Circular Action, United Nations Industrial Development Organization, Vienna, pp. 7 and 10. The guide cites the widely used estimate that about 80% of a product's environmental impact is determined at the design stage (UNEP, 2021).

- **Growth and value retention.** Circular design, reuse and recovery could unlock over USD 700 million across the five priority sectors and add about 0.5% to GDP by 2030, capturing value that is now buried, burned or leaked.
- **Lower import dependence and a stronger industrial base.** Substituting domestic secondary materials for imported virgin inputs eases pressure on foreign exchange, cushions producers against commodity price shocks and supplies local manufacturing under the Bottom-up Economic Transformation Agenda.
- **Decent jobs and inclusion.** The transition is projected to create more than 46,000 green jobs and offers a route to formalise the informal workers, most of them women and youth, who already carry out most of Kenya's material recovery.
- **Climate action and a cleaner environment.** With over 75% of waste mismanaged, circular recovery cuts dumpsite methane, black carbon from open burning and the embodied carbon of construction, directly supporting the NDC's 35% emissions reduction commitment and opening access to carbon markets and climate finance.
- **Competitiveness and market access.** Enforceable standards, a working EPR system and verifiable recycled content help Kenyan producers meet the ecodesign and traceability requirements now emerging in export markets, while giving investors the regulatory certainty they need to commit capital.

2.2 Global and Regional Circular Economy Trends

Global momentum, stagnating circularity. Global engagement with the circular economy has nearly tripled since 2018⁶, yet the share of secondary materials in total use fell from 9.1% to 7.2% between 2018 and 2023.⁷ Part of the reason is where policy effort has gone. Of the 99 national circular economy frameworks launched since 1999, most remain centred on waste and end-of-life management rather than on design and production.⁸ Commitments alone do not move material flows; enforceable standards, working recovery systems and demand for secondary materials do, and these work best when products are designed from the outset to be reused, repaired and recycled.

The continental dimension. Africa has moved from peripheral interest to institutional commitment. The African Union's Continental Circular Economy Action Plan 2024 to 2034, co-financed and technically supported by the European Union, is the most significant circular economy policy milestone on the continent. It covers agriculture, packaging, energy, construction, electronics and textiles, and calls on all member states to develop national circular economy strategies aligned with Agenda 2063.⁹ CESIP is developed in direct response to that mandate. Kenya is a founding member of both the African Circular Economy Alliance and the African Circular Economy Network, whose work directly informed the continental plan's priority sectors; several of these are structurally identical to CESIP's, an alignment that strengthens Kenya's case for international climate and green finance.

The East African Community. At sub-regional level, regulatory convergence is gathering momentum. The proposed EAC Single-Use Plastics Bill would create a binding regional framework covering the manufacture, import, sale and disposal of specified single-use plastic items across all Partner States, with EPR provisions applicable regionally, and in 2025 EAC member states notified the World Trade Organization of harmonised product standards for food contact materials and plastic articles. CESIP's plastics strategy interfaces with both. Kenya's EPR Regulations 2024 already constitute the most comprehensive mandatory producer responsibility framework in the EAC, positioning Kenya as the de facto regional standard-setter; CESIP must be designed to sustain that leadership position, not merely to meet it.

⁶Circle Economy. (2024). Circularity Gap Report 2024. Circle Economy. Access here

⁷Circle Economy. (2024). Circularity Gap Report 2024. Circle Economy. Access here

⁸ UNIDO (2026), Addressing the Source: A Policy Guide for Upstream Circular Action, United Nations Industrial Development Organization, Vienna, p. 10, citing Chatham House and UNIDO (2025), Global Stocktake of National Circular Economy Roadmaps and Strategies: 2025 Update.

⁹Agenda 2063 is the African Union's (AU) long-term strategic framework, adopted in 2013, to guide Africa's transformation over 50 years (2013–3). It is the continent's collective agenda, and it sets out aspirations for inclusive growth, integration, peace and prosperity. Access here

Comparator experience. Kenya’s ambition is best assessed not against global averages, which reflect high-income industrial economies, but against comparable African economies that have already implemented national circular economy frameworks. Three comparators from CESIP’s benchmarking analysis are directly instructive.

Table 4 Comparator country experience

Country	What it demonstrates for CESIP
Rwanda	The most comprehensive circular economy regulatory architecture in East Africa, with the 2008 plastic bag ban (extended to single-use plastics in 2019 and operationally enforced) ¹⁰ and a National Circular Economy Action Plan. ¹¹
South Africa	South Africa has the most advanced EPR system on the continent. Mandatory EPR has applied since May 2021 to producers placing more than 10 tonnes of packaging on the market, with eco-modulated fees and rising recycled-content targets. The plastics and packaging sector alone has at least five long-standing PROs (PETCO, Polyco, Fibre Circle, MetPac-SA and The Glass Recycling Company), with more registered for e-waste, lighting, batteries and lubricant oils. Formal plastics recycling reached about 28.4% by 2024. ¹² The lesson for Kenya is that, as an EPR system matures, so does the market around it: obligations extend to new product streams, more producers comply, and the number of PROs grows to serve them
Morocco	Article 12 of the 2013 Finance Act established a 1.5% ad valorem eco-tax on the sale, manufacture, and import of plastics, ring-fenced to finance waste valorisation through the National Environment Fund. The rate was revised to 1% in 2016, alongside a national target of 22% recycling by 2022. ¹³ In 2024, the World Bank approved a USD 250 million programme supporting Morocco’s national waste management and valorisation programme, targeting an increase in the municipal solid waste recycling rate from 7% to 25% by 2034. ¹⁴ Despite this, the Zero Mika Law of 2016 banning plastic bags has not produced consistent behaviour change, as a 2024 national survey found 72% of consumers still use plastic bags on every shopping trip, eight years after the ban came into force. ¹⁵

2.3 Alignment with Kenya’s Development Priorities

This CESIP operationalises commitments Kenya has already made across its development, climate and green growth frameworks, and it is the instrument through which four of them acquire quantified sector targets, costed actions and accountability.

Vision 2030 and BETA. Kenya Vision 2030 pursues sustained growth through its economic, social and governance pillars, and a circular economy is a structural enabler of all three, since recovering domestic secondary materials reduces reliance on virgin material imports; formalising the informal waste workforce advances social equity for women and other marginalised groups; and embedding enforceable resource governance strengthens the institutional credibility investors expect. The Bottom-up Economic

¹⁰Government of Rwanda. (2019). Law No. 17/2019 of 10/08/2019 relating to the prohibition of manufacturing, importation, use and sale of plastic carry bags and single-use plastic items. Official Gazette of the Republic of Rwanda, 23 September 2019. Access here

¹¹Rwanda Ministry of Environment. (2022, December 6). Rwanda launches national circular economy action plan and roadmap [Press release]. Government of Rwanda. Access here

¹²Republic of South Africa, Department of Environment, Forestry and Fisheries. (2020). Government Gazette No. 43882: Extended Producer Responsibility Scheme for paper, packaging and some single-use products (Section 18, National Environmental Management: Waste Act No. 59 of 2008). Access here

¹³World Bank. (2022). Plastic-free coastlines: a contribution from the Maghreb to address marine plastic pollution. World Bank. Access here

¹⁴World Bank. (2024). World Bank approves new US\$250 million program to strengthen Morocco’s municipal solid waste management. World Bank. Access here

¹⁵Switch to Circular. (2023). Recycling Morocco 2023: Consumer survey. Switch to Circular. Access here

Transformation Agenda anchors circularity to industrialisation and job creation, and the Fourth Medium-Term Plan (2023 to 2027) mainstreams the green economy as a cross-cutting priority. CESIP is positioned as the implementation instrument that converts this commitment into quantified sector targets. Its 2028–2032 period follows directly on the Fourth Medium-Term Plan, so its priorities can be carried into the next medium-term planning cycle and into county integrated development plans.

Climate commitments. Kenya’s Second Nationally Determined Contribution (April 2025) provides the most legally binding alignment, as it commits to a 35% emissions reduction by 2030 to 2035 and names sustainable waste management among its primary mitigation mechanisms.¹⁶ Three of the six NDC mitigation sectors, agriculture, industry and waste, map directly onto CESIP’s priority sectors, since organic waste valorisation captures landfill methane, reduced open plastic burning cuts black carbon, and construction waste reuse lowers the embodied carbon of cement production. Kenya also pledges to cover 21% of mitigation costs domestically. Interventions that demonstrate verifiable mitigation can therefore access results-based climate finance, Article 6 carbon markets and Green Climate Fund support, provided CESIP’s monitoring framework maps sector targets to NDC-recognised contributions.

Green Economy Strategy (GESIP 2016 to 2030). GESIP provides the overarching green economy framework. However, within its first five years, it achieved only about half of its sustainability targets, with weak sector-level operationalisation identified as the primary constraint.¹⁷ CESIP addresses this directly, translating GESIP’s cross-sectoral objectives into binding sector targets, costed action plans, and an accountability framework.

Devolution. The most structurally distinctive feature of Kenya’s circular economy governance is constitutional devolution. Under the Fourth Schedule of the Constitution of Kenya 2010, county governments hold the mandate for solid waste management, reinforced by every citizen’s right to a clean and healthy environment under Article 42, but capacity, financing and infrastructure are unevenly distributed across the 47 counties, and public-private partnerships concentrate in wealthier urban counties.¹⁸ This gap between constitutional mandate and operational capacity is a structural governance deficit, not a minor implementation challenge, and left unaddressed, it risks confining the transition to a handful of counties while the majority default to linear disposal. CESIP therefore treats counties as constitutional co-implementers whose integrated development plans, budgets and investment decisions are the operational terrain on which the strategy will succeed or fail.

2.4 How the Strategy was Developed

CESIP was developed through a structured, evidence-led and participatory process. This section sets out the overall approach, the analytical methodology and the three workstreams through which the strategy was built: situational analysis, stakeholder engagement, and review and validation. Annex D gives further detail on the development process, the prioritisation criteria and consultation coverage.

2.4.1 Approach

The development process follows Sitra’s structured approach to preparing a national circular economy roadmap, adapted to Kenya’s context.¹⁹ The approach sets out nine phases (Figure 1): groundwork and preconditions; stakeholders and participation; the situational picture; vision and goals; focus areas; planning the actions; compiling and publishing the roadmap; execution and implementation; and evaluation and

¹⁶Republic of Kenya, Ministry of Environment, Climate Change and Forestry. (2025). Kenya’s second nationally determined contribution (2031–2035). UNFCCC.

¹⁷P. K. Musyoka. (2022). Greening Kenya’s Economy: An Assessment of the Green Economy Strategy and Implementation Plan. Meru University of Science and Technology.

¹⁸Ministry of Environment and Forestry. (2021). National Sustainable Waste Management Policy, 2021 . Ministry of Environment and Forestry. Access here

¹⁹L. Järvinen, & R. Sinervo. (2020). How to Create a National Circular Economy Road Map. Sitra. <https://www.sitra.fi/en/publications/how-to-create-a-national-circular-economy-road-map/>

revision. It treats a national roadmap as a combination of strategy and tangible action plan, owned by government and co-created with the actors who will deliver it.

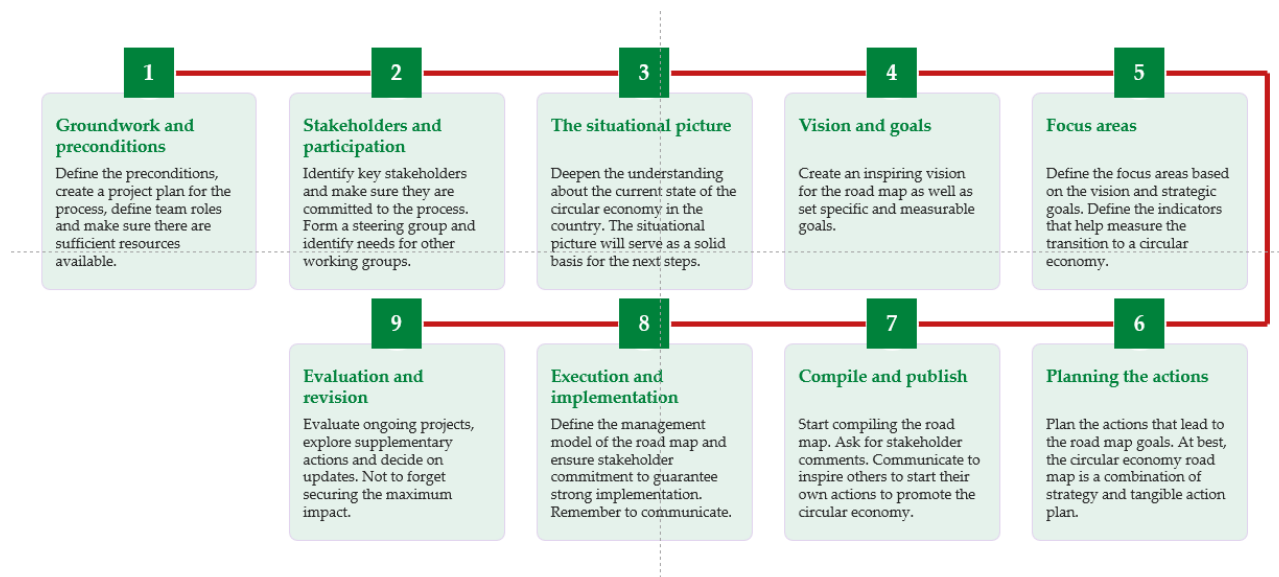


Figure 1 The roadmap process in nine phases, as applied to CESIP
Source: *How to create a national circular economy road map* (Sitra, 2020)

CESIP applies these phases as follows. Groundwork and stakeholder participation established the project plan, team roles and the National Steering Committee chaired by the Ministry of Environment, Climate Change and Forestry. The situational picture is the evidence baseline described in [Section 2.4.3](#) and presented in [Chapter 3](#). Vision, goals and focus areas are set out in [Chapter 1](#) and [Section 4.1](#), and the five priority sectors and eight cross-cutting priorities in [Chapter 4](#). Planning the actions produced the sector interventions and the implementation plan in [Annex A](#). Compiling and publishing covers the review, consultation and validation steps in [Section 2.4.4](#) and the communication strategy in [Chapter 7](#). Execution, implementation, evaluation and revision are provided through the governance arrangements in [Chapter 6](#) and the monitoring, evaluation and learning framework in [Chapter 8](#).

The approach is also aligned with UNIDO's policy guide for upstream circular action, prepared with input from the Ministry of Investments, Trade and Industry and the Kenya National Cleaner Production Centre, and in particular with its three strategic shifts: from downstream fixes to upstream design, from siloed to systemic policymaking, and from prescriptive to participatory design.²⁰

2.4.2 Methodology

The analysis applied four internationally recognised frameworks consistently across all five priority sectors, each answering a different question: the [EU categorisation of circular economy activities](#), which locates an activity in the value chain; the 10R framework, which ranks circular strategies by how much value they retain; the [Ellen MacArthur Foundation's principles](#), which set the direction of change; and the [OECD typology of circular business models](#), which classifies enterprises by how they create value.²¹ Figure 2 shows how they fit together.

The EU categorisation of circular economy activities²² groups activities and business models by their position in the value chain into four categories, referred to in this strategy as the three Cs and circular support: circular design and production (upstream), circular use (midstream), circular value recovery (downstream) and

²⁰UNIDO (2026), *Addressing the Source: A Policy Guide for Upstream Circular Action*, United Nations Industrial Development Organization, Vienna, pp. 2 and 12. <https://www.unido.org/sites/default/files/unido-publications/2026-09/Addressing%20the%20Source%20-%20A%20Policy%20Guide%20for%20Upstream%20Circular%20Action.pdf>

²¹[Complete reference for the EU circular economy framework, Sitra national roadmap guidance, Ellen MacArthur Foundation principles and the 10R framework.]

²²Business models are classified using the EU categorisation system for the circular economy (European Commission, 2020). The plastics and packaging and e-waste business models in Section 3.4.1 and Tables H2 and H3 draw on GIZ, SWITCH to Circular Economy Value Chains (SWITCH2CE), Business Value Chain Analysis: SMEs, Transitioning Firms and Joint Ventures, Draft 2, February 2026. The other sectors draw on desk research and the sector diagnostics in Annex C.

circular support, the enabling layer of tools, services and advisory that the other three rely on. This typology structures the sector snapshots in Section 3.3 and the intervention areas in Chapter 4; the circular support conditions are consolidated in Section 3.4.

The 10R framework of circular strategies (refuse, rethink, reduce, reuse, repair, refurbish, remanufacture, repurpose, recycle and recover) ranks what can be done with a product or material by how much value each strategy retains. Throughout the strategy, interventions favour the highest R strategy available before falling back to recovery.

The Ellen MacArthur Foundation’s three principles of a circular economy (eliminate waste and pollution, circulate products and materials at their highest value, and regenerate nature) shifted the analytical focus from end-of-life recovery to upstream value retention across the full product lifecycle. They guided the sector diagnostics and the design of interventions, so that prevention, reuse and repair are considered before investment in recovery infrastructure, and the regeneration principle is reflected in returning organic nutrients to soils through composting, organic fertiliser and residue valorisation.

The OECD typology of circular business models²³ groups the same business models by how they create value rather than where they sit in the value chain: circular supply, resource recovery, product life extension, sharing and product-service systems. It complements the EU categories and is used, alongside them, to classify the circular enterprises profiled in Section 3.3 and Annex F. The two typologies overlap in places, and the way CESIP resolves this is set out below.

The four frameworks are used together, as layers. The Ellen MacArthur Foundation principles set the direction for every intervention. The EU categories place each activity in the value chain, and the 10R framework ranks the strategies within each category by the value they keep: refuse, rethink and reduce sit in Circular Design and Production; reuse, repair, refurbish and remanufacture in Circular Use; and repurpose, recycle and recover in Circular Value Recovery. Circular Support carries no R strategy and enables all three. The OECD typology then classifies the enterprises that deliver these strategies by how they create value. Where the OECD and EU schemes overlap, CESIP counts each enterprise once. A firm that recovers material sits under Circular Value Recovery, and a firm that uses it as an input sits under Circular Design and Production. Durable design sits upstream and repair midstream. Sharing and product-service systems share one Circular Use sub-category.

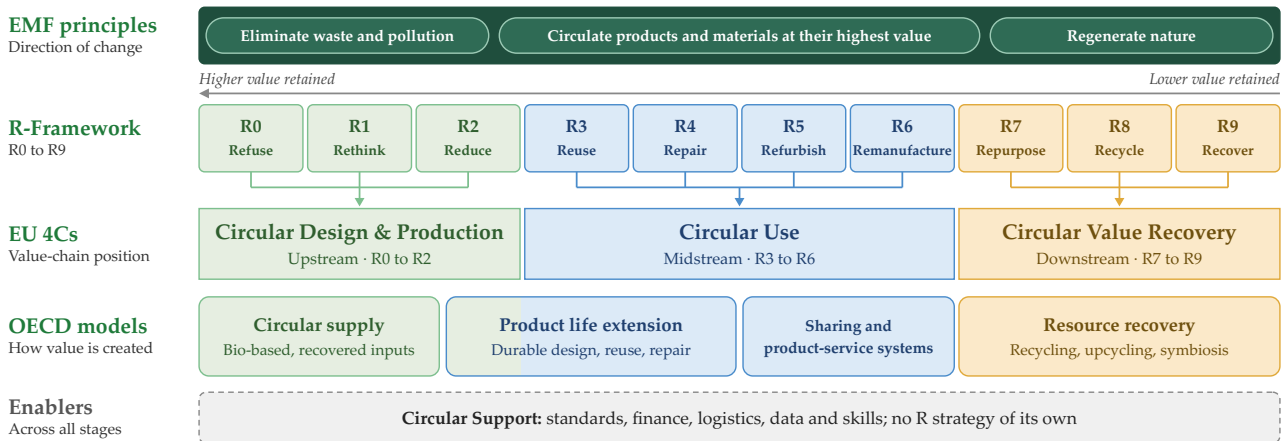


Figure 2 How the four frameworks fit together in CESIP

Source: CESIP synthesis of the EU, 10R, Ellen MacArthur Foundation and OECD frameworks

2.4.3 Situational Analysis

The situational analysis corresponds to the situational picture phase of the Sitra roadmap and built the evidence baseline on which the strategy rests. It combined a desk review, a three-tier policy and regulatory review (global, national and county), sector value chain and material flow diagnostics for the five priority

²³OECD (2019), Business Models for the Circular Economy: Opportunities and Challenges for Policy, OECD Publishing, Paris.

sectors, and stakeholder mapping that captured informal actors, enterprises and county institutions alongside national organisations. The results are presented in [Chapter 3](#), with the policy and regulatory mapping in [Annex C](#) and the baseline data register in [Annex B](#).

The desk review built on the circular economy work already undertaken in and for Kenya rather than starting afresh. Key sources included the Circular Economy in the Africa-EU Cooperation country report for Kenya (Trinomics, 2020); the Kenya Institute for Public Policy Research and Analysis study Circular Development: Accelerating the Agenda in Kenya; NEMA's circular economy assessment using the Cambridge Econometrics FRAMES model; the Green Economy Strategy and Implementation Plan and the National Sustainable Waste Management Policy (2021); the Nairobi Circular Economy Baseline Study (Climate-KIC and Wasafiri, 2024); the Aspen Network of Development Entrepreneurs' work on green entrepreneurship and on investing in the waste and circularity sector (2023 and 2024); the Circularity Gap Report (Circle Economy, 2024); and UNIDO's policy guide for upstream circular action (2026).

Sector evidence was drawn from the most recent national sources, including the Kenya National Plastics Action Partnership National Action Roadmap and the Ministry, NEMA and JICA baseline survey on plastic waste generation and recycling (both 2026, preliminary); FAO and World Resources Institute estimates of food loss and waste; the National Construction Authority's Construction and Demolition Waste Management Strategy and Implementation Plan (2026); the GIZ SWITCH2CE business value chain analysis; and Invest Kenya's assessment of waste management and circular economy investment opportunities (2026). Where national data were incomplete or contested, figures are classified by evidence level and source in Annex B.

2.4.4 Stakeholder Engagement

Stakeholder engagement corresponds to the stakeholders and participation phase of the Sitra roadmap and ran alongside the situational analysis, bringing stakeholders in as co-creators rather than reviewers. It was designed as a sequence rather than a single consultation round, with each activity serving a distinct function: gathering evidence (key informant interviews and focus group discussions), steering and review (the National Steering Committee), awareness (the pre-launch, the county public consultations and the launch) and validation (the county public consultations and the national validation workshop). Table 5 summarises the activities in stakeholder engagement.

Identification and selection of stakeholders: Stakeholders were identified through the stakeholder mapping carried out in the situational analysis, which captured informal actors, women-led enterprises and county institutions alongside national organisations. Selection followed the value chain of each of the five priority sectors, so that actors upstream (producers, importers and designers), midstream (users, repairers and aggregators) and downstream (collectors, recyclers and recovery enterprises) were represented, together with the institutions that regulate, finance and support them.

Within that frame, stakeholders were prioritised on five considerations: their mandate or influence over the sector, including regulatory, standard-setting and producer responsibility functions; the data and evidence they hold; their position along the value chain; their exposure to the effects of the strategy, with deliberate inclusion of informal workers, waste picker groups, women, youth and smallholders, who are often absent from national consultations; and geographic spread.

Evidence gathering through key informant interviews and focus group discussions

Key informant interviews (KIIs) were held between June and August 2026 across six actor categories²⁴, with 30 interviews in total. Interviewees included the producer responsibility organisations (KEPRO, PAKPRO, EPROK and HAPROK), public institutions such as the National Construction Authority, the Export Processing Zones Authority, the Kenya Bureau of Standards and the Council of Governors, development partners including UNEP, UNIDO and JICA, and enterprises and associations operating along each value chain. The interviews tested the diagnostic findings, filled data gaps and identified the binding constraint in each sector.

²⁴Six actor categories were engaged in the KIIs: the five CESIP priority sectors (Plastics and Packaging, Agriculture and Food Systems, Textiles and Apparel, Electrical and Electronic Equipment and Mining, Quarrying and Construction) together with a cross-cutting category of organizations active across more than one sector focus.

Seven thematic focus group discussions (FGDs)²⁵ were then held in July and August 2026, one for each priority sector and two cross-cutting groups on finance and investment and on informal workers. The FGDs brought together producers, recyclers, aggregators, waste picker groups, community-based organisations, financiers, researchers and public agencies to validate emerging findings, test candidate interventions and identify who should lead them. Together, the KIIs and FGDs engaged more than 110 stakeholders.

Review and steering: National Steering Committee

The first draft was shared with the National Steering Committee on 4 September 2026, with written comments due by 18 September 2026. A total of 129 comments were received from eight reviewers: Sitra, the Ministry of Environment, Climate Change and Forestry, KEPRO, the University of Nairobi, KeNaWPWA, VSO Kenya, Dr Molu and Denmark. Each comment was logged and tagged as accept, reframe, clarify or note, and the proposed responses were presented to the Committee at its update meeting on 28 September 2026, where members also guided the resolution of comments that pulled in different directions.

At the same meeting, sector breakout groups reviewed each draft intervention, decided whether to retain, revise, remove, or add new ones, and scored each for impact and feasibility on a scale of one to five. The priority score (impact multiplied by feasibility) placed each intervention in one of four categories, essential, aspirational, desirable or deferred, which inform the phasing in Section 4.6. A second set of breakout groups tested the delivery chapters on investment and financing, governance, communication and monitoring, evaluation and learning. Interventions were also assessed against common criteria, namely environmental impact, economic value, job potential, feasibility and readiness, investment potential, policy leverage and inclusion.

Awareness: pre-launch at the Annual Circular Economy Conference

CESIP was pre-launched at the Annual Circular Economy Conference on 30 September 2026 to raise awareness of the strategy, its vision and priority sectors among a wide audience of government, industry, finance, research and civil society actors. The pre-launch mattered because it extended visibility beyond those consulted directly, prepared stakeholders for the validation stage and began building the broad ownership the Sitra roadmap identifies as a condition for a strategy to be implemented rather than shelved.

Awareness and validation: county public consultations

Draft 2 was taken to county public consultations in Kisumu (6 October 2026), Nakuru (8 October 2026), Mombasa (13 October 2026) and Eldoret (16 October 2026), supported by a public awareness campaign through social media and government press. The consultations had two purposes: to spread awareness of the strategy among county officials, residents, informal workers and local enterprises, and to test whether the proposed interventions are relevant, workable and beneficial for them.

Validation: national validation workshop

A national stakeholder validation workshop on 22 October 2026 brings together representatives of all stakeholder categories to validate the full strategy and implementation plan, including the vision, priority interventions, targets, financing, governance and monitoring arrangements. The workshop is the point at which stakeholders confirm that the strategy reflects their inputs and that the evidence and priorities are sound. Its importance lies in building consensus across interests that may differ and in securing the endorsement required for formal adoption by the Ministry of Environment, Climate Change and Forestry.

CESIP Launch

The validated strategy is scheduled for national launch on 5 November 2026. The launch makes the strategy public, signals government commitment to Kenya’s circular economy transition and marks the move from strategy development to governance activation and implementation, with 2027 used as a preparatory year.

Table 5 Stakeholder engagement activities, purpose and importance

²⁵Seven thematic FGDs were conducted, engaging actors across the five CESIP priority sectors (Plastics and Packaging, Agriculture and Food Systems, Textiles and Apparel, Electrical and Electronic Equipment and Mining, Quarrying and Construction) together with two cross-cutting categories: Finance and Investments, and Informal Workers.

Activity	Timing	Who took part	Purpose	Why it mattered
Key informant interviews	June to August 2026	PROs, regulators and public agencies, development partners, enterprises and associations across six actor categories	Test diagnostic findings, fill data gaps, identify each sector's binding constraint	Grounded the diagnosis in the experience of those who hold the mandates and the data
Focus group discussions	July and August 2026	Producers, recyclers, aggregators, waste picker groups, CBOs, financiers, researchers, public agencies	Validate emerging findings, test candidate interventions, identify who should lead them	Brought competing value-chain interests into one room and surfaced informal-sector realities
National Steering Committee sessions	11 May 2026; 28 September 2026	Steering Committee members and written reviewers	Review drafts, resolve conflicting comments, score and prioritise interventions	Gave the strategy institutional direction and ownership by the bodies that will implement it
Pre-launch, Annual Circular Economy Conference	30 September 2026	Conference delegates from government, industry, finance, research and civil society	Raise awareness of CESIP and its direction ahead of validation	Built visibility and early buy-in among a wide audience beyond those consulted directly
County public consultations	Kisumu 6 Oct; Nakuru 8 Oct; Mombasa 13 Oct; Eldoret 16 Oct 2026	County officials, residents, informal workers, local enterprises, CBOs	Spread awareness and test whether the interventions are relevant and workable locally	Met the public participation requirement and checked the strategy against county realities
National validation workshop	22 October 2026	Representatives of all stakeholder categories	Validate the full strategy and its implementation plan	Secured consensus and the endorsement needed for adoption
National launch	5 November 2026	Government, partners, industry and the public	Publicly launch the validated strategy	Signals political commitment and opens the transition to implementation

Governance activation, corresponding to the execution and implementation phase of the Sitra roadmap, will be initiated following the national launch, with 2027 used as a preparatory year. This will include convening the inaugural meeting of the National Circular Economy Coordination Platform, supported by an operational manual, terms of reference and a first-year workplan. A 90-day start-up plan will then guide the assignment of institutional ownership and activation of priority interventions.

[Annex D](#) sets out consultation coverage by stakeholder category, sector, gender and county (Table D5) and lists the organisations interviewed and the FGD participants (Tables D6 and D7).

3. The Circular Economy in Kenya Today

This chapter establishes CESIP's baseline from national statistics, sector studies, policy sources and stakeholder engagement.

3.1 The National Picture

3.1.1 Resource Use, Waste Generation and Management

Kenya has no regular, harmonised national material flow account. The most complete assessment remains the 2020 Africa-EU Trinomics country report, which found per capita material consumption below the regional average but rapidly growing manufacturing throughput,²⁶ and NEMA has since applied the Cambridge Econometrics FRAMES model across six priority areas closely mirroring CESIP's sectors.²⁷ Nationally, Kenya generates an estimated 8 to 8.8 million tonnes of solid waste annually, of which more than 75% is mismanaged through dumping, open burning or disposal without treatment or recovery.²⁸ Organic material dominates the stream, at roughly 44% nationally and 60 to 80% in Nairobi.²⁹ Collection, where it occurs, ends overwhelmingly at open dumpsites rather than recovery. Dandora dumpsite was declared full in 2001 but still receives thousands of tonnes daily. The published estimates of generation and recovery vary widely by source and year, which is itself evidence of the absence of a continuous national waste-metering system. Table 6 below summarises the best available indicators; figures are drawn from different years and methodologies and should be read as indicative rather than as a harmonised account. The baseline register in Annex B records the source, year, unit, scope, definition, method and confidence level of each figure, so that figures with different denominators are not compared as if they were equivalent.

Table 6 National material flow and waste routing snapshot by priority sector

Sector	Key material flow indicator	Recovery rate	Current routing
Agriculture and food systems	Approx. 10 million tonnes of food lost or wasted annually (about 40% of production), worth about KES 72 billion; 5 to 24 million tonnes of crop residue available ³⁰	Valorisation is confined to a small number of private ventures; no national organic recovery target.	On-farm losses, informal feed use, residue burning; organic fraction of municipal waste to dumpsites.
Plastics and packaging	Approx. 680,000 tonnes of plastic waste generated (2024); about 37% collected, concentrated in urban areas ³¹	Approx. 9% recycled (regulator estimates 2 to 8%)	High-value PET and HDPE picked out by informal collectors for recyclers; flexibles and multilayer largely burned, dumped or leaked

²⁶Trinomics, Circular Economy in Africa-EU Cooperation: Country Report for Kenya, 2020; Kenya Institute for Public Policy Research and Analysis, Circular Development: Accelerating the Agenda in Kenya.

²⁷National Environment Management Authority, Circular Economy, nema.go.ke/circular-economy/.

²⁸'NEMA miffed by Kenya's 8M tonnes of waste', People Daily, 30 April 2025; Aspen Network of Development Entrepreneurs, Investing in the Waste and Circularity Sector in Kenya, September 2024.

²⁹CGIAR, Organic Waste Recycling for a Sustainable Future in Kenya, 24 September 2024.

³⁰FAO Kenya food loss and waste estimates (2024); World Resources Institute Africa, Turning the Tap on Food Loss and Waste in Kenya (2025); Scientific Reports (2026) residue availability estimates.

³¹Kenya National Plastics Action Partnership, National Action Roadmap: 2024 baseline (Metrics Advisory Group, third meeting, July 2026). Preliminary figures, subject to final validation.

Sector	Key material flow indicator	Recovery rate	Current routing
E-waste (EEE)	55,956 tonnes generated in 2025, up from 48,461 tonnes in 2021 ³²	Under 5% formally recycled; over 90% handled informally	Mixed with municipal waste; informal dismantling and open cable burning; small share to licensed facilities operating well below capacity
Textiles and apparel	Approx. 220,000 tonnes of second-hand clothing imported (2024, MCAK); domestic cotton production at 20,000 to 25,000 bales against 35,000 in the 1980s ³³	Under 1% of textile waste recycled; ³⁴ unsellable import share disputed, 2% (MCAK) to 20 to 50% (independent research)	Informal sorting and resale at Gikomba and equivalents; waste fraction to dumpsites, burning or waterways
Mining, quarrying and construction	No consolidated national inventory; construction and demolition waste estimated at about 40% of urban waste ³⁵ ; mining waste (tailings, overburden, waste rock) not tracked	Recovery and recycling near zero; informal reuse of metals and second-hand materials only	Unsegregated disposal to municipal dumpsites; informal on-site reuse and second-hand building material trade

Source as footnoted per row. NPAP figures are preliminary and subject to final validation.

3.1.2 Key Stakeholders and Institutional Landscape

Kenya's circular economy governance spans national policy institutions, the devolved county tier, standards and enforcement bodies, private sector and producer organisations, informal sector associations and development partners. Table 7 summarises the principal actors. The governance structure and the role of each institution in CESIP are set out in Chapter 6.

Table 7 Key institutions and their circular economy roles

Institution or actor	Role in the circular economy
Ministry of Environment, Climate Change and Forestry	Policy owner and CESIP commissioning ministry; anchors circularity within national environmental and climate commitments
NEMA	Principal regulator under EMCA; administers the EPR Regulations (2024), licenses waste handlers, issues sector guidelines and consults counties on enforcement
County governments and Council of Governors	Hold the devolved solid waste mandate (collection, transport, disposal); CoG coordinates county policy and represents county interests nationally; capacity varies widely
KEBS and Kenya Revenue Authority	Product, packaging and materials standards, including import verification; tariff and tax treatment that currently shapes circularity outcomes at the border

³²Kenya National Bureau of Statistics, Economic Survey 2025.

³³Mitumba Consortium Association of Kenya, key informant interview, 2026; Kenya National Bureau of Statistics Economic Survey.

³⁴National Environment Management Authority, World Cleanup Day 2025: Managing the Crisis of Textile Waste.

³⁵National Construction Authority, National Construction and Demolition Waste Management Strategy and Implementation Plan (Revised edition), 2026.

Institution or actor	Role in the circular economy
KEPSA, KAM and other sector associations	Private sector convening and advocacy; KAM's LOOP Forum catalyses circular policy dialogue and supports member EPR compliance
Licensed Producer Responsibility Organisations (PROs)	Licensed by NEMA under the EPR Regulations (LN 176/2024) to discharge producers' obligations collectively. They organise and finance the collection, sorting and recycling of the products and packaging their members place on the market (for packaging PROs, across plastic, paper and board, glass, metal and composite materials), through contracts with collectors, aggregators, cooperatives and recyclers; run consumer awareness; and report verified producer and material-flow data to NEMA
Multistakeholder platforms (Kenya Plastics Pact, NPAP Kenya)	Coordinate national plastics circularity targets and roadmaps to 2030 across government, industry, civil society and informal sector representatives
Private recyclers and social enterprises	Operate the practical recovery and valorisation infrastructure that currently exists, often in direct partnership with informal collectors, across plastics, organics, e-waste, textiles and construction materials
Informal sector associations and trade bodies	Represent the collectors and traders who carry out the bulk of actual material recovery, and second-hand clothing importers in policy consultations
Development partners	Technical advisory, financing and the sector studies that currently substitute for official statistics in several sectors

3.1.3 Informal Sector Material Flows and Circularity

With formal recycling capturing only an estimated 3 to 10% of Kenya's waste stream, depending on the material, the informal sector is, in practice, the country's primary circular economy infrastructure. Waste pickers at Dandora and similar sites recover plastic, metal, paper, glass and electronic waste before burial, sustaining most of the recycling economy that exists in Nairobi.³⁶ Estimates of the Dandora workforce range from roughly 3,000 families to 8,000 individual pickers on a given day, around 60% of them women, typically earning under USD 2 per day, and with documented occupational health harms recognised by Kenya's Environment and Land Court.³⁷ Nationally the workforce is far larger, with the national waste-picker association reporting more than 46,000 members across all 47 counties, and the health risks extend beyond plastics to e-waste dismantling, with direct lead and mercury exposure, and textile sorting. This workforce feeds a structured value chain, in which pickers sell to aggregators, who supply formal recyclers. One Nairobi plastics recycler, for example, sources about half of the roughly 140 tonnes it processes monthly from a network of around 550 informal pickers.³⁸ Mitumba trade is a distinct informal circularity system, supporting an estimated two million livelihoods, with about 91.5% of households purchasing second-hand clothing.³⁹ At a conservative substitution rate it avoids roughly 142,500 tonnes of new garment production annually. Across plastics, e-waste and textiles the same structural gap recurs, as informal collectors, traders and repairers remain largely unlicensed, excluded from social protection and absent from planning processes, even though EMCA formally requires licences for handling waste. Emerging inclusion efforts, such as informal sector

³⁶'What Happens After Dandora? Kenya's Green Transition Faces Its Hardest Test', African Arguments, July 2026.

³⁷Climate-KIC and Wasafiri Kenya, Nairobi Circular Economy Baseline Study, September 2024; 'Dandora cleanup puts waste pickers at a crossroads', Capital FM Kenya, August 2026.

³⁸Circle Economy, Mr Green Africa: Fairly Traded Recycled Plastics, knowledge-hub.circle-economy.com.

³⁹'Textile waste emerges as Kenya's new ocean crisis', Daily Nation, 16 May 2026, citing the 2025 Kenya Economic Survey and NEMA.

representation on the Kenya Plastics Pact Steering Committee and its 2030 integration targets, indicate the direction as formalising and building on these arrangements rather than displacing them.

3.1.4 Existing Circular Economy Initiatives and Programmes

A substantial base of circular activity already exists, though it is concentrated in Nairobi, driven mainly by private enterprise and development partners, and organised sector by sector rather than as a coordinated national programme. Examples range from the Nairobi solid waste NAMA and the Kenya Plastics Pact to the WEEE Centre and Africa Collect Textiles.

Taken together, these initiatives show that circular practice in Kenya is real, technically credible and in several cases commercially viable, but largely private or donor led, geographically concentrated and organised sector by sector.

3.2 The National Policy and Regulatory Context

This section maps the national policy and regulatory environment and identifies what must change at system level; the sector-specific instruments and gaps are treated within each sector snapshot in Section 3.3, while the instrument-by-instrument mapping is provided as Annex C. Throughout, the distinction is kept sharp between a gap (an instrument is missing or incoherent) and an implementation issue (a rule exists but is not applied), because the two call for different reforms.

3.2.1 Instruments Supporting the Circular Economy

Kenya's circular economy mandate rests on a small set of cross-cutting instruments rather than a single dedicated law. The Environmental Management and Coordination Act (EMCA), 1999 is the parent statute, giving NEMA its licensing, assessment and enforcement powers. While it is still in force, it was not drafted with circularity in mind. The Sustainable Waste Management Act, 2022 (SWMA) establishes the waste hierarchy as the guiding principle, provides for a National Waste Information Management System, and establishes a Waste Management Council with a statutory mandate to set targets.⁴⁰ Its Extended Producer Responsibility (EPR) Regulations, gazetted in November 2024, create Kenya's first producer-pays framework, applying on a phased schedule to packaging, e-waste and, from 2026, textiles, with at least four Producer Responsibility Organisations operational or forming, including KEPRO and PAKPRO for packaging, EPROM for electronics and HAPROK for hazardous product packaging.⁴¹

The framework's central instrument, the EPR Regulations, remains legally contested, with four cases pending and a conservatory order suspending enforcement since May 2025.⁴² Three issues are in dispute, namely (i) the process of adoption, with the Law Society of Kenya petition arguing inadequate public participation and the absence of a Regulatory Impact Assessment required under the Statutory Instruments Act, (ii) the scope of "producer" and the design of the flat KES 150 fee, contested both by importers disputing their designation and in the LSK petition itself, which argues the uniform fee has no demonstrated cost basis and falls hardest on low-margin essential goods, and (iii) the enforcement channel, after the Environment and Land Court barred NEMA in July 2026 from enforcing compliance through retailers.⁴³ Each dispute is a design input for the reforms proposed in Chapter 4. Part of the dispute is also conceptual in that some obligated producers read extended producer responsibility as open-ended liability transferred to them alone. CESIP therefore sets out clearly the complementary roles within the value chain, namely producers' financial and operational responsibility for the post-consumer management of the products and packaging they place on the market,

⁴⁰Sustainable Waste Management Act, 2022 (Cap. 387C).

⁴¹Extended Producer Responsibility Regulations (LN 176/2024); Plastic Packaging Materials Regulations (LN 181/2024); Waste Management Regulations (LN 178/2024). PROs: KEPRO (incubated from KAM, 2017); PAKPRO; EPROM (formed 2023); HAPROK.

⁴²'High Court Halts NEMA Waste Rules', Big3Africa, 9 May 2025; 'Big win for local producers as court blocks new NEMA fees', Daily Nation, 15 May 2025; CESIP Plastics and Packaging Focus Group Discussion, 5 August 2026. Status of the four pending cases to be confirmed at validation.

⁴³'Court Stops NEMA From Enforcing EPR Compliance Through Retailers Pending Constitutional Case', The Kenyan Wallstreet, July 2026.

discharged individually or through licensed PROs; consumers' duty to segregate at source; counties' collection and disposal functions under the SWMA; and retailers' take-back role. Clarifying these roles does not dilute the producer obligation established by the SWMA and the EPR Regulations, and preserves the polluter-pays principle. CESIP is therefore intended to function while resolution is pending.

Beyond the waste regime, the Public Procurement and Asset Disposal Act, 2015 contains no circularity or recycled-content criteria, leaving green public procurement, repeatedly identified as the most powerful demand-side lever government controls, unrealised. Collectively, the regime is adequate in its foundations but unsettled and uneven in application as its most circular-economy-specific instrument remains in litigation, and its strongest demand lever remains unclaimed. That unevenness, more than any single missing law, is the gap. Annex C consolidates the policy, legal and regulatory instruments reviewed for this strategy.

3.2.2 System-Wide Policy Gaps

The gaps outlined below recur across all five sectors. Taken together, they reflect a pattern common to most national strategies: policy is concentrated downstream, on collection, recycling and disposal, while the upstream decisions on product design, material choice and business models that determine most environmental impact are left largely unaddressed. Kenya's instruments are also mostly regulatory; of the five categories of policy instrument identified by UNIDO (regulation, information disclosure, economic incentives, support for voluntary action and direct government intervention), the last four are the least developed.⁴⁴

i. **No overarching circular economy framework or targets (Gap).** Kenya has no single national circular economy law or strategy tying its instruments together; CESIP is intended to be that framework. Sector circularity is being built ministry by ministry, in parallel rather than integrated, and no instrument sets economy-wide targets against which sector policies can be measured. The Waste Management Council, established by the SWMA in 2022 precisely to set targets, has yet to do so; operationalising it is the legal avenue for this reform.

ii. **Coherence and mandate overlaps (Gap).** National legislation creates committees and agencies at county level without establishing how they interface with counties as constitutionally distinct duty-bearers; NEMA and NCA both claim C&D waste oversight; EPZA has no co-regulatory role over the EPZ waste stream it sits closest to; and authority to certify new or recycled materials is unresolved between KEBS and the professional engineering bodies. UNIDO recommends that such conflicts be identified systematically by mapping the objectives and measures of each instrument against those of the others, both across ministries (horizontal coherence) and between national and county levels (vertical coherence), a task the Waste Management Council and the CESIP Secretariat

(Section 6.1) are designed to take on.⁴⁵

iii. **Enforcement architecture and data custodianship (Implementation).** Core instruments are widely described as adequate on paper but hampered by under-resourced institutions, as NEMA compliance processes are costly, its capacity to review at volume is limited, and it cannot authoritatively report waste volumes for several priority sectors, so the coordination gap is as much about who owns the data as whether it exists. The EPR Regulations have been amended twice since gazettment, so even the compliance schedule is still settling.

iv. **Devolution and county capacity (Implementation).** Solid waste is a county function, but the legislative, technical and financial architecture did not follow the function to county level; roughly 23 of 47 counties have standalone waste legislation, good practice is not replicated, and no integrated data system links county information to a national database. Counties need what climate policy provided, namely national direction

⁴⁴ UNIDO (2026), Addressing the Source: A Policy Guide for Upstream Circular Action, United Nations Industrial Development Organization, Vienna, pp. 10–12. The five categories form the guide's Circularity Policy Wheel.

⁴⁵ UNIDO (2026), Addressing the Source: A Policy Guide for Upstream Circular Action, United Nations Industrial Development Organization, Vienna, pp. 19–20.

⁴⁶ CESIP key informant interviews: Council of Governors; National Construction Authority; Export Processing Zones Authority; Institution of Engineers of Kenya, 2026.

and targets, a model county bill, defined responsibilities and a financing mechanism, rather than national projects layered onto counties without matching capacity.⁴⁷

v. **EPR fee design and PRO fragmentation (Gap).** Across sectors, EPR fees are flat and undifferentiated by material, recyclability or processing stage, directing funds towards lower-cost processing rather than higher-value recycling; competing PROs operate without a harmonised framework, creating free-riding, fee undercutting and double-counting risks; and there is no common standard for how fee income reaches recovery operators. The remedy is a common rulebook rather than consolidation, namely a NEMA-supervised common producer register, a clearing and allocation mechanism so that each tonne is claimed once, common data and audit standards, and minimum service obligations binding on every licensed PRO, co-designed with existing PROs and recognising the reporting standards they have already built, while producers retain the choice of PRO (CC-4 (iii)).

vi. **Informal sector recognised without a pathway (Gap).** Policies barely recognise the informal actors who handle most recovered material and create no registration route, protective equipment provision, health cover or linkage to buy-back centres and MRFs. Recognition without a pathway is not inclusion. This gap recurs in every sector and is addressed through CC-6 and a formalisation activity in each sector.

vii. **Fragmented data systems and absent social safeguards (Gap).** The national waste information system and agricultural MRV systems are separately and partially built; gender, youth and disability participation quotas exist in sector policy but are not applied to circular economy activities; and no transition fund, retraining pathway or income-protection mechanism protects smallholders and informal recyclers from displacement as formalisation proceeds. The fiscal dimension of these gaps, identical tax treatment of recycled and virgin inputs and duties on recovery equipment, recurs in every sector snapshot below and is taken up with the other cross-cutting enablers in Section 3.4. The National Treasury's draft Green Fiscal Incentives Policy Framework, which covers waste and manufacturing among eleven sectors and is cited internationally as a systemic approach to green fiscal reform, offers a ready vehicle for addressing them once finalised.⁴⁸

3.3 Sector Snapshots

This section sets out where each of the five priority sectors stands today and where circular interventions offer the greatest returns. Each snapshot covers material flows and current circularity, binding constraints and policy gaps, the highest-potential opportunity, quick wins, circular business models and the priority response in Chapter 4. Circular support conditions common to all five sectors, including finance, standards, skills, demand and trade, are consolidated under Section 3.4.

3.3.1 Agriculture and Food Systems (Organic Waste)

Organic waste is Kenya's largest unrecovered resource and the main contaminant of every other recyclable stream, so it is the sector where circularity can deliver the largest gains for soil health, feed costs and emissions. Losses begin before harvest. Uncertified seed and recycled planting material produce low-grade crops that processors reject, and off-grade produce is discarded at the farm gate. Organic fertiliser and circular feed ingredients sit outside the fertiliser subsidy channel and feed millers' formulations because no standard certifies them, even though insect-frass trials raised maize nitrogen uptake by 21% against urea⁴⁹. Structured aggregation works where it exists, and the warehouse receipt system is associated with post-harvest losses falling from around 40% to around 10% for participating grain deposits⁵⁰. Downstream, the value chain fails at segregation, collection, processing scale and product trust, and organic waste sits outside the EPR framework. The two binding constraints reinforce each other, since without a standard there is no market for

⁴⁷CESIP key informant interview, Council of Governors, 2026.

⁴⁸ UNIDO (2026), Addressing the Source: A Policy Guide for Upstream Circular Action, United Nations Industrial Development Organization, Vienna, p. 48, citing National Treasury and Economic Planning, Republic of Kenya (2022), Draft Green Fiscal Incentives Policy Framework.

⁴⁹ icipe INSFEED programme trial results, reported by IDRC (2022).

⁵⁰ Warehouse Receipt Systems Act 2019; Warehouse Receipt System Council reported figures, February 2026; not independently verified.

recovered material, and without segregation there is no clean feedstock to supply one. CESIP therefore prioritises product standards and subsidy access to create a paying market, then builds segregation and collection around it.

Table 8 Agriculture and food systems snapshot

Material flows and current circularity	Roughly 40% of food produced, about 10 million tonnes worth KES 72 billion, is lost or wasted each year; 5 to 24 million tonnes of crop and agro-processing residue are available; organic matter is 60 to 80% of the municipal stream and about 95% of generators do not segregate. Named formal processing capacity totals around 70,000 tonnes a year, under 1% of generation.
Binding constraints	No official standard for organic fertiliser or insect feed, so recovered material cannot be graded, priced or included in the fertiliser subsidy programme; and almost no household, market or institution separates organic waste, so there is little clean feedstock even where a standard exists.
Policy and regulatory gaps	No circular design requirements for agricultural inputs or packaging; no quantified organic waste targets; fiscal support not conditioned on circular practice and 16% VAT on composting equipment; certification costs of around KES 3 million that price out MSMEs; weak county enforcement of segregation. An existing 40% organic fertiliser subsidy quota (National Sustainable Waste Management Policy, 2021) has not been operationalised.
Highest-potential opportunity	Scale recovery where most value is lost and private investment is already flowing, namely post-harvest aggregation and storage, and organic processing through composting, insect farming and biogas.
Quick wins	Finalise and gazette KS 2290 with feedstock annexes, opening access to the fertiliser subsidy; publish the insect meal specification; introduce tiered certification thresholds so small agri-circular enterprises are not priced out.
Circular business models	▪ Upstream: circular supply of bio-based fertilisers, biochar, insect protein for feed and biological crop protection is well established, alongside circular design of durable farm equipment. ▪ Midstream: sharing models such as tractor and machinery hire, and product-as-a-service models such as pay-as-you-go solar irrigation and Cooling-as-a-Service, give smallholders access to equipment without ownership, supported by machinery repair. ▪ Downstream: resource recovery is the most mature layer, through composting, briquetting, biogas and sludge-to-fuel.
CESIP response	ORG-1 to ORG-7 in Section 4.5.1, from standards and subsidy access first, through storage, livestock and residue value recovery, to household and market segregation and community collection.

3.3.2 Plastics and Packaging

The strategic task in plastics is to move effort upstream, from managing packaging after use to designing waste out before it reaches the market. Plastic packaging in Kenya follows a largely linear chain, with imported virgin polymer accounting for around 71% of packaging consumption⁵¹. Design, however, remains the least regulated stage. The Plastic Packaging Materials Regulations, 2024 set a recycled-content requirement but do not regulate format, materials or recyclability⁵², so formats such as PVC labels, tinted PET and multilayer

⁵¹ Kenya Plastics Pact, Design Guidelines for Recyclability of Flexible Packaging Materials, 2026

⁵² The Plastic Packaging Materials Regulations, Legal Notice No. 181 of 2024, establish a recycled-content requirement (Regulation 18(2)) but no design-for-recyclability standard; the fiscal treatment of recycled and virgin inputs is identical.

sachets remain in routine use⁵³. Kenya has a base for reuse in returnable glass for beer and milk⁵⁴, and a PET deposit-return system could recover about 132,000 tonnes, or 26% of the bottle category, by 2040⁵⁵. Downstream, recovery is constrained by contamination, high transport costs for bulky material and weak end-market demand, which is why existing recyclers run well below installed capacity. The sector has the most developed policy framework of the five, but its central instrument, the EPR Regulations, remains legally contested.

Table 9 Plastics and packaging snapshot

Material flows and current circularity	About 680,000 tonnes of plastic waste generated in 2024; about 37% collected, mainly in cities; around 9% recycled by some 34 firms with underused capacity of nearly 170,000 tonnes; roughly one-third openly burned and one-quarter leaked, with about 37,000 tonnes reaching waterways each year. Non-plastic packaging (paper and board, glass, metals and cartons) has very different recovery economics and is not yet quantified.
Binding constraints	EPR litigation and the suspension of enforcement create regulatory uncertainty; there is no national quality standard for recycled material; and recycled and virgin inputs carry the same tax treatment, so producers have no price incentive to substitute.
Policy and regulatory gaps	No phased pathway for the 30% recycled-content requirement and no food-grade certification route; no mandatory design-for-recyclability or reuse standard; no route for absorbent hygiene products and hazardous packaging; county and national licensing not harmonised.
Highest-potential opportunity	Upstream design change before packaging enters the market, eliminating hard-to-recycle formats and expanding reuse, which delivers the largest modelled waste reduction to 2040.
Quick wins	Lower tax on recycled inputs than on virgin material; harmonise county and national licensing; assign a governing regime and treatment route for absorbent hygiene products.
Circular business models	▪ Upstream: circular design of mono-material, recyclable packaging and circular supply of post-consumer recycled content are led by established converters, while bio-based packaging is at pilot stage. ▪ Midstream: reuse models, including refill and returnable packaging systems, are commercially deployed and distinguish Kenya within the region. ▪ Downstream: resource recovery dominates, mainly aggregation and pre-processing, with fewer recycling and recycled-product manufacturing models and emerging digital waste marketplaces.
CESIP response	PLA-1 to PLA-4 in Section 4.5.2, covering design standards and recycled content, an assessed deposit-return scheme and reuse infrastructure, a three-tier recovery network and hard-to-recycle streams, with packaging standards, procurement, fees and EPR governance under the cross-cutting priorities.

3.3.3 Electrical and Electronic Equipment (E-waste)

With little local manufacturing of electrical and electronic equipment (EEE), Kenya's main levers over e-waste are the point of import and the repair and recovery economy. About 70% of equipment is imported, while

⁵³ Kenya Plastics Pact, Design Guidelines for Recyclability of Flexible Packaging Materials, 2026

⁵⁴ CESIP Plastics and Packaging Focus Group Discussion, 5 August 2026.

⁵⁵ Kenya National Plastics Action Partnership, National Action Roadmap Executive Summary, Metrics Advisory Group Meeting 4, August 2026 (preliminary).

local production is limited to the emerging assembly of mobile phones and off-grid solar products⁵⁶. Product design is regulated indirectly by KEBS, the Communications Authority of Kenya and NEMA, without a single ecodesign framework. Reuse and repair are the most established circular activities, centred on markets such as Computer Village, River Road and Luthuli Avenue, with an informal repair network beyond them. Formal collection and processing remain the weakest links. Licensed capacity is underused because neither material nor EPR fee payments are reaching processors. Since collections began in January 2026, members of the electronics PRO have declared about 44,000 tonnes placed on the market, against about 1,500 tonnes collected and recycled⁵⁷. Hazardous, low-value fractions are exported, while informal dismantling and open cable burning expose workers and communities around Dandora to lead and other toxic substances⁵⁸. CESIP therefore prioritises a graduated EPR fee that channels revenue to collectors and recyclers, backed by circularity conditions at type approval.

Table 10 E-waste snapshot

Material flows and current circularity	E-waste generation rose from 48,461 tonnes in 2020 to 55,956 tonnes in 2025; about 70% of equipment is imported; over 90% of recovered volume is handled informally and under 5% is formally recycled; formal processing capacity is around 375 tonnes a year and underused. Reuse, resale and repair markets are well established.
Binding constraints	Type approval carries no repairability, recyclability or hazardous-substance criteria; the EPR fee is flat rather than graduated; and fee revenue is not reaching recyclers and collectors.
Policy and regulatory gaps	No circular design requirements; no circularity obligation at market entry; fragmented product standards and no disposal route for non-recoverable fractions; county instruments almost absent and cross-county fees on collection vehicles.
Highest-potential opportunity	Formalise and scale the existing reuse, repair and refurbishment economy, which already shows commercial viability and strong emissions savings, with structured take-back.
Quick wins	A direct, verified payment channel for collection and recycling; harmonised branding and compliance requirements for collection vehicles across counties.
Circular business models	▪ Upstream: there are no established models, as local production is limited to assembly; circular design of modular and repairable products, hazardous-substance compliance for imports and second-life batteries are open opportunities. ▪ Midstream: most circular value sits here, in refurbishment and resale, a large informal repair economy, and product-as-a-service models such as pay-as-you-go devices and battery swapping. Downstream: take-back schemes feed dismantling and pre-processing, with higher-value fractions exported.
CESIP response	EEE-1 to EEE-5 in Section 4.5.3, running from market-entry obligations, through repair and refurbishment and take-back, to domestic recovery and a regional processing hub, with the formalisation of informal dismantlers under the cross-cutting priorities.

⁵⁶ Electrical and Electronic Equipment (EEE) Focus Group Discussion, 4 August 2026.

⁵⁷ EPROM, key informant interview, 2026.

⁵⁸ Human Rights Research Center, Lead Exposure from E-waste: A Case Study of Dandora Dumpsite, March 2026.

3.3.4 Textiles, Apparel and Fashion

Kenya's textile sector is characterised by a large, established reuse (mitumba) economy and limited formal recovery infrastructure. EPZ manufacturers produce for export from imported virgin cotton and synthetic fibre, while the far larger second-hand clothing trade saw imports rise from 170,000 tonnes in 2020 to about 220,000 tonnes in 2024⁵⁹. Local cotton has fallen to 20,000 to 25,000 bales a year, leaving negligible domestic spinning capacity. Circular design operates at artisanal rather than industrial scale, while bio-based fibres remain at pilot stage. Africa Collect Textiles runs East Africa's only collection and upcycling operation at scale⁶⁰. Unsellable clothing and EPZ cutting waste already concentrate at Gikomba and EPZ sites, which could serve as aggregation points for formal sorting. The two most binding constraints are institutional. EPR fees are collected with no operating PRO to disburse them. The unresolved dispute over the waste share of imports⁶¹ limits the reliable estimation of required collection and recycling capacity. CESIP therefore builds on the mitumba economy rather than competing with it, with operationalising the textile PRO and an independent waste characterisation study as near-term priorities.

Table 11 Textiles snapshot

Material flows and current circularity	About 220,000 tonnes of second-hand clothing imported in 2024; recycled content below 5% among EPZ manufacturers; under 1% of textile waste recycled; the mitumba reuse economy sustains about two million livelihoods. The unsellable share of imports is disputed, from 2% (MCAK) to 20 to 50% (independent research).
Binding constraints	No formal sorting or recycling capacity anywhere in the value chain; and the disputed scale of textile waste, which prevents the sizing of collection and recycling investments.
Policy and regulatory gaps	EPR fees collected with no operating PRO to disburse them and offcuts not covered; the EPZ 20% domestic-sales ceiling; an import protocol that measures hygiene rather than environment; a 35% duty on recycling machinery; weak consultation on EPR design. New ecodesign requirements in export markets add a further gap for exporters.
Highest-potential opportunity	Formalise and scale what already works in the mitumba reuse and repair economy and in proven collection and upcycling.
Quick wins	Remove the 35% duty on textile recycling machinery; operationalise the textile PRO.
Circular business models	▪ Upstream: circular design is limited to upcycling and design for longevity, and circular supply of bio-based fibres (cotton, sisal and banana) and recycled fibre and yarn has no commercial producers yet. ▪ Midstream: reuse and resale through the mitumba trade is the sector's main strength, supporting repair and tailoring and extending to online marketplaces, while rental and leasing of clothing and uniforms is undeveloped. Downstream: collection of post-consumer and post-industrial textiles rests on a single operator, and there is no formal sorting or recycling facility.
CESIP response	TEX-1 to TEX-5 in Section 4.5.4, running from ecodesign readiness for exporters and local manufacturing and resale, through grading standards and a sorting hub, to the textile PRO.

⁵⁹ Mitumba Consortium Association of Kenya, key informant interview, 2026.

⁶⁰ Africa Collect Textiles, key informant interview, 2026.

⁶¹ Mulwa, 2025; Africa Collect Textiles, key informant interview, 2026.

3.3.5 Mining, Quarrying and Construction

Mining and quarrying supply the main virgin inputs for construction, including soda ash, limestone, fluorspar, diatomite and aggregates. Neither extraction volumes nor mining waste, such as tailings, overburden and quarry spoil, are systematically tracked. The Mining Act (2016) treats these side streams as liabilities rather than secondary resources. Kenya's interest in critical raw materials makes their recovery a growing priority. Construction consumes these inputs and returns them as demolition waste. It is also the main market for recovered material from at least three other sectors. Public infrastructure spending gives government direct influence over this demand. Virgin materials still dominate. Recycled materials remain at pilot scale, such as Eco Build's mining-waste bricks in Siaya⁶². A Nairobi assessment found a potential 75% material-reuse rate under design for disassembly⁶³. The 2025 Road Design Manual's recycled asphalt provisions show that regulatory approval is achievable. However, a trial cycle of about five years delays market entry. Reuse markets for plywood, metal sheets and scrap steel operate informally, without price or volume data. Formal C&D recovery capacity is near zero⁶⁴. The 2024 National Building Code's performance-based standards remove the legal barrier to recycled materials. Without a measured baseline or mandatory requirements for salvage and recycled content, investors lack the demand certainty to finance recovery capacity. CESIP therefore prioritises a C&D baseline study. Mandatory salvage and recycled-content requirements, tied to the Building Code and NCA project registration, will follow before any new legislation is considered.

Table 12 Mining, quarrying and construction snapshot

Material flows and current circularity	No Kenya-specific material flow account; C&D waste estimated at about 40% of urban waste with no tonnage baseline and recovery near zero; mining waste (tailings, overburden, quarry spoil) not tracked. Scrap steel is the clearest functioning secondary stream.
Binding constraints	No testing infrastructure for C&D waste; no KEBS specifications for recycled aggregate or reclaimed materials; and no verified baseline against which recovery targets can be judged.
Policy and regulatory gaps	No sector EPR or standing finance for circular infrastructure; voluntary green provisions in the Building Code; no circularity test in environmental assessments; overlapping NCA, NEMA and county mandates. Mining instruments treat side streams only as liabilities, and mining is treated mainly as a supplier of construction materials rather than as a sector with its own circular opportunities.
Highest-potential opportunity	Government procurement, given that an estimated 66% of the country's infrastructure is yet to be built; and, for mining, recovering more value from side streams so that fewer new mines are needed.
Quick wins	KEBS grading standards for recycled aggregate and reclaimed materials; operationalising the NCA's proposed waste marketplace and project-linked waste tracking.
Circular business models	▪ Upstream: circular supply is established where recovered or local material replaces a costly input, through stabilised soil blocks, co-processing of waste in cement kilns and recycled-plastic pavers and lumber, while design for disassembly is emerging. ▪ Midstream: sharing and leasing of equipment and machinery is well developed and mine and quarry rehabilitation is practised, while reuse of

⁶² Kenya National Innovation Agency, 2025.

⁶³ Mwembi, 2025; Talamo et al., 2025.

⁶⁴ National Construction Authority, National Construction and Demolition Waste Management Strategy and Implementation Plan (Revised edition), 2026.

	formwork, scaffolding and reclaimed fittings remains informal and building retrofit is undeveloped. ▪ Downstream: scrap steel recycling is the only functioning recovery market, and there is no operating facility for C&D waste collection, sorting or recycling.
CESIP response	CON-1 to CON-4 in Section 4.5.5, running from design for disassembly and circular mining, through standards, to a flagship Nairobi facility and alignment with the NCA Strategy, with the C&D baseline (CC-7 (vii)) as a prerequisite for major targets, and recycled content in public construction under the cross-cutting priorities.

3.3.6 Cross-Sector Linkages, Industrial Symbiosis and the Blue Economy

The five priority sectors are connected. Waste from one sector is often a usable input for another, and several streams concentrate in the same locations. These connections allow CESIP to recover more value through shared infrastructure, standards and markets than any single sector could achieve alone. Four material linkages are sufficiently evidenced to support pilot design. The coastal and blue economy is treated as a place-based lens across the five sectors rather than as a sixth sector.

Construction as the main destination for recovered material. Construction already absorbs recovered material from at least three other sectors. Mining waste is used in bricks, and recycled plastic in pavers and blocks. Synthetic textile offcuts currently have no market within the textile value chain. They could serve as building insulation or, subject to emissions control, as fuel in cement kilns that already run alternative-fuel programmes.

Agriculture, textiles and energy. Cotton, pineapple and banana residues are candidate inputs for bio-based textile fibres. Cotton gin waste, husks and stalks can be used to produce briquettes or biogas instead of being burned in the field.

E-waste, metals, plastics and energy. E-waste is an urban-mining source of copper, aluminium, gold and palladium. Shared material-grade standards and price transparency with the mining sector would avoid building parallel systems. E-waste and plastics share the same legal basis under the EPR Regulations, which creates scope for shared governance and less compliance duplication. Pay-as-you-go solar fleets serving over three million customers will reach end of life between 2028 and 2030. Solar panels and lithium-ion batteries therefore need to be covered by EPR from the outset.

Coastal and blue economy. Blue economy waste streams fall within the five sectors but concentrate in the five coastline counties (Kwale, Mombasa, Kilifi, Tana River and Lamu) and the Lake Victoria fishing counties. Marine and freshwater ecosystems in these areas raise the environmental cost of poorly managed waste. The strongest links are to agriculture and food systems and to plastics and packaging.

Blue economy links to agriculture and food systems. Fish processing by-products, including heads, frames, skins, scales and viscera, are largely discarded or sold informally. They can be processed into fish meal, aquafeed, fish oil, collagen, gelatine, fish leather and fertiliser. Seaweed, farmed mainly by women's groups in Kwale County, is sold mostly as raw dried product. Local processing into bio-stimulants, feed supplements and cosmetics would retain more value. Coastal hotels and restaurants also generate high seasonal volumes of food waste. Capturing this value depends on cold chain and drying capacity at landing sites, and on feed and fertiliser standards.

Blue economy links to plastics and packaging. Lost and discarded fishing gear, mostly synthetic, adds to plastic leakage along the coast and in Lake Victoria. Fishing gear is not yet a named stream under the EPR Regulations, and no take-back system exists. Tourism creates seasonal peaks in single-use packaging and glass. The ports of Mombasa and Lamu must also manage ship-generated waste under MARPOL Annex V. Gear

collection at landing sites, port reception facilities and refill and returnable-packaging schemes in hotels are practical entry points. Seaweed-based packaging offers a further bio-based option.

Coastal delivery conditions and safeguards. Coastal counties face seasonal waste peaks, limited sanitary landfill capacity and dumpsites exposed to flooding and tides. Dispersed communities in Lamu and Tana River are costly to serve. Shared recovery facilities in Mombasa will depend on inter-county arrangements through the Jumuiya ya Kaunti za Pwani regional bloc. Recovery facilities, dumpsites and aquaculture expansion must be screened through environmental impact assessment. No recovery activity should encroach on mangroves, coral reefs, seagrass beds or marine protected areas such as Kisite-Mpunguti, Watamu and Malindi. The 2020 ban on single-use plastics in protected areas, including beaches, also requires consistent enforcement.

Institutions. The State Department for Blue Economy and Fisheries leads blue economy policy. It works with the Kenya Fisheries Service, the Kenya Marine and Fisheries Research Institute, the Kenya Maritime Authority, the Kenya Ports Authority, the Kenya Coast Guard Service, the Kenya Wildlife Service, the Kenya Forest Service and NEMA. Coastal and lake county governments deliver collection and landing-site management with Beach Management Units. Together, these institutions form the marine sub-group of the Plastics and Packaging TWG.

CESIP will take these linkages forward through an industrial symbiosis programme, starting in EPZs, SEZs and industrial parks.

3.4 Cross-Cutting Enablers for the Transition

The five sector snapshots point to the same set of systemic constraints. Standards and specifications are missing or incomplete. Data on material flows is limited. Finance does not reach the value chain actors who need it most, and demand for recovered materials is weak. Skills are thin, while fiscal measures and trade rules still favour virgin materials. Because these constraints recur across sectors, they are economy-wide challenges that need coordinated national responses. This section examines the five enablers that will set the pace of the transition: finance, innovation and standards, skills, demand and trade. The cross-cutting priorities in Section 4.4 respond to each of them.

3.4.1 Finance and Investment

Three structural challenges hold back investment in the circular economy. First, capital is concentrated at either end of the market. Microfinance serves individuals and small operators, while development finance is more accessible to established and bankable corporates. The aggregation layer in between remains underserved. This covers sorting, pre-processing, drying, composting and cold-chain infrastructure. These activities often lack conventional collateral and only generate enough revenue once volumes reach scale.⁶⁵ Second, EPR fees are not yet reaching downstream operators. PROs collect fees in several material streams, but stakeholders reported that little of this funding reaches recyclers and collectors. Coverage is also incomplete. No textile PRO was operational at the time of consultation, and organic waste and construction materials largely fall outside the EPR framework.^{66,67} Third, the fiscal framework gives little incentive for circular production. Recovered materials are generally taxed in the same way as virgin materials, and processing equipment attracts full duty and VAT. The Draft National Green Fiscal Incentives Policy Framework could address some of these constraints. It has not been fully implemented, however, and many

⁶⁵CESIP Finance and Investment Focus Group Discussion, 30 July 2026.

⁶⁶CESIP E-waste Focus Group Discussion, [date].

⁶⁷CESIP Textiles and Apparel Focus Group Discussion, [date].

of the enterprises it targets do not yet understand it.⁶⁸⁶⁹⁷⁰ The priority for CESIP is to direct capital to the aggregation layer and to make EPR fees pay for recovery. Chapter 5 sets out the financing need, the sources of capital and the instruments available.

3.4.2 Innovation, Research and Standards

Kenya has a solid base of applied circular economy research. Examples include icipe's research on insect-frass fertiliser and insect-based animal feed in agriculture;⁷¹ JKUAT's research on design for disassembly and material reuse in construction;⁷² Moi University's partnership with the Stockholm Environment Institute and Estonian Academy of Arts to map textile waste and pilot industrial upcycling at Rivatex;⁷³ and Kenyatta University's research on e-waste generation and management.⁷⁴ The gap lies in moving validated research into commercial use. Two gaps stand out. The first is testing, certification and quality assurance. Recovered materials need recognised quality specifications to enter formal markets. These remain absent or incomplete for several material streams. There are no KEBS specifications for recycled aggregate, reclaimed timber or recovered steel; no grading standard for sorted textile waste; no differentiation of feedstocks within the organic fertiliser standard; no affordable food-contact certification pathway for recycled PET; and no accredited laboratory system for recovered e-waste fractions.⁷⁵⁷⁶ Where certification pathways exist, stakeholders in all sectors described them as slow and costly. This creates a significant barrier for MSMEs. The second gap is digital infrastructure for material matching and traceability. Stakeholders in construction, agriculture and textiles each called for platforms that connect waste generators with potential users. No integrated system exists yet. E-waste has digital platforms but no unified material-flow data system behind them. Closing these two gaps will turn Kenya's research base into products that markets can trust and buy.

3.4.3 Skills and Capacity

The main skills challenge is turning technical knowledge into viable, scalable enterprises. Community organisations and informal operators already do much of the work in collection, sorting, repair and recovery. Gaps in business management, market access and enterprise development limit their ability to grow volumes, meet buyer requirements and build lasting businesses. Capacity building must therefore go beyond technical training to cover the commercial and operational skills enterprises need to grow.⁷⁷ Weak regulatory awareness adds to the problem. Many MSMEs have a limited understanding of the policies, compliance requirements and incentives that apply to them. Stakeholders reported that contact with regulators centres on licensing and fees, with little ongoing guidance on obligations or available support.⁷⁸ Formal training through TVET institutions, universities and donor programmes is not consistently linked to workplace practice. It is also concentrated in Nairobi, which limits access elsewhere in the country.⁷⁹ Stronger links between training

⁶⁸Environmental Management and Co-ordination (Management and Control of Plastic Packaging Materials) Regulations, Legal Notice No. 181 of 2024.

⁶⁹Value Added Tax Act, 2013 (standard rate of 16 per cent); import duty on textile recycling machinery under the EAC Common External Tariff, raised in CESIP Textiles and Apparel Focus Group Discussion, [date].

⁷⁰The National Treasury and Economic Planning, Draft National Green Fiscal Incentives Policy Framework, December 2022, published for public comment.

⁷¹International Centre of Insect Physiology and Ecology (icipe), Insects for Food, Feed and Other Uses (INSEFF) Programme; icipe, Annual Report 2023, research on insect-frass fertiliser and insect-based animal feed.

⁷²Mwembi, C. N. (2025), Design for Disassembly – Tackling the Building Waste Problem in Commercial Architecture, SABS Journal of Environment, Space and Society, Jomo Kenyatta University of Agriculture and Technology (JKUAT), Vol. 1(1), pp. 210–211.

⁷³Stockholm Environment Institute, Estonian Academy of Arts and Moi University (2025), Mapping Textile Waste and Leftover Materials in Rivatex's Textile and Garment Production Process, Transferring UPMADe Know-how to Kenya project.

⁷⁴Munyugi, L. K. (2012), The Assessment of Electronic-Waste Generation and Management in Selected Institutions in Nairobi, Kenya, Kenyatta University.

⁷⁵CESIP Mining, Quarrying and Construction Focus Group Discussion, July 2026

⁷⁶CESIP Textiles and Apparel Focus Group Discussion, July 2026

⁷⁷CESIP Agriculture and Food Systems Focus Group Discussion, [date].

⁷⁸CESIP Finance and Investment Focus Group Discussion, 30 July 2026.

⁷⁹CESIP Agriculture and Food Systems Focus Group Discussion, [date].

providers, industry and circular enterprises, and delivery beyond Nairobi, are needed to build skills across emerging value chains. For informal workers, skills development must also lead to recognition and a route into more structured work. Consultations in every sector identified certification of informal practitioners as a way to recognise existing skills and open access to formal markets and contracts.⁸⁰ This should not depend on mandatory individual formalisation, which could exclude the workers the strategy aims to support. Cooperatives, associations and contracts offer a better route. Through them, informal workers can access certification, training, markets and social protection, and move gradually into formal value chains.

3.4.4 Demand and Public Procurement

Demand for recovered materials exists. It is held back by missing product specifications and unreliable offtake arrangements. Feed millers and the fertiliser subsidy channel are potential buyers of organic fertiliser and insect meal, but they need clear composition standards. Regional retailers already require 30 per cent recycled content in bottles and 50 per cent in trays, ahead of Kenyan regulation. Domestic suppliers cannot meet this demand because there is no affordable food-contact certification pathway.⁸¹ Corporate uniform contracts sustain the only textile collection operation at scale, even without a grading standard. Recycled aggregate still lacks a KEBS specification.⁸² In e-waste, the constraint is low consumer confidence in refurbished equipment. In all five sectors, demand depends on the standards agenda set out in Section 3.4.2. Procurement rules cannot work until the quality of circular products is formally defined. Public procurement is the most direct tool government has to create demand at scale, yet it is largely unused across the five sectors. The scale of future public spending makes this a major opportunity. An estimated two-thirds of the urban infrastructure Africa will need by 2050 is yet to be built, a share reflected in Kenya's construction pipeline;⁸³ government textile procurement is estimated at KES 5 to 10 billion annually;⁸⁴ and government ICT replacement cycles generate equipment that is often stockpiled until refurbishment is no longer economically viable.⁸⁵ A phased green public procurement framework, starting with government-funded projects, would provide anchor demand for circular products. Its requirements should rest on agreed standards and align with existing market specifications rather than create parallel ones. Consultations also show that consumers adopt circular products when the economic benefit is clear. Deposit-return systems for plastics and trade-in incentives for refurbished electronics build on this insight.

3.4.5 Trade and Market Access

Trade policy currently works against circularity. Textile recycling machinery attracts a 35 per cent import duty. Recycled and virgin polymers receive similar duty and tax treatment. E-waste type approval does not consider circularity at the point of import.⁸⁶⁸⁷ High-value materials also leave the country before any domestic value is added. Circuit boards are exported to European smelters. Recycled PET is exported as fibre rather than processed into food-grade resin. Hides are exported raw while domestic tanneries import wet blue.⁸⁹⁹⁰ In each case, the binding constraints are domestic processing capacity and product specifications, not market access. Restricting exports before that capacity exists would lose value. The right sequence is to put standards and

⁸⁰CESIP Plastics and Packaging Focus Group Discussion, 5 August 2026.

⁸¹CESIP Plastics and Packaging Focus Group Discussion, 5 August 2026.

⁸²CESIP Textiles and Apparel Focus Group Discussion,

⁸³African Development Bank (2016), cited in Brookings Institution, Foresight Africa: two-thirds of the investments in urban infrastructure needed by 2050 have yet to be made; CESIP Mining, Quarrying and Construction Focus Group Discussion

⁸⁴CESIP Textiles and Apparel Focus Group Discussion

⁸⁵CESIP E-waste Focus Group Discussion

⁸⁶Value Added Tax Act, 2013 (standard rate of 16 per cent); import duty on textile recycling machinery under the EAC Common External Tariff, raised in CESIP Textiles and Apparel Focus Group Discussion, [date].

⁸⁷Kenya National Plastics Action Partnership, National Action Roadmap Executive Summary, Metrics Advisory Group Meeting 4, August 2026 (preliminary).

⁸⁸CESIP E-waste Focus Group Discussion

⁸⁹CESIP E-waste Focus Group Discussion

⁹⁰CESIP Agriculture and Food Systems Focus Group Discussion

processing capacity in place first. Export markets also show how market-access rules can speed up circular practice. Export value chains comply with environmental and product requirements because buyers make compliance a condition of access. The domestic market offers few such incentives. Regional integration can improve both market access and the viability of circular investment. Two opportunities stand out. An East African e-waste processing hub could pool enough volume for higher-value recovery. Harmonised organic fertiliser and feed specifications through the East African Standards Committee would ease regional trade.⁹¹

⁹¹CESIP E-waste Focus Group Discussion, [date].

4. The Strategy

This chapter converts the findings of Chapter 3 into action. It sets out what success will look like (4.1), the principles every intervention follows (4.2) and how the interventions are organised (4.3), then the eight cross-cutting priorities (4.4), the sector interventions (4.5), how delivery is sequenced (4.6) and the gender and youth commitments (4.7).

4.1 What Success Will Look Like

By 2032, Kenya's economy will get more value from every tonne of material it uses. Households and businesses will separate their waste at source, and counties will collect it separately. Food, plastics, electronics, textiles and building materials will stay in use longer through reuse, repair and recycling. Far less waste will be dumped, burned or washed into rivers and the sea. Recovery will be a recognised source of decent work, including for the waste pickers and repairers who already do most of it.

The thirteen headline targets in Table 13 track progress towards this picture. They measure how productively Kenya uses materials (H1–H2), how much waste it generates and separates (H3, H4, H7), how much it recovers (H5, H8–H10) and how much leaks into the environment (H6, H13). They also measure how far public spending and employment shift towards circular models (H11–H12). Where no measured baseline exists, targets are set relative to the 2028 baseline and are reviewed under CC-6 (iv) once the baseline studies report. Section 8.2 links each target to the objective it serves, the interventions that will move it, the lead institution and the data source, and Annex B defines each indicator.

Table 13 National headline targets

Indicator	Baseline	2030 milestone	2032 target
H1 Material circularity rate	To be established in 2028 (CC-6 (ii))	2028 baseline plus 1 percentage point	2028 baseline plus 2 percentage points
H2 Material productivity	To be established in 2028 (CC-6 (ii))	5% above the 2028 baseline	10% above the 2028 baseline
H3 Municipal solid waste generated per person	About 150 to 170 kg per person a year (8 to 8.8 million tonnes a year nationally)	No higher than the 2028 baseline per person a year	5% below the 2028 baseline per person a year
H4 Municipal waste separated at source	About 5% of generators	15% of generators	30% of generators
H5 Municipal waste recycled, composted or digested	To be established in 2028 (CC-6 (ii))	At least 15% of municipal waste a year	At least 25% of municipal waste a year
H6 Waste dumped or openly burned	Over 75% of waste mismanaged (estimate)	Below 65%	Below 55%
H7 Food loss and waste	About 40% of production (about 10 million tonnes a year)	35% of production	30% of production
H8 Plastics recycling rate	About 9% (2024)	20%	30%
H9 E-waste formally collected and recycled	Under 5% (2025)	15%	25%

Indicator	Baseline	2030 milestone	2032 target
H10 Construction and demolition waste recovered	Near zero; no measured baseline	Baseline verified (CC-6 (ii))	20%, aligned with the NCA Strategy
H11 Public procurement meeting circular criteria	0%	10%	20%
H12 Circular economy jobs, by sex and age	Upwards of 46,000 (2023 estimate); confirmed in 2028	15,000 above the 2028 baseline, by sex and age	30,000 above the 2028 baseline, by sex and age
H13 Plastic leakage to land and waterways	About 37,000 tonnes a year reaching waterways	30,000 tonnes a year	25,000 tonnes a year

Each sector section in 4.5 opens with two or three sector targets drawn from Annex B.

4.2 Guiding Principles

Seven principles apply to every intervention in this chapter.

- **Build on what exists.** CESIP works through existing institutions, platforms, programmes and data systems wherever possible, and proposes new mechanisms only where the evidence shows a gap that existing arrangements cannot fill.
- **Highest value first, with a circularity screening test.** Interventions favour the highest R strategy available, refusing, rethinking and reducing before reusing and repairing, and these before recycling and recovery. Before CESIP supports investment in recycling or recovery infrastructure, the proposal must show that the material flow could not reasonably be prevented, reduced, reused, repaired or remanufactured instead, so that CESIP does not become simply a waste infrastructure programme.
- **Business models as well as materials.** Circularity is about how value is created as well as about recycling or making products that last. CESIP promotes business models already working in Kenya and elsewhere, such as sharing platforms, leasing, consignment and product-as-a-service, alongside product, component and material loops. Annex F maps these models by sector, and CESIP will actively support the enterprises that run them (CC-8), so that business support is a delivery channel for the strategy alongside policy and regulation.
- **Ambition with sequencing.** Ambitious actions, such as deposit-return, tax shifts and chemical recycling, are presented with their caveats, prerequisites and first steps. A first step on the path to something larger is a legitimate commitment, and the horizon bands show which actions come first.
- **A just transition.** The transition is built on, and protects the livelihoods of, the waste pickers, informal recyclers, repairers and traders who already carry out most recovery. Formalisation works through associations, cooperatives and contracts rather than individual licensing requirements that would exclude part of the workforce, and no dumpsite closes before a financed transition plan is agreed.
- **Environmental and health safeguards.** A circular process is not automatically environmentally sound. Waste-to-energy, chemical recycling, e-waste processing, composting, anaerobic digestion, biochar, C&D recycling, waste-derived fuels and industrial symbiosis all operate within best available techniques and best environmental practice, environmental impact assessment, occupational health requirements and product-quality standards, so that recycling does not shift pollution into air, water, products or residues.

- **Neutrality among market actors.** Commitments name categories of actor, such as licensed PROs, licensed recyclers or national waste-picker associations, so that implementation roles are open to every qualifying organisation.

4.3 How the Interventions Are Organised

Each intervention sets out the problem it addresses and Kenya's response, followed by its activities. Activities are numbered within each intervention, so CC-4 (ii) is the second activity under cross-cutting priority 4, and ORG, PLA, EEE, TEX and CON mark the organics, plastics, e-waste, textiles and construction sectors. The same label links the activity to its row in the implementation matrix (Annex A) and to its indicator (Annex B). Each cross-cutting priority sets out its national activities first, followed by an activity for each sector where the priority applies differently; these sector activities are not repeated in Section 4.5. Within each sector, interventions run from upstream (design and production) to downstream (recovery), with enabling interventions covered last.

Each activity names its lead institution and supporting partners, and the Timing column shows the years of delivery, shaded by horizon.

 Short term, 2028–2029.

 Medium term, 2030–2032.

 Long term, starting within the period and delivering after 2032.

4.4 Cross-cutting strategic priorities

Every sector depends on the same enabling conditions such as trusted standards, reliable demand, accessible finance, a working EPR system, an included informal workforce, sound data, skilled institutions and support for the enterprises that run circular business models. The eight cross-cutting priorities put these conditions in place once, for the whole economy, and show what each means for each sector. Most of this work comes early in the strategy period, because the sector investments in Section 4.5 depend on it.

CC-1 Set enforceable quality standards across recovered material streams

Kenya has an established foundation for recovered-material standards. For example, KEBS has published specifications for organic fertiliser (KS 2290) and dried insect products for animal feed (KS 2711:2017, including limits on heavy metals, pesticide residues and aflatoxins), together with a code of practice for the mechanical recycling of PET (KS 2988:2024). Coverage nonetheless remains uneven across the priority value chains. Refurbished electronics, sorted textiles and secondary construction materials lack dedicated quality benchmarks; accredited testing capacity for recovered materials is limited; and certification costs remain a barrier for the small and medium enterprises driving circular innovation. Without a consistent standards framework, recovered materials cannot compete on equal terms with virgin inputs, off-takers and investors face unpriced quality risk, and regulators lack a reliable basis for safety assurance.

KEBS, working with industry, regulators and research institutions, will strengthen the quality infrastructure for recovered materials. It will develop or update standards for each priority material, building on existing specifications; expand accredited testing capacity; and introduce an affordable certification pathway for small and medium enterprises. Together with NEMA and sector regulators, KEBS will also undertake joint market surveillance to promote compliance. This will provide a common, trusted quality basis on which each sector intervention can build.

Activities	Timing
i) Develop and gazette core standards for priority recovered materials Develop and/or update core standards in consultations from the industry actors covering organic fertiliser and insect feed (including aflatoxin limits), recycled plastic grades, refurbished electronics, sorted textiles and secondary construction materials. Additionally, set and revise recycled-content thresholds through a standing technical committee with formal seats for licensed PROs and producer associations, informed by a prior feedstock-availability study. Lead: <i>KEBS</i> Supporting partners: <i>MoALD, NEMA, NCA, research institutes, industry associations, licensed PROs</i>	2028–29
ii) Build accredited testing capacity Equip the KEBS central laboratory and regional labs in Mombasa and Kisumu with a test suite for each sector, accredit methods with KENAS and train analysts. Lead: <i>KEBS</i> Supporting partners: <i>KENAS, universities</i>	2028–31
iii) Set up certification with tiered fees for small producers Launch a certification mark with tiered fees and first-cycle support, so small compost makers, recyclers, refurbishers and block makers can certify. Lead: <i>KEBS</i> Supporting partners: <i>Producer associations, MSEA</i>	2028–31
iv) Monitor compliance through market surveillance Sample and test certified products and those supplied under public tenders and EPR contracts, under a joint compliance protocol with NEMA and sector regulator. Lead: <i>KEBS</i> Supporting partners: <i>NEMA, AFA, Communications Authority, NCA</i>	2030–32

CC-2 Use public procurement to create demand for circular and recovered products

Public procurement accounts for a significant share of national expenditure, giving Government considerable leverage to shape markets for circular and recovered products. Current procurement practice, however, gives limited weight to recycled content, refurbished equipment and certified organic inputs, and procuring entities need clearer criteria, standard tender documents and practical guidance to purchase these products with confidence. Harnessing public demand would give circular enterprises a stable early market, reduce investment risk and accelerate the growth of recovered-material value chains.

The National Treasury will amend the procurement regulations to recognise circular attributes and will monitor green procurement through the Electronic Government Procurement (e-GP) system. PPRA will equip procuring entities with sector-specific circular criteria, model tenders and framework contracts, and build their capacity to apply them. Anchoring the criteria in CC-1 standards will enable public buyers to specify certified products, sending a credible demand signal.

Activities	Timing
i) Amend the procurement regulations Amend the regulations so procuring entities can give weight to recycled content, refurbishment and certified products. <i>Lead: National Treasury</i> <i>Supporting partners: PPRA</i>	2028–29
ii) Issue circular procurement criteria, model tenders and framework contracts Develop circular procurement criteria for CE products, for example certified organic fertiliser, recycled-content plastics, refurbished ICT equipment, recycled-fibre uniforms and recycled construction materials. Issue standard tender documents and framework contracts, including leasing and take-back models for ICT equipment and uniforms. <i>Lead: PPRA</i> <i>Supporting partners: KEBS, NCA, ICT Authority</i>	2028–30
iii) Build the capacity of public procuring entities Train procurement officers in national ministries, departments and agencies (MDAs) and all 47 county governments, starting with high-spend categories, supported by guidance and a helpdesk. <i>Lead: PPRA</i> <i>Supporting partners: KSG, CoG</i>	2029–31
iv) Track green procurement spend Add a green procurement module to e-GP and publish annual reports from 2029. <i>Lead: National Treasury</i> <i>Supporting partners: PPRA</i>	2029–32

CC-3 Mobilise public and private finance for circular investment

Circular investment is under-financed. Public budgets do not track or prioritise it, and counties lack funds for waste infrastructure. Lenders regard circular ventures, especially small repair, refurbishment and reuse businesses, as high-risk because of small deal sizes, unproven offtake and volatile material prices. Import duty on recycling equipment is set at East African Community (EAC) level, and the Kenya Green Finance Taxonomy has no criteria for reuse, refurbishment or remanufacturing.

The National Treasury will establish a circular economy finance facility that uses first-loss capital to crowd in private investment and lending from development finance institutions (DFIs) across the value chain, from circular design and repair to remanufacturing and recycling. It will align budgets and fiscal incentives with circular priorities and help counties finance infrastructure, while CBK will extend the taxonomy to circular activities. Through the EAC, Kenya will press for harmonised duty, standards and cross-border rules so that its circular industries can serve the regional market. Price signals, including EPR fees and disposal levies, are addressed under CC-4.

Activities	Timing
i) Establish a national circular economy finance facility Capitalise the facility with approximately USD 25 million in first-loss capital to anchor a USD 100–125 million facility, structured around dedicated windows for circular design and product-as-a-service; repair, refurbishment and remanufacturing; organics (biogas and compost); and recycling (plastics, textiles, and construction and demolition waste). Additionally, reserve at least 20% of the facility for MSMEs and informal enterprises, and draw on the investment-ready pipeline prepared under CC-8. <i>Lead: National Treasury</i> <i>Supporting partners: DFIs, commercial banks, fund manager</i>	2028–32
ii) Align public finance and fiscal incentives with circular investment Tag circular expenditure in national and county budgets to strengthen tracking and accountability. Furthermore, review existing tax expenditures and propose Finance Bill VAT measures for repair, refurbishment, remanufacturing and recycling equipment and inputs. In parallel, support ten pilot counties to prepare circular infrastructure investment plans and public–private partnership projects. Finally, KRA will issue classification guidance for secondary materials and refurbished goods to provide certainty to traders. <i>Lead: National Treasury</i> <i>Supporting partners: KRA, KEBS, CoG</i>	2028–29
iii) Extend the Kenya Green Finance Taxonomy to circular activities Develop technical screening criteria for reuse, refurbishment, remanufacturing and recycling, thereby activating the taxonomy’s circularity objective. In parallel, equip banks with reporting templates and targeted training to support consistent classification and disclosure of circular lending. <i>Lead: CBK</i> <i>Supporting partners: KBA, National Treasury</i>	2028–30
iv) Advance regional harmonisation through the EAC and AfCFTA Propose Common External Tariff relief for recycling equipment and harmonised standards for recycled products. Additionally, promote Basel Convention-compliant rules for cross-border trade in recyclables, in line with the AfCFTA. <i>Lead: State Department for EAC</i> <i>Supporting partners: National Treasury, KRA, KEBS, NEMA</i>	2028–32

Results indicators: finance mobilised per shilling of first-loss capital; share of facility finance outside recycling; number of MSMEs and informal enterprises financed; circular expenditure tagged in national and county budgets; circular activities covered by taxonomy criteria.

CC-4 Secure legal certainty for EPR and make fees pay for recovery

Kenya’s EPR Regulations, 2024 (LN 176/2024) extend producer responsibility to products and packaging across all material types, including electrical and electronic equipment and, on a phased basis from 2026, textiles. Licensed PROs already finance collection and recycling, but enforcement is suspended by conservatory orders pending legal challenges, and the framework remains incomplete. Several hard-to-recycle streams have no PRO coverage; although Regulation 18(1) sets out fee-modulation factors, no common methodology applies them, so flat per-kilogram fees neither reward recyclability nor reach the workers who drive recovery; and producers lack common rules for registration, reporting and tonnage verification. Meanwhile, conflicting county by-laws impose duplicate licences and fees on waste transporters. Without

legal certainty and common rules, producers face uncertain obligations, PROs cannot plan investment, and EPR income cannot be channelled reliably into recovery.

MoECCF and NEMA will restore legal certainty and complete the EPR framework. MoECCF will review the Regulations through a consultative process that addresses the grounds of the pending litigation, including whether a minimum share of fees for waste-picker organisations should be introduced through a negotiated amendment to Regulation 18. NEMA will then extend PRO coverage to unserved streams, issue fee-modulation guidance within the Regulation 18 framework and publish cross-sectoral EPR guidelines, while MoECCF and the Council of Governors harmonise county waste laws and licensing with the SWMA. This will give producers clear obligations and ensure that EPR fees finance recovery.

Activities	Timing
i) Review the EPR Regulations through a consultative process Conduct a legal review, Regulatory Impact Assessment and regional public participation addressing the grounds of the pending litigation, and confirm the scope of the Regulations with NEMA. Additionally, assess whether a minimum share of fees for waste-picker organisations should be introduced through a negotiated amendment to Regulation 18. Lead: <i>MoECCF</i> Supporting partners: <i>NEMA, Office of the Attorney General, licensed PROs, KAM, waste-picker associations</i>	2028
ii) Extend PRO coverage to unserved and hard-to-recycle streams Extend the mandate of existing licensed PROs to unserved and hard-to-recycle streams through dedicated, ring-fenced fee lines, applying this preference equally to all licensed PROs. Furthermore, license a new PRO only where no existing PRO can credibly serve a stream, decided on operational and coverage grounds to avoid duplicate registrations and fees. Lead: <i>NEMA</i> Supporting partners: <i>Licensed PROs, producers, CAK</i>	2029–30
iii) Issue fee-modulation guidance within the Regulation 18 framework EPR fees are currently charged at standard per-kilogram rates that do not reflect toxicity or recyclability, and much of the income is absorbed by administrative costs rather than reaching the recyclers, sorters and aggregators who drive recovery. To address this, issue guidance on applying the Regulation 18(1) fee-modulation factors, using criteria such as recyclability, toxicity, material complexity, recovery cost, domestic processing availability and environmental impact. Lead: <i>NEMA</i> Supporting partners: <i>Licensed PROs, producers, KAM</i>	2029–30
iv) Issue cross-sectoral EPR guidelines Publish one set of EPR guidelines for all obligated sectors, defining stakeholder roles, registration, reporting, tonnage verification and NEMA's decision timelines. Additionally, consolidate the fee-modulation guidance into a single reference for producers and PROs. Lead: <i>NEMA</i> Supporting partners: <i>Licensed PROs, producers, KAM</i>	2029–31

Activities	Timing
v) Harmonise county waste laws and licensing with the SWMA Harmonise the 47 county waste laws with the SWMA, eliminating conflicting licensing and fee requirements such as separate waste-transporter licences and vehicle fees charged by each county a transporter operates in. Lead: MoECCF and Council of Governors Supporting partners: NEMA, county assemblies, licensed PROs, National Treasury	2029–32

CC-5 Integrate the informal economy through contracts and associations

Informal workers collect, sort and recover most secondary material in Kenya, from waste pickers and e-waste dismantlers to mitumba traders, jua kali artisans and quarry workers. Waste-picker associations alone have registered tens of thousands of members, yet most workers operate without contracts, social protection or formal recognition, often in hazardous conditions. Incomes depend on volatile buy-back prices, child labour persists on dumpsites, and skills gained on the job carry no formal credentials. Without deliberate integration, EPR, new facilities and formal contracts risk displacing these workers rather than building on their expertise.

Government will work through existing informal-worker associations, guided by just transition principles. KNBS will co-deliver a national livelihood survey with these associations, and MoECCF will build a tiered worker register on their existing registries, linked to SHA and NSSF. The State Department for Cooperatives will organise workers into cooperatives that contract as recognised suppliers at fair prices, MoH will deliver PPE and health screening through associations, and the State Department for TVET will certify 15,000 workers by 2032. This will give informal workers recognition, safer work and a fair share of the value they create, with particular attention to women and youth.

Activities	Timing
i) Map informal livelihoods across sectors and counties Co-deliver a national survey with informal worker associations through their county networks, reaching beyond the five pilot cities and disaggregated by gender and age. Additionally, measure the extent of child labour on dumpsites, and link affected children to school re-entry and social services. Lead: KNBS Supporting partners: MoECCF, counties, waste-picker and informal-worker associations	2028
ii) Register informal workers through a tiered system Build the register on existing informal workers association registries such as KeNaWPWA, issuing tiered IDs that enable contracting, payment and enrolment in SHIF and NSSF. Lead: MoECCF Supporting partners: Waste-picker and informal-worker associations, counties, SHA, NSSF	2028–30
iii) Formalise associations and cooperatives with contracts Organise informal workers into cooperatives and community-based organisations that can contract as recognised suppliers, including waste pickers in plastics, mitumba traders in textiles and jua kali artisans in e-waste and construction. In turn, secure fair and stable incomes through published minimum buy-back prices and timely payment, with contract rates progressively raised to at least the statutory minimum wage. Lead: State Department for Cooperatives Supporting partners: PROs, counties	2029–31

Activities	Timing
iv) Provide protective equipment and health screening Fund first-year PPE and health screening through worker associations. Thereafter, embed PPE as a mandatory cost line in supplier contracts under iii) and deliver screening through SHA primary healthcare cover and county community health promoters. Lead: <i>MoH, Counties</i> Supporting partners: <i>Worker associations, DOSHS, SHA, counties, PROs</i>	2028–29
v) Build a national skills and certification pathway for circular trades Develop national occupational standards and competency-based curricula for circular trades, and certify 15,000 workers by 2032, prioritising hazardous streams and scaling through county vocational training centres and association peer trainers. Additionally, use recognition of prior learning and NITA trade testing to certify experienced workers, with county and TVET budgets sustaining training beyond 2032. Lead: <i>State Department for TVET</i> Supporting partners: <i>TVET CDACC, NITA, KNQA, county vocational training centres, worker associations</i>	2029–32

CC-6 Build a national waste data system and baseline

Kenya has no agreed method for estimating recovery and recycling rates and no national baseline of waste volumes by material stream. The JICA plastics model, once approved, offers a precedent, but comparable evidence is missing elsewhere: agricultural and mining waste data are largely absent, e-waste data is fragmented, and the widely cited construction and demolition share has no confirmed empirical backing. Producer declarations are partial and cannot be traced, and tonnage recovered by informal workers is not recorded separately. As a result, targets cannot be set, progress cannot be tracked and EPR claims cannot be verified.

Under the Sustainable Waste Management Act, NEMA is the central data authority, counties share their data with it and KNBS produces official statistics. Building on this, KNBS and NEMA will agree one methodology and publish a national baseline covering all 47 counties and every priority stream, updated every five years. In parallel, NEMA will establish a national waste information system that traces each tonne from producer to final treatment, records the contribution of informal workers and makes the data open to all. Finally, the Waste Management Council will use the baseline to recommend national recycling and recovery targets. Together, these will give Kenya a verifiable evidence base for setting targets, tracking progress and checking EPR claims.

Activities	Timing
i) Adopt a national estimation methodology Agree on a common methodology for measuring generation, collection, recovery and disposal, with a data-sharing protocol setting the roles of NEMA, KNBS, counties and PROs. Lead: <i>KNBS</i> Supporting partners: <i>MoECCF, NEMA, counties</i>	2028

Activities	Timing
ii) Publish and update the material flow baseline Characterise waste in all 47 counties and extend the JICA plastics modelling approach to every priority stream, starting with agricultural, e-waste, mining and construction waste, to produce a national baseline. Update the baseline every five years. <i>Lead: NEMA</i> <i>Supporting partners: KNBS, MoECCF, counties, sector ministries</i>	2028–32
iii) Establish the national waste information system Establish one national waste information system recording waste flows by stream and county, licensed operators and compliance. Link it to PRO, recycler and county systems so each tonne is traceable from producer to final treatment. Add an informal-sector layer, captured at the point of sale, recording registered workers, tonnage and income by sex and age, with personal data protected. Include a register of circular enterprises by sector and county. Publish analytical reports and an open dashboard so government, industry and the public can use the data. <i>Lead: NEMA</i> <i>Supporting partners: PROs, counties, KNBS, worker associations, ICT Authority</i>	2029–32
iv) Recommend national recycling and recovery targets Use the baseline to recommend stream-level recycling and recovery targets to the Cabinet Secretary, and review progress against them. <i>Lead: Waste Management Council</i> <i>Supporting partners: MoECCF, NEMA, KNBS, counties</i>	2031–32

CC-7 Build institutional and research capacity for circular transition

Counties carry most implementation duties under the new waste and EPR laws, yet lack the trained officers, tools and data systems to enforce them. Furthermore, circular research is fragmented across institutions, proven circular business models go undocumented, and few households segregate waste at source, which undermines collection and recovery.

Counties will fund and build their own enforcement and data capacity, coordinated by the Council of Governors. In parallel, NACOSTI will host a coordination mechanism that sets a national circular research agenda, aligns research institutions and industry, and documents proven models. Finally, counties will run sustained behaviour change campaigns using common NEMA messaging. Together, this gives the CESIP the institutions, evidence and public buy-in it needs to deliver.

Activities	Timing
i) Build county implementation capacity Train officers in all 47 counties and provide toolkits and frameworks for licensing, inspection, enforcement and data reporting, aligned with CC-4 and CC-6. <i>Lead: County governments</i> <i>Supporting partners: Council of Governors, MoECCF, NEMA</i>	2029–31

Activities	Timing
ii) Establish a national circular economy research coordination mechanism Establish a NACOSTI-hosted coordination mechanism to set a national circular economy research agenda, align universities, research institutes and industry around priority material challenges, and translate findings into practice through counties, enterprises and CC-8. <i>Lead: NACOSTI</i> <i>Supporting partners: NRF, KIRDI, universities, KEPSA, industry associations</i>	2028–32
iii) Run a national awareness and behaviour change campaign Run a nationally branded, multi-year campaign on segregation at source, repair and reuse, delivered through counties, schools, community health promoters and local media, and track change through household surveys. <i>Lead: County governments</i> <i>Supporting partners: NEMA, Ministry of Education, worker associations, PROs</i>	2029–32

CC-8 Build an investment-ready pipeline of circular enterprises

Most circular businesses in Kenya are small and early-stage. Few have the business plans, financial records, offtake agreements or technical studies that lenders require, so the CC-3 facility risks having too few bankable deals. Women- and youth-led enterprises face added barriers, and industrial parks and SEZs rarely develop projects that turn one firm's residues into another's inputs.

The State Department for MSMEs will run a single programme that supports at least 500 circular enterprises from ideation to growth stage, with at least 40% women- and youth-led. With KEPSA, it will enable at least 30% to secure follow-on financing or offtake agreements, particularly from public entities, while EPZA funds feasibility studies that unlock by-product exchanges in industrial parks and SEZs. This will give enterprises secure markets and the CC-3 facility a steady pipeline of bankable, investment-ready deals.

Activities	Timing
i) Establish a circular enterprise incubation and investment-readiness programme Support at least 500 circular enterprises, from ideation to growth stage, across five priority sectors, with at least 40% women- and youth-led. Enable at least 30% to secure follow-on financing or offtake agreements, particularly from public entities, building a bankable pipeline for the CC-3 facility, CC-2 tenders and anchor buyers. <i>Lead: State Department for MSMEs</i> <i>Supporting partners: KEPSA, KeNIA, KenInvest, PPRA, incubators, Women Enterprise Fund, Youth Enterprise Development Fund</i>	2029–32
ii) Develop industrial symbiosis projects in industrial parks and SEZs Fund feasibility studies in five industrial parks or SEZs to unlock by-product exchange opportunities, with resulting investments financed through the CC-3 facility. <i>Lead: EPZA</i> <i>Supporting partners: SEZA, KAM, KIRDI</i>	2030–32

4.5 Sector interventions

Each sector opens with its strategic objective and targets, followed by its interventions from upstream to downstream.

4.5.1 Agriculture and Food Systems (Organic Waste)

Strategic objective. Convert Kenya's food system into one that designs out loss at the point of production, captures what residue remains before it becomes waste, and converts it into the fertiliser, feed and energy inputs the food system depends on, closing the loop between what it produces and what it forfeits as waste.

Sector targets

- Up to 25 per cent of fertiliser subsidy volume from certified organic sources.
- Post-harvest loss at certified aggregation points reduced by 30 per cent by 2032 (indicative).
- Source separation of organic waste in pilot counties at 30 per cent of households and markets by 2032 (indicative).

These targets contribute to headline targets H4, H5 and H7. Together, the agriculture interventions grow the circular business models mapped in Table F1, notably insect protein, organic fertiliser and composting, Cooling-as-a-Service and mechanisation hire, and biomass valorisation; the enterprises running them are supported under CC-8.

The interventions below concentrate deliberately on loss, residues and organic waste. Production-side practices associated with regenerative agriculture, such as crop rotation, cover crops, polyculture and integrated soil fertility management, are carried by existing agricultural programmes under the ASTGS and the Climate Smart Agriculture Strategy; CESIP links to them through the organic fertiliser and residue interventions, which return nutrients to the soil, rather than duplicating them.

ORG-1 Implement organic fertiliser certification standards and market development

Recovered fertilisers such as compost, bio-slurry (the nutrient-rich residue from biogas digesters) and insect frass (the residue from insect farming) cannot be graded, priced or subsidised because no standard covers them. The subsidy programme supports only inorganic fertiliser, even though a 2021 policy already provides for a 40 per cent organic quota.

KEBS will complete the revised organic fertiliser standard, bio-slurry will be scaled through existing cooperative hubs, and MoALD will open the subsidy programme to certified organic products.

Value chain focus. Upstream (inputs), with downstream effect as the products specified are recovery outputs

Activities	Timing
i) Complete and gazette the feedstock-differentiated revision of KS 2290 Gazette the KS 2290 revision class by class, starting with bio-slurry, and introduce lower testing fees for community and micro-scale producers. <i>Lead: KEBS</i> <i>Supporting partners: Organic fertiliser and input manufacturers, PCPB, MoALD</i>	2028–29
ii) Specify bio-slurry as a tradeable class and scale through cooperative hubs Specify bio-slurry as a tradeable fertiliser class and distribute it through the existing cooperative biogas hub network. <i>Lead: Kenya Biogas Programme</i> <i>Supporting partners: KEBS, Kenya Dairy Board, dairy, coffee and tea cooperatives, county livestock departments</i>	2029–32

Activities	Timing
iii) Add certified organic fertiliser to the National Fertilizer Subsidy Programme schedule Add certified organic fertiliser to the subsidy schedule so it can be redeemed on the NCPB e-voucher at the same subsidy as inorganic fertiliser. <i>Lead: MoALD (State Department for Crops)</i> <i>Supporting partners: National Treasury, NCPB, KEBS, county agriculture departments</i>	2028–29

ORG-2 Formulate and publish circular feed ingredient standards

Insect meal and other recovered feed ingredients reach millers without declared protein content or safe inclusion limits, and contaminated rearing substrates can pass aflatoxins into eggs and meat. KEBS will publish an insect meal specification first, because demand is already proven, followed by a schedule of permitted circular feed ingredients with inclusion limits and handling rules.

Value chain focus. Upstream (feed input specification), with downstream effect as the ingredients specified are recovery outputs from insect conversion and agro processing

Activities	Timing
i) Issue insect meal specifications Publish an insect meal specification covering protein, moisture, ash and packaging so feed millers can use it in their formulations. <i>Lead: KEBS</i> <i>Supporting partners: ICIPE, Association of Kenya Feed Manufacturers, insect-meal producers, feed off-takers</i>	2028–29
ii) Publish the permitted circular feed ingredient schedule Publish a schedule of permitted circular feed ingredients with inclusion limits and food-safety rules, including traceability for aquatic by-products. <i>Lead: KEBS</i> <i>Supporting partners: MoALD (State Department for Livestock Development), Kenya Fisheries Service, Association of Kenya Feed Manufacturers, KALRO, ILRI, agro-processors and millers</i>	2028–30

ORG-3 Invest in first-mile storage, drying and cold chain infrastructure

Missing storage and aggregation after harvest are the largest source of organic loss, forcing farmers to sell immediately at low prices. The Warehouse Receipt System, which lets farmers store produce in certified warehouses and borrow against it, will extend to more crops, and counties will build aggregation, drying and cold storage near production clusters.

Value chain focus. Midstream (storage, aggregation and distribution), with a downstream link where reject volumes feed composting and insect conversion

Activities	Timing
i) Extend Warehouse Receipt System certification to incorporate other agricultural produce Certify at least twelve more warehouses so farmers of pulses, oilseeds, tubers and horticulture can store produce and borrow against it. <i>Lead: Warehouse Receipt System Council</i> <i>Supporting partners: NCPB, Agriculture and Food Authority, Agricultural Finance Corporation, Equity Bank, Co-operative Bank, producer cooperatives</i>	2029–32
ii) Develop aggregation, drying and cold chain infrastructure for perishable produce Build small aggregation centres, drying and cold storage close to production clusters. <i>Lead: County governments</i> <i>Supporting partners: Agriculture and Food Authority, Kenya Dairy Board and dairy cooperatives, solar cooling private providers, Agricultural Finance Corporation and commercial banks</i>	2029–32

ORG-4 Implement livestock by-product value retention and recovery

An estimated 3 million hides and 18 million skins are wasted each year, poor flaying destroys much of their value, and abattoir by-products are mostly discarded. Slaughterhouses will adopt flaying machines and trained operators, by-products will be tracked through the livestock traceability system, and shared facilities will render blood and bone into meal and digest paunch and manure into biogas.

Value chain focus. Midstream (value retention at flaying) and downstream (by-product recovery and effluent)

Activities	Timing
i) Deploy flaying machines and training around high volume slaughterhouses Install flaying machines and train operators at high-volume slaughterhouses, building on the nine machines already placed through public-private partnerships. <i>Lead: Kenya Leather Development Council</i> <i>Supporting partners: County veterinary departments, Kenya Meat Commission, private slaughterhouses, Alpharama Ltd and member tanneries, KCB</i>	2029–32
ii) Extend the livestock traceability system to carry hides, skins and by-product data Add hides, skins and by-products to the national livestock traceability system so recovered volumes become visible and financeable. <i>Lead: MoALD (State Department for Livestock Development)</i> <i>Supporting partners: Directorate of Veterinary Services, Kenya Leather Development Council, KNBS, county veterinary departments</i>	2028–30
iii) Set up shared processing and digestion facilities Build shared rendering, wastewater and biogas facilities serving slaughterhouses in the same area. <i>Lead: MoALD (State Department for Livestock Development) and Directorate of Veterinary Services</i> <i>Supporting partners: County veterinary and public health departments, NEMA, Kenya Meat Commission, private abattoirs and butcher associations, feed millers</i>	2030–32 and beyond

ORG-5 Strengthen crop and agro-industrial residue valorisation

Between 5 and 24 million tonnes of crop and agro-processing residue are produced each year, and most is burned or left to rot. Regional hubs will turn residues into dry-season animal feed, EPRA will settle grid and tariff terms for power from residues, and processors will invest in cogeneration, meaning producing electricity and heat together from residues such as bagasse, under firm power purchase agreements.

Value chain focus. Upstream (residue upgraded into feed inputs) and downstream (residue to energy)

Activities	Timing
i) Set up regional hubs to upgrade crop residues into dry-season animal feed Set up regional hubs that turn crop residues into silage, hay and feed blocks for the dry season. <i>Lead: MoALD and county livestock departments</i> <i>Supporting partners: KALRO, ILRI, farmer cooperatives</i>	2029–32
ii) Clarify grid rules and tariff terms for exporting power from crop residues Settle the grid connection and tariff terms for processors exporting surplus power from bagasse, husks and other residues. <i>Lead: Ministry of Energy and Petroleum and EPRA</i> <i>Supporting partners: Kenya Power, crop industry boards, KenGen, National Treasury</i>	2028
iii) Upgrade processing plant energy equipment to export surplus power Upgrade boilers and turbines at large processors to export surplus power, each investment tied to a firm power purchase agreement. <i>Lead: Sugar millers and large processors</i> <i>Supporting partners: Kenya Sugar Board, National Treasury, DFIs, Kenya Power, EPRA</i>	2030–32 and beyond

ORG-6 Formalise, facilitate and encourage value addition to agricultural byproducts

Fish, crop and livestock by-products have commercial value but are discarded or traded informally, and unregulated trade can drive over-harvesting, as with fish maw. The Kenya Fisheries Service and MoALD will introduce traceable licensing linked to resource management, counties will build collection points at landing sites and slaughterhouses, and small processors will be supported to turn by-products into feed, fertiliser and other products.

Value chain focus. Midstream (value retention at landing) and downstream (by-product aggregation and processing)

Activities	Timing
i) Develop a by-product traceability and licensing protocol, aligned with resource management measures Develop a traceability and licensing protocol for fisheries and other by-products so their trade does not reward unsustainable harvest. <i>Lead: Kenya Fisheries Service and MoALD</i> <i>Supporting partners: Research institutes, beach management units, producer organisations</i>	2028–30

Activities	Timing
ii) Build collection and aggregation infrastructure at key production points Install chilled storage, drying yards and simple processing at landing sites, slaughterhouses and collection centres, with women and youth processors in operation and benefit-sharing. <i>Lead: County agriculture/livestock/fisheries departments</i> <i>Supporting partners: Producer organisations, private processors</i>	2029–32
iii) Promote local value-addition processing Support small processors to turn by-products into feed, fertiliser, collagen and biogas, after a feasibility screen of volumes, safety and markets. <i>Lead: County trade and industrialisation departments</i> <i>Supporting partners: Research institutes, private off-takers</i>	2029–32

ORG-7 Establish household and market-level organic waste segregation and community collection

Organic matter makes up 60 to 80 per cent of urban waste and about 95 per cent of households and markets do not separate it, so it contaminates every other recyclable. Counties will set up community buy-back and aggregation points for separated organic waste, register the collectors and youth enterprises already doing this work, and track volumes digitally so that the activity becomes financeable.

Value chain focus. Downstream (segregation and collection at source), feeding midstream processing

Activities	Timing
i) Establish community buy-back and aggregation points for source-separated organic waste Set up community buy-back and aggregation points for separated household and market organic waste in pilot counties, linked to composting, insect and biogas operators. <i>Lead: County governments</i> <i>Supporting partners: Market associations, CBOs, composting, insect-conversion and biogas operators</i>	2029–32
ii) Introduce digital collection tracking interoperable with the national portal Track collected and diverted volumes digitally, linked to the national reporting portal, so they become verifiable and financeable. <i>Lead: County governments and NEMA</i> <i>Supporting partners: Digital collection platform operators</i>	2029–31

4.5.2 Plastics and Packaging

Strategic objective. Shift the plastics and packaging sector, covering plastic, paper and board, glass, metal and composite packaging, from a linear, leak-prone system to a circular one. Packaging will be designed from the start for reuse or recycling, kept in use through deposit-return and reuse systems, and recovered at end of life through infrastructure spread across the country.

Sector targets

- Plastics recycling rate of 20 per cent by 2030 (provisional).
- All four hard-to-recycle streams under an assigned regime with cost-reflective fees by 2029.
- Plastic leakage to waterways reduced from about 37,000 to 25,000 tonnes a year by 2032.

These targets contribute to headline targets H8 and H13. The interventions below grow the circular business models mapped in Table F2, notably mono-material and recyclable design, refill and returnable packaging, aggregation and pre-processing, and recycling into non-packaging products; the enterprises running them are supported under CC-8.

Interventions 1 to 3 and 5 apply to all packaging materials where relevant. Glass, metals, paper and board and beverage cartons have very different recovery economics from plastics, and the material-flow summary for non-plastic packaging is to be completed for the final draft.

PLA-1 Adopt phased standards for recyclability, reuse and recycled content

No mandatory standard governs whether packaging can be recycled or reused, the 30 per cent recycled-content requirement has no phased path, and recycled plastic is taxed like virgin resin.⁹² KEBS will turn the Kenya Plastics Pact design guidelines into phased national standards, MoECCF will restrict formats with no viable recycling route, and KEBS will create a grading standard and an affordable food-contact certification route for recycled plastic.

Value chain focus. Upstream, with demand-side measures downstream

Ranking: Essential (standards must be in place before packaging can be designed for reuse)

Activities	Timing
i) Adopt and phase in standards for recyclability, reuse and recycled content Adopt the Kenya Plastics Pact guidelines as the national design baseline, phase in requirements by format starting with PVC in flexible packaging, and raise the 30 per cent recycled-content requirement on a published schedule. ⁹³⁹⁴⁹⁵ Lead: KEBS Supporting partners: MoECCF (regulations), NEMA, Kenya Plastics Pact, KAM and converters, KRA, licensed PROs	2029–32
ii) Restrict problematic formats and support alternatives Progressively restrict flexible and multilayer formats with no viable recycling route, including through stricter enforcement of the single-use plastics ban, and support producers to develop alternatives. ⁹⁶ Lead: MoECCF Supporting partners: NEMA (enforcement), KEBS, National Treasury and KRA, KIRDI and universities, brand owners and the Kenya Plastics Pact	2029–32

⁹²Kenya National Plastics Action Partnership, National Action Roadmap Executive Summary, Metrics Advisory Group Meeting 4, August 2026. Preliminary results, subject to final validation.

⁹³Woolworths Holdings consultation, 17 August 2026.

⁹⁴NPAP, National Action Roadmap Executive Summary, August 2026 (preliminary).

⁹⁵CESIP stakeholder consultation with Woolworths Holdings, 17 August 2026.

⁹⁶Gazette Notice No. 2356 of 28 February 2017, under sections 3 and 86 of EMCA (Cap. 387), effective 28 August 2017

PLA-2 Assess and introduce deposit-return and reuse systems

No producer will charge a deposit on its own because customers would switch brands, so return systems will not emerge voluntarily. Kenya has run returnable glass systems before.⁹⁷

NEMA will first test whether a deposit-return scheme, in which consumers pay a small refundable deposit on a beverage container, makes sense for Kenya, including its effect on informal collectors. If it does, MoECCF will make regulations for a scheme within the EPR system, producers will pilot it, and the shared infrastructure that reuse depends on will be built.

Value chain focus. Midstream, downstream

Activities	Timing
i) Assess the feasibility, cost and distributional effects of a beverage-container deposit-return scheme Study the cost, fit with EPR and effect on informal collectors' incomes of a deposit-return scheme for single-use beverage containers. <i>Lead: NEMA</i> <i>Supporting partners: MoECCF, producers, importers and licensed packaging PROs, retailers, waste-picker associations</i>	2028–29
ii) Make regulations for a deposit-return scheme within the EPR system If the study supports it, gazette regulations for a mandatory scheme run within the EPR system by a producer-led, not-for-profit operator licensed by NEMA. <i>Lead: MoECCF</i> <i>Supporting partners: NEMA (drafting, licensing and oversight), Office of the Attorney-General, producers, importers and licensed packaging PROs, retailers</i>	2030–31
iii) Pilot the deposit-return scheme in a defined geography Pilot the scheme in one county or urban area, measuring return rates, costs and effects on informal collectors, before any national rollout after 2032. <i>Lead: Producer-led system operator and licensed packaging PROs</i> <i>Supporting partners: NEMA (oversight), county government, retailers, reclaimer associations</i>	2031–32
iv) Develop the shared infrastructure that reuse depends on Provide collection space, traceability of returnable assets, shared washing facilities and consumer awareness, with incentives for private operators to invest. <i>Lead: NEMA and county governments</i> <i>Supporting partners: Retailers and reuse operators, licensed PROs, community organisations</i>	2029–32

PLA-3 Develop aggregation, recovery, and disposal infrastructure

Outside the main cities there is no capacity to bale and sort plastic close to where it is collected, no landfill meets sanitary standards, and plastic and fishing gear leak into rivers, lakes and the ocean.⁹⁸

Counties and NEMA will build a three-tier network of county pre-processing centres, regional sorting hubs and regional sanitary landfills, source from registered reclaimer cooperatives, harmonise county licences, and

⁹⁷CESIP Plastics and packaging FGD findings, August 2026

⁹⁸Ministry of Environment, Climate Change and Forestry, NEMA and JICA Expert Team, Baseline Survey Report on Plastic Waste Generation and Recycling: Methodology and Baseline Estimation for National Target Setting, July 2026 (draft).

intercept leakage at coasts and lakes. No dumpsite will close before a financed transition plan for its waste pickers is agreed.

Value chain focus. Midstream, downstream

Activities	Timing
i) Establish a three-tier, multi-stream recovery and disposal network Build county pre-processing centres, regional sorting hubs and regional sanitary landfills, commissioning capacity only where offtake is contracted and closing dumpsites only after a financed waste-picker transition plan is agreed. ⁹⁹¹⁰⁰¹⁰¹ <i>Lead: County governments</i> <i>Supporting partners: NEMA, licensed PROs across streams, offtake recyclers, DFIs</i>	2029–32
ii) Harmonise county and national licensing for waste movement Agree a single framework for licences and fees on moving recovered material across counties. <i>Lead: Council of Governors</i> <i>Supporting partners: NEMA, National Treasury</i>	2028–29
iii) Control plastic leakage into rivers, lakes, and oceans Intercept plastic at the river, lake and coastal points where leakage concentrates, pilot retrieval and take-back of lost fishing gear, and report in line with the Nairobi Convention. ¹⁰² <i>Lead: County governments, including coastal counties</i> <i>Supporting partners: NEMA, Kenya Maritime Authority, Kenya Fisheries Service, port and tourism actors, community groups</i>	2029–32

PLA-4 Regulate hard-to-recycle and hazardous streams

Diapers and other absorbent hygiene products have no recycler, no PRO and no treatment route, and hazardous packaging such as agrochemical containers needs separate handling.¹⁰³ MoECCF and NEMA will assign each hard-to-recycle stream to a single legal regime with cost-reflective fees, extend PRO coverage to hygiene products through dedicated fee lines, and assess chemical recycling, which breaks plastics down into chemical feedstock, as a long-term and regional option.

Value chain focus. Downstream

⁹⁹Sustainable Waste Management Act, 2022 (Cap. 387C), ss. 9(4), 14 and 17 (county collection centres, licensed MRFs, sanitary landfills, inter-county frameworks); Ministry of Environment and Forestry, National Sustainable Waste Management Policy, 2021 (jointly managed engineered landfills under county economic bloc agreements). Consolidated three-tier configuration: Ministry of Environment, Climate Change and Forestry, NEMA and JICA Expert Team, Baseline Survey Report on Plastic Waste Generation and Recycling, July 2026 (draft).

¹⁰⁰National Environment Management Authority, National Guidelines for the Establishment of Material Recovery Facilities, 2024. Access here

¹⁰¹NPAP, National Action Roadmap Executive Summary, August 2026 (preliminary).

¹⁰²CESIP Plastics and Packaging Focus Group Discussion, August 2026.

¹⁰³CESIP Plastics and Packaging Focus Group Discussion, August 2026.

Activities	Timing
i) Assign the governing regime for each stream and set cost-reflective hazardous fees with take-back Gazette which regime governs each hard-to-recycle stream, raise the hazardous packaging fee in phases from about KES 10 towards KES 60 per kilogram, and set up producer-funded take-back. <i>Lead: MoECCF and NEMA</i> <i>Supporting partners: Industry associations, producers</i>	2028–32
ii) Extend PRO coverage and treatment routes to absorbent hygiene products Add a dedicated fee line and treatment route for absorbent hygiene products within licensed PROs, agreed with packaging PROs so that no producer pays twice. ¹⁰⁴ <i>Lead: NEMA</i> <i>Supporting partners: Licensed PROs, diaper and hygiene product producers</i>	2029–32
iii) Explore chemical recycling as a long-term, regional and niche option Assess whether chemical recycling could serve niche uses such as food-contact layers, with any public-private partnership following only a positive assessment. ¹⁰⁵ <i>Lead: State Department for Industrialization and NEMA</i> <i>Supporting partners: MoECCF, EAC partner states, private developers, DFIs</i>	2030–32 and beyond

4.5.3 Electrical and Electronic Equipment (E-waste)

Strategic objective. Shift electrical and electronic equipment from short-lived imports that end in informal dismantling and open burning to products that enter the market repairable and traceable, stay in use longer through certified repair and refurbishment, and are collected and processed safely, with the highest-value fractions recovered domestically or regionally.

Sector targets

- Circularity conditions in type approval by 2029.
- Formal e-waste collection and recycling at 25 per cent of generation by 2032.
- Certified repair technicians at about 3,000 by 2032.

These targets contribute to headline target H9. The interventions below grow the circular business models mapped in Table F3, notably repair and refurbishment, pay-as-you-go and battery-swapping services, take-back and collection, and dismantling and recycling; the enterprises running them are supported under CC-8.

EEE-1 Implement circularity obligations at market entry through type approval reform

About 70 per cent of electronics are imported, and type approval, the licence that equipment needs before it can be sold in Kenya, checks nothing about repairability, spare parts or EPR registration. The Ministry of ICT and the Communications Authority will add circularity conditions to type approval, enforced jointly with NEMA and KRA at the border.

Value chain focus. Upstream

¹⁰⁴CESIP Plastics and Packaging Focus Group Discussion, August 2026.

¹⁰⁵NPAP, National Action Roadmap Executive Summary, August 2026 (preliminary).

Activities	Timing
i) Add circularity conditions to the Type Approval Regulations 2026 Amend the Type Approval Regulations to require minimum repairability scores and at least five years of spare-parts availability. <i>Lead: Ministry of ICT and Communications Authority</i> <i>Supporting partners: NEMA, KEBS</i>	2028–29
ii) Establish a joint CA, NEMA and KRA enforcement protocol at market entry Link EPR non-compliance to suspension of type approval, and provide for joint border inspections of imported equipment. <i>Lead: Communications Authority</i> <i>Supporting partners: NEMA, KRA</i>	2028–29

EEE-2 Scale repair, refurbishment and technician certification

Repair is widespread but uncertified, there is no standard for a refurbished device and buyers of refurbished goods have no warranty protection. KEBS will set repair and refurbishment standards, TVET institutions will certify technicians, the Competition Authority will extend consumer protection to refurbished goods, and public procurement will favour refurbished equipment and leasing contracts.

Value chain focus. Midstream and downstream (repair, refurbishment, reuse)

Activities	Timing
i) Develop national repair and refurbishment standards Set technical standards a repaired or refurbished device must meet on safety, performance and quality before resale. <i>Lead: KEBS</i> <i>Supporting partners: Licensed recyclers such as WEEE Centre, Jua Kali associations</i>	2029–31
ii) Build a TVET-delivered technician certification pathway Develop an accredited TVET certification pathway for repair and refurbishment technicians, based on the new standards. <i>Lead: TVET institutions</i> <i>Supporting partners: KEBS, Jua Kali associations</i>	2029–31
iii) Establish a legal framework for refurbished-product warranties Give buyers of certified refurbished equipment the same warranty and consumer protection as buyers of new products. <i>Lead: Competition Authority of Kenya</i> <i>Supporting partners: KEBS, State Department for Industrialization, licensed recyclers</i>	2029–31

EEE-3 Mandate retailer take-back and incentivise consumer collection

Collection points are underused because consumers do not know about them, retailers have no take-back duty and people hold on to old devices. MoECCF will require retailers, distributors and public institutions above a size threshold to run take-back points, and licensed PROs will pilot incentives such as trade-in discounts.

Value chain focus. Downstream and midstream (consumer-facing collection)

Activities	Timing
i) Require take-back points at retailers, distributors and institutions, with incentives Require retailers, distributors and large public institutions to run permanent collection points, with incentives for retailers that exceed the minimum. <i>Lead: MoECCF</i> <i>Supporting partners: Licensed e-waste PROs, retailers' association, ICT Authority</i>	2028–30

EEE-4 Build domestic E-waste material recovery capacity

Over 90 per cent of e-waste is handled informally, often with open burning, while licensed facilities run well below capacity and high-value parts are exported unprocessed. NEMA will set out which fractions are worth processing in Kenya, recyclers will invest where the economics work, and registered informal dismantlers will be trained and linked to licensed recyclers.

Value chain focus. Midstream and downstream (material recovery, secondary markets)

Activities	Timing
i) Develop a national e-waste recovery roadmap Assess which e-waste fractions, from batteries and solar panels to circuit boards and metals, should be processed in Kenya, pre-processed for export or sent for specialised treatment. <i>Lead: NEMA</i> <i>Supporting partners: MoECCF, EPROK, licensed recyclers, KEBS, KenInvest, financiers and development partners</i>	2028–29
ii) Scale domestic fraction-specific pre-processing capacity Support investment in dismantling, sorting and pre-processing for fractions where domestic economics work, avoiding premature investment in circuit-board recovery. <i>Lead: Licensed recyclers and investors</i> <i>Supporting partners: NEMA, licensed e-waste PROs, KenInvest, financiers and development partners</i>	2030–32

EEE-5 Establish a regional (East Africa) e-waste processing hub

Kenya's volumes alone may not justify full precious-metal recovery, and neighbouring countries face the same gap. MoECCF will agree cross-border movement rules with EAC partners under the Basel Convention, the treaty that controls cross-border shipments of hazardous waste, before a regional processing hub is structured as a public-private partnership with EACO.

Value chain focus. Midstream and downstream

Activities	Timing
i) Establish a legal framework for cross-border e-waste movement Agree Basel-compliant transboundary movement procedures with Uganda, Tanzania, Rwanda and South Sudan before construction financing is committed. <i>Lead: MoECCF</i> <i>Supporting partners: NEMA, environmental authorities of Uganda, Tanzania, Rwanda and South Sudan, EAC Secretariat, EACO</i>	2028–30
ii) Structure a regional e-waste processing PPP Structure, with EACO, a public-private partnership for a regional facility with full precious-metal recovery. <i>Lead: NEMA and MoECCF</i> <i>Supporting partners: EAC Secretariat, EACO, counterpart environmental authorities, private operator</i>	2031–32 and beyond

4.5.4 Textiles, Apparel and Fashion

Strategic objective. Shift textiles from garments designed and imported with no thought for their end of life, to garments built for durability and lower synthetic content, kept in use through reuse, resale and repair, and once truly worn out, captured and returned to fibre production instead of being burned or dumped.

Sector targets

- Textile PRO fee revenue fully and auditably disbursed from 2028.
- KEBS grading standard in force by 2030.
- Sorting hub operating by 2031.

These targets contribute to headline targets H5 and H12. The interventions below grow the circular business models mapped in Table F4, notably upcycling, second-hand resale and repair, and post-consumer collection, and aim to open the recycled-fibre models not yet operating in Kenya; the enterprises running them are supported under CC-8.

TEX-1 Prepare Kenyan textile exporters for ecodesign and digital product passport requirements

Kenya's textile exporters face new rules in their main markets, including the EU Ecodesign for Sustainable Products Regulation (ESPR) and digital product passports, which record a product's materials and footprint so buyers can trace it. Few firms are ready.

EPZA and KAM will run a readiness programme on traceability and product data, and training institutions will deliver ecodesign training with buyer-backed pilots.

Value chain focus. Upstream (design and production) for export value chains

Activities	Timing
i) Establish a textile ecodesign and digital product passport readiness programme Help exporters and EPZ firms prepare for digital product passports, traceability and lifecycle assessment through guidance, pilots and buyer-linked demonstrations. <i>Lead: EPZA and KAM</i> <i>Supporting partners: State Department for Industrialization, EU CERC, export-oriented manufacturers</i>	2029–32
ii) Deliver a national textile ecodesign capacity-building and buyer-pilot programme Train manufacturers in ecodesign, durability, recyclability and EU ecodesign compliance, paired with buyers in market pilots. <i>Lead: Kenya Institute of Textile and Technology and KAM</i> <i>Supporting partners: State Department for Industrialization, EU CERC, buyers</i>	2029–32

TEX-2 Strengthen local manufacturing, resale and fibre-recovery capacity

Local manufacturers struggle to compete with imports, natural-fibre production has declined, and Kenya has no fibre-to-fibre recycling. The State Department for Industrialization will operationalise the Cotton, Textile and Apparel Policy, support manufacturers and pilot bio-based fibres as a longer-term option, public procurement will create demand for reclaimed content where certified supply exists, and resale and repair platforms will extend garment life.

Value chain focus. Upstream (fibre production, manufacturing) and midstream (resale)

Activities	Timing
i) Operationalise the CTA Policy Operationalise the circularity and EPR provisions of the Cotton, Textile and Apparels Policy once Cabinet approves it. <i>Lead: State Department for Industrialization</i> <i>Supporting partners: NEMA</i>	2028–29
ii) Strengthen local manufacturing and natural-fibre production Finance and support local manufacturers and natural-fibre production, and pilot bio-based fibres such as banana and pineapple. <i>Lead: State Department for Industrialization</i> <i>Supporting partners: AFA Fibre Crops Directorate, MCAK, Kenya Association of Manufacturers, Kenyatta University</i>	2029–32 and beyond
iii) Support digital resale and repair platforms Support digital resale, rental and repair platforms that connect informal traders and tailors to wider markets. <i>Lead: Micro and Small Enterprises Authority</i> <i>Supporting partners: State Department for Industrialization, MCAK, platform operators, tailor and trader associations</i>	2029–31

TEX-3 Strengthen textile standards for textile materials and natural-fibre content

There is no grading standard for sorted or recycled textiles, so buyers cannot specify what they want. KEBS will develop grading standards, and the State Department for Industrialization will assess, before any decision, whether a minimum natural-fibre requirement is workable given trade rules and the mitumba trade.

Value chain focus. Midstream (grading, standards)

Activities	Timing
i) Develop KEBS grading standards for sorted and recycled textiles Develop KEBS grades (A to D) for sorted second-hand and recycled textiles, with quality benchmarks for recycled fibres. <i>Lead: KEBS</i> <i>Supporting partners: MCAK, textile PRO, recyclers</i>	2028–30
ii) Assess a minimum natural-fibre content requirement Assess a minimum natural-fibre content for garments sold in Kenya, weighing effects on the mitumba trade, prices, trade commitments and alternatives such as labelling. <i>Lead: State Department for Industrialization</i> <i>Supporting partners: KEBS, State Department for Trade, MCAK, textile PRO</i>	2030–31

TEX-4 Establish a textile sorting and aggregation hub

Kenya has no formal textile sorting or recycling facility, and the size of the waste problem is disputed. The textile PRO and Nairobi City County will complete a feasibility study once the characterisation study reports, and a private operator will build and run a sorting hub that hires existing informal sorters and buys from them rather than displacing them.

Value chain focus. Downstream (collection, sorting) with midstream linkages to recyclers and downcyclers

Activities	Timing
i) Complete feasibility, siting and the operating model for the hub Using the second-hand clothing study, confirm the hub's capacity, site, cost and offtake, assess effects on informal sorters, and tender a private operator. <i>Lead: Textile PRO and Nairobi City County</i> <i>Supporting partners: MCAK, CESIP Secretariat, PPP Directorate</i>	2028–29
ii) Build and commission the sorting and aggregation facility Build the sorting and baling facility through the private operator, with contracted feedstock and offtake before construction and a minimum share of jobs for informal sorters. <i>Lead: Private operator under concession</i> <i>Supporting partners: Textile PRO, Nairobi City County, MCAK</i>	2030–31

TEX-5 Set up a PRO for textiles

Importers already pay an EPR fee per bale, but no operating PRO channels the money into collection and recycling. The textile PRO will roll out under NEMA licensing with audited accounts, MoECCF will define textile producers in the EPR Regulations, and the PRO will design a take-back system.

Value chain focus. Downstream (collection, take-back) with upstream policy implications for importers and brands

Activities	Timing
i) Roll out the textile PRO and channel EPR fees transparently Support the textile PRO roll-out and ensure the KES 150 per bale EPR fee is spent transparently on collection and recycling, with a published annual audit. <i>Lead: Textile PRO</i> <i>Supporting partners: NEMA (licensing and oversight), State Department for Industrialization</i>	2028
ii) Define textile producers and their obligations in the EPR Regulations Define textile producers and their end-of-life obligations through the review of the EPR Regulations. <i>Lead: MoECCF</i> <i>Supporting partners: NEMA, State Department for Industrialization, textile PRO, MCAK</i>	2029–30
iii) Design a textile take-back and buy-back system Design a textile take-back and buy-back system with recyclers involved from the outset. <i>Lead: Textile PRO</i> <i>Supporting partners: Recyclers and collectors, retailers, NEMA</i>	2029

4.5.5 Mining, Quarrying and Construction

Strategic objective. Shift the built environment from extracting, using and dumping materials to one where buildings and infrastructure are designed for disassembly, construction and demolition waste and mining side streams are measured and recovered, and public procurement creates anchor demand for certified secondary materials. Mining and construction waste follow different regulatory and technical pathways and are treated separately where this matters.

Sector targets

- Construction and demolition waste recovery of 20 per cent by 2032 against a verified baseline.
- Recycled content phased towards 20 per cent in public tenders by 2032.
- A circular mining approach introduced.

These targets contribute to headline targets H10 and H11. The interventions below grow the circular business models mapped in Table F5, notably design for disassembly and alternative building blocks, recycled plastic and aggregate products, equipment rental, mine and quarry rehabilitation, and scrap recovery; the enterprises running them are supported under CC-8.

A verified construction and demolition waste baseline is a prerequisite milestone before major national recovery targets are fixed. The mining component is broadened in Draft 2 beyond construction aggregates towards circular mining, consistent with Kenya's interest in a wider minerals sector.

CON-1 Mainstream design for disassembly and scale material-recovery and circular mining models

Buildings are designed with materials that cannot be recovered, and mining and quarry side streams, such as waste rock and tailings, are treated only as liabilities. Government projects will assess design for disassembly, meaning designing buildings so parts can be taken apart and reused, mining-waste bricks will be scaled up, abandoned quarries mapped for reuse, and a circular mining approach introduced that recovers more value from what is already extracted.

Value chain focus. Upstream (design) through downstream (material recovery, repurposing)

Activities	Timing
i) Require design-for-disassembly assessments and fund pilots Require design-for-disassembly assessments for government projects above KES 100 million and fund five to ten demonstration pilots. <i>Lead: State Department for Public Works and NCA</i> <i>Supporting partners: Kenya Green Building Society</i>	2028–30
ii) Scale up mining-waste-to-brick production Provide equipment grants and certification support to scale mining-waste-to-brick ventures nationally. <i>Lead: State Department for Mining</i> <i>Supporting partners: KEBS, mining-waste-to-brick ventures</i>	2029–30
iii) Map abandoned quarries and side streams for repurposing Map abandoned quarries and the minerals left in quarry and mine side streams, for repurposing. <i>Lead: Ministry of Mining</i> <i>Supporting partners: County governments</i>	2029–31
iv) Introduce a circular mining approach Scope the minerals in Kenya's mining pipeline, including critical raw materials, and introduce a circular mining approach covering traceability, artisanal miners and recovery from side streams. <i>Lead: Ministry of Mining, Blue Economy and Maritime Affairs</i> <i>Supporting partners: State Department for Mining, county governments, EU CERC, research institutions</i>	2029–32

CON-2 Standards, testing and certification for recycled and secondary materials

There are no KEBS specifications for recycled aggregate, reclaimed timber or recovered steel, so buyers cannot trust them, and the second-hand materials trade is undocumented. KEBS will issue specifications, NCA will map and grade the second-hand dealer network, and industry will develop a Kenyan circularity rating tool for buildings.

Value chain focus. Upstream (materials grading, standards)

Activities	Timing
i) Develop KEBS specifications for secondary construction materials Develop KEBS specifications for recycled concrete aggregate, reclaimed timber and recovered metal. <i>Lead: KEBS</i> <i>Supporting partners: Kenya Green Building Society</i>	2028–29
ii) Map and grade second-hand building material dealers Map and grade the second-hand building materials dealer network in major towns. <i>Lead: NCA</i> <i>Supporting partners: Kenya Green Building Society</i>	2028–29
iii) Develop a Kenya-specific circularity rating tool Support a Kenya-specific circularity rating tool for buildings. <i>Lead: Kenya Green Building Society</i> <i>Supporting partners: KEPSA, Architectural Association of Kenya</i>	2029

CON-3 Flagship Nairobi C&D waste sorting and processing facility

Kenya has no operating C&D waste recycling facility to show what recovery can achieve. NCA and Nairobi City County will complete a feasibility study once the C&D baseline is known, and a private operator will build a sorting and crushing facility producing recycled concrete aggregate, meaning crushed concrete reused as a building material, with priority hiring for informal waste workers.

Value chain focus. Downstream (sorting, processing) with upstream implications for recycled-material supply

Activities	Timing
i) Complete feasibility, siting and the operating model for the facility Using the C&D study, confirm the facility's capacity, site, cost and offtake, assess effects on informal salvagers, and tender a private operator. <i>Lead: NCA and Nairobi City County</i> <i>Supporting partners: CESIP Secretariat, PPP Directorate</i>	2028–29
ii) Build and commission the flagship C&D sorting and crushing facility Build a 200 tonne-a-day crushing and sorting facility through the private operator, with contracted offtake before construction and a minimum share of jobs for informal workers. <i>Lead: Private operator under concession</i> <i>Supporting partners: NCA, Nairobi City County, KEBS</i>	2030–31

CON-4 Align CESIP with, and resource, the NCA's C&D Waste Management Strategy

The NCA's C&D Waste Management Strategy already sets a 20 per cent recovery target, and a parallel CESIP framework would fragment effort. CESIP will act as an implementation partner for the NCA strategy, co-fund coordination across NCA, NEMA, counties and KEBS, and assess whether NCA needs a formal co-regulatory role.

Activities	Timing
i) Align CESIP with the NCA Strategy recovery target Position CESIP as an implementation partner for the NCA Strategy's 20 per cent recovery target rather than a parallel framework. <i>Lead: CESIP Secretariat</i> <i>Supporting partners: NCA</i>	2028
ii) Co-fund institutional coordination for C&D waste Co-fund the coordination mechanisms the NCA Strategy sets up across NCA, NEMA, counties and KEBS. <i>Lead: NCA</i> <i>Supporting partners: NEMA, KEBS, county governments</i>	2028–29
iii) Assess a formal co-regulatory role for NCA Assess a formal co-regulatory role for NCA on circular economy matters, which would require a legal amendment. <i>Lead: MoECCF and NCA</i> <i>Supporting partners: NEMA, EPZA</i>	2029–30

4.6 Sequencing and Phasing

CESIP runs for five years, from 2028 to 2032. 2027 is a preparatory year outside the five years, and implementation then runs in two phases within the period, followed by a long-term pathway beyond it. The phases match the horizon tags used throughout the document. Each phase is defined by what the evidence in Chapter 3 shows must come first, namely verified baselines and standards before infrastructure, county delivery mechanisms before national scale-up, and regional integration once domestic systems are functioning.

Table 14 Phases of the strategy

Phase	Purpose
2027 Getting ready (preparatory year)	Validate and adopt CESIP, set up the coordination mechanism and Secretariat, cost Annex A and prepare 2028 budgets
Phase 1, Foundations  2028–2029	Put in place what everything else depends on, namely baselines, standards, legal certainty in EPR, procurement rules, the finance facility and registration of informal workers, and complete feasibility for the flagship facilities
Phase 2, Regulation, demand and scale  2030–2032	Make standards mandatory, apply procurement requirements, scale recovery infrastructure and contracts, and review progress at mid-term (2030) and end of period (2032)
Long-term pathway  beyond 2032	Regional processing, national rollout of successful pilots and the larger investments for which CESIP lays the first steps

The timing of every activity is shown in the timeline in Annex A1.

Gates before capital investment. Major capital investments proceed only once their preconditions are met, so that infrastructure follows demonstrated demand. The gates are (i) an approved baseline for the material stream concerned; (ii) the relevant standard or specification in force, where the facility's output depends on one; (iii) contracted offtake or a financing commitment; and (iv) a county agreement covering land, permits and, where people's livelihoods are affected, a financed transition plan. Annex A records the gate that applies to each capital activity under its dependencies.

If the EPR litigation is not resolved. Court timelines are outside CESIP's control. Phase 1 therefore depends on the consultative regulatory review and the interim compliance framework (CC-4 (i) and CC-4 (ii)), which government controls, rather than on the outcome of the cases. If the cases remain open beyond 2028, the interim framework continues and later phases proceed on that basis.

Source consolidated from the sector implementation roadmaps developed for each priority sector and updated for the 2028–2032 strategy period.

4.7 Gender and Youth

The gender and youth commitments apply to every cross-cutting priority and sector intervention above.

4.7.1 Gender-Transformative Approach

The strategy is gender transformative rather than gender neutral, so the test is not whether women participate, but whether formalisation transfers value towards them or away from them. Women are concentrated at exactly the points the strategy formalises, picking and sorting in plastics and e-waste, post-harvest handling and market trading in food systems, sorting, repair and resale in textiles, while men control aggregation, pricing and the higher-value stages. Licensing collector groups, siting formal facilities and awarding PRO contracts each carry a live risk of consolidating access in male-controlled structures unless the design binds against it.

Across the three Cs and circular support, the same mechanisms apply in every sector. In circular design and production, producer responsibility for absorbent hygiene products (PLA-4 (ii)) matters for women because the cost of managing this waste stream currently falls on households, and largely on women through unpaid care work, and on the collectors who handle it; bringing it under producer responsibility shifts that cost to producers. In circular use, reuse return points, washing facilities and sorting hubs will be sited, lit and staffed for women's safety, with hours and childcare provision that accommodate care responsibilities, and refunds paid directly to the person returning material. In circular value recovery, fixed published weigh-in prices paid directly to registered women will dismantle intermediated price-setting, protective equipment will apply regardless of registration status, and cooperative governance will carry women's representation requirements. In circular support, the national finance facility will operate a women-led enterprise window whose ticket sizes and collateral requirements do not presuppose land or plant ownership, and sex-disaggregated employment and income data will be a standing condition of EPR contracts and public financing.

The approach is to measure, then bind, then report. Socio-economic and node mapping in 2028 establishes the baseline, using existing instruments such as the WE-GE (Women and Green Enterprise) Index where they already operate rather than commissioning parallel surveys; until it reports, gender provisions are framed as design requirements rather than quantified targets; from that point, sex-disaggregated reporting through the MEL framework (Chapter 8) carries the obligation. Together these measures move women from unprotected, intermediated labour into directly paid, protected and represented positions, and into ownership, across the circular economy.

The commitments become measurable through five indicators in Annex B, set once the 2028 mapping reports, namely the share of PRO collection contracts held by women-led cooperatives, the number of women beneficiaries and their change in income, women's representation in cooperative and TWG governance, the

share of finance facility disbursements to women-led enterprises, and the share of facilities meeting the safety and siting requirements above.

4.7.2 Youth Circular Innovation Ecosystem

Young people are already the operational backbone of Kenya's recovery economy, dominating waste picking, collection, repair and device markets, yet they are under-represented in ownership, and in agriculture, youth are about 35% of the population but fewer than 10% of those engaged in the sector.¹⁰⁶ The strategy therefore routes youth participation through the instruments already in the action plan rather than building a parallel youth track, and connects skills to enterprise, since training alone does not produce sustained participation unless young people can move from acquiring skills to testing ideas, establishing enterprises, accessing finance and securing markets.

Across the three Cs and circular support, the pathways are consistent. In circular design and production, co-funded research and development programmes, design-for-disassembly pilots and bio-based fibre and mining-waste valorisation initiatives are open to youth-led ventures as financed routes into upstream innovation. In circular use, reuse service systems, shared washing facilities, reverse logistics, digital traceability of returnable assets, resale platforms and tiered repair certification open a service economy suited to young entrepreneurs. In circular value recovery, tiered registration systems and digital collection platforms formalise the collection base young people already operate, with minimum set-asides in PRO collection contracts and youth participation tracked through the MEL framework. Youth-led collection enterprises using digital collection platforms already operate in Nairobi, Kisumu and Mombasa and can inform national rollout rather than requiring a new pilot (ORG-7). In circular support, the finance facility will operate a dedicated youth window with smaller ticket sizes and collateral requirements that do not presuppose asset ownership, delivered with the NYOTA programme, and the circular enterprise support programme under CC-8 will run a youth track focused on the business models with the lowest entry barriers, such as repair and refurbishment, rental, digital marketplaces and collection services (Annex F), while TVET institutions carry circular economy modules linked to practical business development, and KEBS standards give youth innovations the certification route from prototype to viable business. Together, these pathways position young people not only as the workforce of collection and recovery, but as certified technicians, service providers and business owners capable of driving the scale-up of Kenya's reuse, recycling and circular design segments.

The youth ambition is quantified in Annex B through youth-led enterprises supported, technicians certified, finance mobilised through the youth window, jobs created and innovations commercialised.

¹⁰⁶Agricultural Sector Transformation and Growth Strategy, 2019 to 2029.

5. Investment and Financing Framework

This chapter builds on the financing baseline in Section 3.4.1. It sets out how much financing is needed and where capital will come from, including the fiscal incentives that correct the price signals circular businesses face. It also covers how circular enterprises can become bankable and the opportunities for carbon finance.

5.1 Economic Opportunity, Cost of Delivery and Financing Needs

5.1.1 The investment case

Kenya's economy remains largely linear. Across the five priority sectors, production depends heavily on imported virgin inputs, while domestically available secondary materials, such as packaging, organic residues, textiles, electronic components and construction materials, remain largely unrecovered.¹⁰⁷ Circular approaches to design, reuse and recovery could generate over USD 700 million across the five sectors and add about 0.5 per cent to GDP by 2030, a finding supported by NEMA's modelling using the Cambridge Econometrics FRAMES framework.¹⁰⁸

5.1.2 Financing need

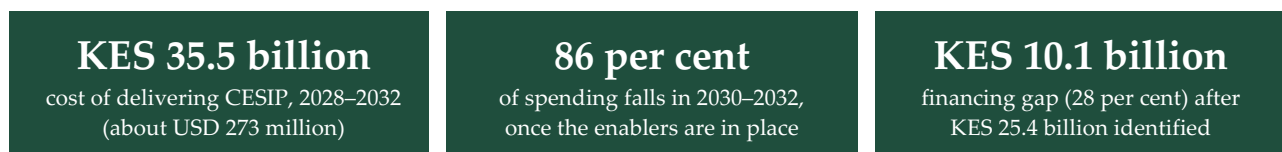
The economic opportunity and the cost of delivery are distinct, and the strategy treats them separately. Annex A4 puts the cost of delivering CESIP at about KES 35.5 billion (about USD 273 million) over 2028–2032. Spending is heavily back-loaded: KES 4.8 billion (14 per cent) falls in 2028–2029, when standards, regulation and project preparation are put in place, and KES 30.7 billion (86 per cent) in 2030–2032, when recovery and processing infrastructure is built. Funding identified so far covers KES 25.4 billion (72 per cent), leaving a financing gap of about KES 10.1 billion (28 per cent). Projected revenues, such as EPR fee income, carbon credits and power sales, are reported separately and are not netted against this need.

Figure 3 shows what the need pays for and how it is phased. Recovery and processing infrastructure takes about 41 per cent (KES 14.4 billion), led by the regional plastics recovery network. Energy infrastructure takes about 25 per cent (KES 9.0 billion), almost all of it for export-capable bagasse cogeneration in agro-processing (ORG-5 (iii)). Upstream measures take about 8 per cent (KES 2.8 billion). They cover recyclability and reuse standards, ecodesign for exporters, repair and refurbishment, reuse systems, natural-fibre alternatives, design for disassembly and first-mile storage that prevents food loss. The upstream share is smaller because most upstream change is driven by rules and prices rather than capital: design standards, format restrictions, recycled-content requirements, green procurement and fiscal incentives cost the budget little but change what producers make and buyers choose. Fiscal incentives are revenue forgone and are not counted in the total. Annexes A2 to A4 give the breakdown by intervention.

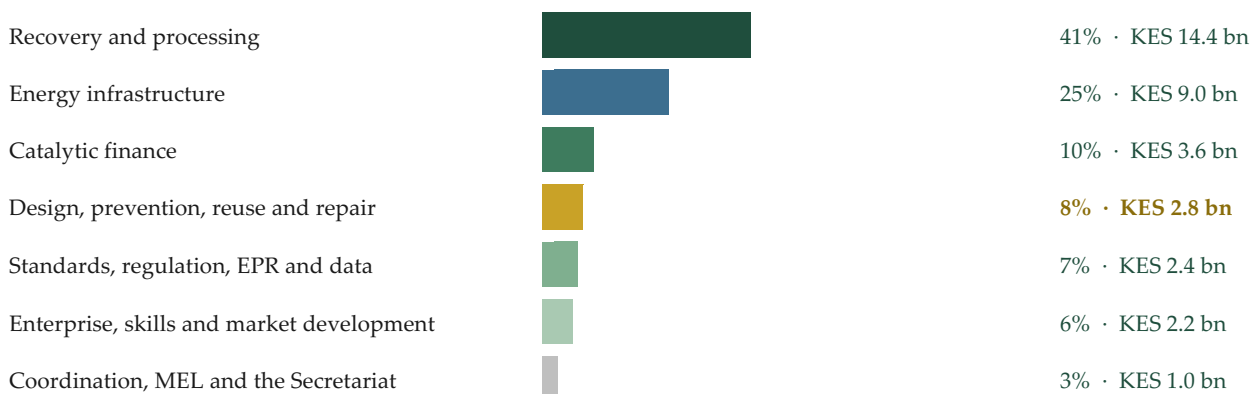
The remaining four groups are enablers. They account for about 26 per cent of the total, yet they determine whether the infrastructure becomes bankable: standards create markets for recovered materials, EPR certainty secures the fee revenue that services debt, and reliable data allows lenders to price risk. The strategy therefore front-loads these enablers in 2028–2029 and releases capital for infrastructure in 2030–2032 once they are in place.

¹⁰⁷Invest Kenya, Waste Management and Circular Economy Investment Opportunity in Kenya, 2026. Developed with Systemiq, ALN Kenya and TakaTaka Ni Mali.

¹⁰⁸NEMA, Circular Economy in Kenya, Cambridge Econometrics FRAMES model assessment across six priority sectors.



What the KES 35.5 billion pays for



How it is sequenced

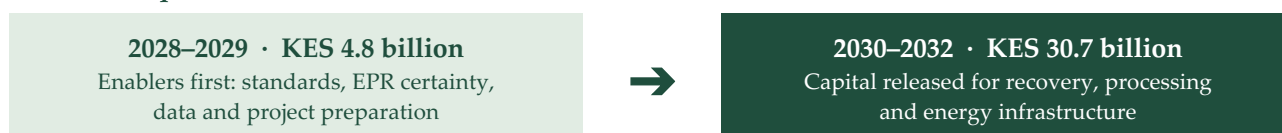


Figure 3 Financing need by intervention group and phase, 2028–2032

Capital is available in the market: Kenyan start-ups raised approximately USD 984 million in 2025, the highest on the continent and roughly one third of all African start-up funding, and more than 120 circularity-focused companies already operate in the country.¹⁰⁹ Yet circular economy investment remains concentrated in early-stage grants and seed capital, with significant gaps in growth-stage debt and blended finance, particularly for asset-intensive infrastructure. Part of the gap is also invisible: most banks do not classify lending as green or circular, so capital flowing to the sector cannot be tracked, targeted or reported.¹¹⁰ Expanding the Kenya Green Finance Taxonomy to incorporate circularity is therefore an early action of this strategy (CC-3 (iii)).

The challenge is less the availability of capital than matching the right instrument to each group of interventions: public budgets, EPR revenue and grants for the enablers; concessional, blended and project finance for infrastructure; and venture and growth equity for early-stage circular enterprises. Section 5.2 sets out the sources expected to close the gap and Section 5.3 the pathways that will make circular enterprises bankable enough to attract them.

5.1.3 Sector financing needs

Table 15 sets out the financing need of the five priority sectors and the cross-cutting priorities over three horizons. The short term (2028–2029) is dominated by standards, regulation and feasibility work that make later capital spending bankable. The medium term (2030–2032) carries about 87 per cent of the combined need, as recovery, processing and storage infrastructure is built and the finance facility is deployed. The long term (beyond 2032) covers investments that are prepared within the plan period but completed after it. These are not costed in Annex A; the table gives an indicative range of KES 35–70 billion to complete them, expected to be financed mainly through PPPs, project finance and commercial capital once the earlier phases have proved the business case.

¹⁰⁹Africa: The Big Deal, Startup Ecosystem Report 2026.

¹¹⁰CESIP Finance and Investment Focus Group Discussion, 30 July 2026.

Table 15 Financing needs of the five priority sectors and cross-cutting priorities by time horizon

Sector	Short term (2028–2029)	Medium term (2030–2032)	Long term (beyond 2032, indicative)
Agriculture and food systems (ORG) KES 13,370 million	KES 560 million Gazette organic fertiliser and circular feed standards (ORG-1, ORG-2), extend livestock traceability (ORG-4 (ii)), set grid and tariff rules for residue energy (ORG-5 (ii)) and open the fertiliser subsidy to certified products (ORG-1 (iii)).	KES 12,810 million Energy-equipment upgrades in sugar mills and large processors, about KES 9.0 billion (ORG-5 (iii)); shared livestock by-product processing (ORG-4 (iii)); certified warehouses, drying and cold chain (ORG-3); residue-to-feed hubs, by-product collection sites and county buy-back points (ORG-5 to ORG-7).	KES 10–18 billion Complete the national network of by-product processing facilities (ORG-4 (iii)) and further phases of residue-to-energy capacity (ORG-5 (iii)), financed mainly through PPPs and power purchase agreements.
Plastics and packaging (PLA) KES 10,535 million	KES 207 million Deposit-return feasibility study (PLA-2 (i)) and determination of the regime and full-cost fees for hard-to-recycle and hazardous streams (PLA-4 (i)). Licensing harmonisation is costed under CC-4.	KES 10,328 million Three-tier regional recovery network in five regions, about KES 9.0 billion (PLA-3 (i)); recyclability and recycled-content standards and format restrictions (PLA-1); deposit-return regulations, pilot and reuse washing hubs (PLA-2); river and coastal leakage interception (PLA-3 (iii)).	KES 10–25 billion National roll-out of deposit-return (PLA-2 (iii)) and any regional chemical recycling plant, if the 2030–2032 scoping supports it (PLA-4 (iii)). The upper end of the range assumes the chemical recycling plant proceeds.
E-waste (EEE) KES 1,945 million	KES 328 million Circularity conditions in type approval and joint CA, NEMA and KRA enforcement (EEE-1), the e-waste recovery roadmap (EEE-4 (i)), first retailer take-back points (EEE-3) and a Basel-compliant framework for regional trade (EEE-5 (i)).	KES 1,617 million Three fraction-specific pre-processing facilities, about KES 1.2 billion (EEE-4 (ii)); repair standards and certification of about 3,000 technicians (EEE-2); completion of take-back points (EEE-3); PPP structuring for a regional hub (EEE-5 (ii)).	KES 4–8 billion Construction and operation of the regional East African e-waste processing hub under a PPP (EEE-5 (ii)).
Textiles (TEX) KES 985 million	KES 307 million Set up the textile PRO and fee system (TEX-5), implement the CTA Policy (TEX-2 (i)), develop grading standards for sorted textiles (TEX-3 (i)) and complete feasibility for the sorting hub (TEX-4 (i)).	KES 678 million Build the sorting and aggregation hub (TEX-4 (ii)); ecodesign and digital product passport readiness for about 40 exporters (TEX-1); natural-fibre pilots and support for resale and repair platforms (TEX-2).	KES 1–3 billion Scale natural-fibre and bio-based fibre manufacturing beyond the pilots (TEX-2 (ii)).
Mining, quarrying and construction (CON) KES 750 million	KES 320 million Design-for-disassembly requirement for public buildings (CON-1 (i)), specifications and grading for secondary materials and a circularity rating tool (CON-2), C&D facility feasibility (CON-3 (i)) and alignment with the NCA strategy (CON-4).	KES 430 million Build the flagship Nairobi C&D sorting and processing facility (CON-3 (ii)); equipment grants for mining-waste-to-brick ventures, quarry mapping and circular mining guidelines (CON-1 (ii) to (iv)).	KES 0.5–1.5 billion Replication of C&D facilities in two to four other cities, subject to the performance of the Nairobi facility, assessed through the progress reviews in Section 8.5.
Cross-cutting priorities (CC)	KES 2,723 million	KES 4,189 million	KES 10–15 billion

Sector	Short term (2028–2029)	Medium term (2030–2032)	Long term (beyond 2032, indicative)
KES 6,912 million	Gazette core standards and build accredited testing (CC-1), amend procurement regulations (CC-2), design the Circular Economy Finance Facility and extend the Green Finance Taxonomy (CC-3), review the EPR Regulations (CC-4 (i)), map informal livelihoods and provide PPE and health screening (CC-5) and adopt a national waste estimation methodology (CC-6 (i)).	Deploy the first-loss tranche of the finance facility, about KES 3.25 billion (CC-3 (i)); complete the material flow baseline and national waste information system (CC-6); certify about 12,000 workers in circular trades (CC-5 (v)); build capacity in 47 counties (CC-7); incubate 500 circular enterprises and scope industrial symbiosis in five parks or SEZs (CC-8).	Scale the finance facility through the senior DFI and commercial debt leveraged by the first-loss tranche (about USD 75–100 million), with the waste information system, skills pathway and county capacity sustained through recurrent national and county budgets.
Total, sectors and cross-cutting KES 34,497 million	KES 4,445 million	KES 30,052 million	KES 35–70 billion

Two sectors dominate the need. Agriculture and food systems (KES 13.4 billion) and plastics and packaging (KES 10.5 billion) account for 87 per cent of sector costs, driven by two large capital items: energy upgrades in agro-processing (ORG-5 (iii)) and the regional plastics recovery network (PLA-3 (i)). The cross-cutting priorities (KES 6.9 billion) are spread more evenly across both periods, with the largest item being the first-loss tranche of the finance facility (CC-3 (i)). Together with coordination, MEL and the Secretariat (KES 1.0 billion), they bring the total to KES 35.5 billion in Annex A4. Beyond 2032, the largest needs are further residue-to-energy capacity, plastics recovery and deposit-return at national scale, and the senior debt leveraged by the finance facility.

5.2 Sources of Funding

Annex A4 identifies KES 25.4 billion of funding against the KES 35.5 billion need. Public sources, domestic and international, provide about KES 16.6 billion (65 per cent): national government KES 3.5 billion, counties KES 2.4 billion, and development finance institutions (DFIs) and development partners KES 10.7 billion. Private sources provide about KES 8.8 billion (35 per cent): EPR fees KES 2.8 billion and private investment KES 6.0 billion. Tables 16 to 18 summarise the lead and supporting sources named for each intervention in Annexes A2 and A3, and map each source to the institution responsible for mobilising it. Climate funds, carbon finance and the uncommitted parts of public-private partnerships are not yet counted in Annex A4 and are treated as upside that can narrow the gap.

5.2.1 Public sources

Public money leads where the work is regulatory, sets standards or builds shared assets that the market will not finance on its own. The national budget leads most standards, regulatory and data work; counties lead community collection and county capacity; and DFIs and development partners provide the largest share, mainly concessional debt for infrastructure and technical assistance for early design work.

Table 16 Public sources of funding, the institutions responsible and the interventions they finance

Source	Institution responsible	Interventions it leads and supports
National government budget, including ring-fenced licence and levy revenue	National Treasury, through MoECCF, KEBS, NEMA, CA, MoALD, Kenya Fisheries Service, the State Department for Industrialization, NCA and other MDAs	Leads: CC-1, CC-2, CC-4, CC-5, CC-6, CC-8, ORG-1, ORG-2, ORG-4, ORG-6, EEE-1, EEE-2, EEE-5, TEX-2, TEX-3, CON-1, CON-2, CON-4 Supports: PLA-2, PLA-4, CON-3
Public procurement and subsidy reallocation	PPRA and National Treasury; MoALD for the National Fertilizer Subsidy Programme	Leads: CC-2, ORG-1 (iii)
Fiscal incentives (tax expenditure)	National Treasury and KRA, under the Draft National Green Fiscal Incentives Policy Framework	Supports: CC-3, PLA-1
County budgets and County Waste Management Funds	County governments, coordinated through the Council of Governors	Leads: CC-7, ORG-7 Supports: CC-5, ORG-3, ORG-4, ORG-5, ORG-6, PLA-2, PLA-3
Public enterprise and affirmative funds	Women Enterprise Fund, Youth Enterprise Development Fund, Warehouse Receipt System Council, EPZA and SEZA	Supports: CC-8, ORG-3, TEX-2
DFI concessional debt and guarantees	DFIs, channelled through National Treasury and the Circular Economy Finance Facility (CC-3 (i))	Leads: CC-3, ORG-3 Supports: ORG-4, PLA-2, PLA-3, EEE-5, TEX-2
Development partner grants and technical assistance	Development partners coordinated by National Treasury and the CESIP Secretariat	Leads: TEX-1 Supports: CC-1, CC-4 to CC-8, ORG-2, ORG-7, PLA-1, PLA-2, PLA-4, EEE-1, EEE-2, EEE-4, TEX-3 to TEX-5, CON-1 to CON-3
Climate funds and bilateral climate finance	Green Climate Fund (including its Private Sector Facility), Global Environment Facility and bilateral climate programmes such as AFD, KfW and Team Europe, accessed through National Treasury as GCF National Designated Authority and accredited entities such as NEMA	Supports: CC-3, ORG-5, PLA-3, EEE-4
Total, public sources		

5.2.2 Private sources

Private capital will finance CESIP wherever an asset or service earns revenue that can repay it. Annex A4 identifies KES 8.8 billion of private funding, about a quarter of the KES 35.5 billion need, through two channels. EPR fees paid by producers through licensed PROs (KES 2.8 billion) fund collection and recycling. Private investors and lenders (KES 6.0 billion) finance processing assets that earn from recovered materials, energy or service fees. This investment is concentrated in a few large assets, mainly residue-to-energy upgrades in agro-processing (ORG-5) and recovery infrastructure (PLA-3, EEE-4). Its pace therefore depends on two conditions that government can directly influence: legal certainty for EPR (CC-4) and bankable offtake and power purchase agreements. Within the investor channel, venture capital and private equity are expected to finance the growth of asset-light and technology-led enterprises emerging from the incubation pipeline (CC-8). Climate funds, including the Green Climate Fund and bilateral climate programmes, can add concessional and blended capital for assets that reduce emissions. They are not yet counted in Annex A4 and are upside against the KES 10.1 billion financing gap.

Table 17 Private sources of funding, the institutions responsible and the interventions they finance

Source	Institution responsible	Interventions it leads and supports
EPR fees and PRO funds	Licensed PROs, including the e-waste and textile PROs, under NEMA licensing and oversight	Leads: CC-5 (levy set-asides), PLA-3, PLA-4, EEE-3, TEX-4, TEX-5 <i>Supports:</i> CC-4, CC-7, EEE-4
Producer and brand-owner budgets, deposits and take-back	Producers, importers and brand owners, through KAM and producer associations	Leads: PLA-1, PLA-2 <i>Supports:</i> TEX-1 (buyer co-financing)
Project and infrastructure investment, including PPP and concession equity	Private operators and investors, with the Kenya Investment Authority positioning opportunities	Leads: EEE-4, ORG-5 (co-investment) <i>Supports:</i> ORG-4, ORG-6, TEX-2, TEX-4, CON-3, EEE-5
Venture capital and private equity	Venture capital and private equity funds, impact investors and angel networks, including members of the East Africa Venture Capital Association	<i>Supports:</i> CC-3 (co-investment), CC-8 (follow-on finance for incubated enterprises), PLA-2, EEE-4, TEX-2
Commercial bank lending and asset finance	Commercial banks and asset financiers, lending alongside the CC-3 guarantee facility	<i>Supports:</i> CC-3 (co-lending), ORG-3 (asset finance), ORG-4
Cooperative and SACCO credit	Cooperatives and SACCOs	<i>Supports:</i> ORG-1
Industry in-kind contributions and incubator co-financing	Industry associations, private incubators and investors, digital platform operators	<i>Supports:</i> CC-8, ORG-2, ORG-7
Total, private sources		

5.2.3 Carbon finance and public-private partnerships

Two further sources sit outside the public and private lines in Annex A4 and can materially reduce the financing gap and the call on public funds. Carbon and results-based finance can monetise the methane and emissions avoided by organic waste valorisation, recycling and e-waste recovery, improving the returns of assets that would otherwise struggle to reach bankability. It is not yet counted in Annex A4 and is treated as upside. Public-private partnerships combine public assets, land and offtake commitments with private capital and operating capability, and are best suited to the large, long-payback facilities in the plan. Only the parts already committed are counted in Annex A4. Table 18 maps both sources to the institutions responsible and the interventions they can support.

Table 18 Carbon finance and public-private partnerships, the institutions responsible and the interventions they can support

Source	Institution responsible	Interventions it can support
Carbon and results-based finance	MoECCF, under the national carbon markets framework; project developers and PROs	ORG-1, ORG-3 to ORG-7, PLA-3, EEE-3, EEE-4, TEX-4, CON-3; supports CC-3 (see Table 19)
Public-private partnerships	Contracting MDAs and counties, with the Kenya Investment Authority	ORG-4 (iii), EEE-5 (ii), TEX-4 (ii), CON-3 (ii)

Carbon revenue can shorten payback periods, but projects should remain environmentally and economically defensible without optimistic carbon-price assumptions. Kenya is already among Africa's largest carbon credit producers, and the 2026 national carbon markets guide places waste projects on the conditional priority list

for accelerated review.¹¹¹ Table 19 identifies the Chapter 4 interventions that can generate carbon revenue, the basis for credit issuance, and relevant verified price benchmarks.

Table 19 Carbon and results-based revenue potential, mapped to the interventions it can cover

Opportunity	Credit basis and category	Indicative price per tonne CO ₂ e (market)	Interventions covered
Organic waste diversion	Avoided methane from open dumping via composting, digestion and bioconversion; most mature waste-sector credit class with ICVCM-labelled methodologies	USD 5 to 10 (voluntary market, verified); up to USD 30 under Article 6 exports	ORG-4, ORG-5, ORG-6 and ORG-7
Refrigerant recovery and destruction	Destruction of high-GWP refrigerants from end-of-life cooling equipment; highest revenue density per unit of material	About USD 15 in the high-integrity voluntary tier (verified); USD 30 to 40 in Nordic compliance-adjacent markets	EEE-4 and EEE-3
Recycling and material recovery	Avoided virgin-production emissions from recycled plastics, metals and construction materials; methodologies consolidating	No verified benchmark yet; methodologies under development	PLA-3, CON-3 and TEX-4
Co-processing and energy recovery	Fossil fuel displacement in cement kilns; displacement-based credits improve the offtake price for prepared waste fuel	About USD 6 (voluntary market category average, verified)	Textiles co-processing of non-reusable fractions; residuals routing under PLA-4
Plastic crediting	Waste Collection Credits and Waste Recycling Credits issued per tonne of plastic collected or recycled under the Verra Plastic Waste Reduction Program; denominated per tonne of plastic rather than CO ₂ e	Prices vary widely by project type, geography and buyer; no verified benchmark adopted, to be confirmed at validation	PLA-3, including reclaimer cooperative volumes contracted under CC-6 (v)

Source verified market benchmarks by credit category as compiled for CESIP, 2026; prices to be refreshed at validation.

5.3 Pathways to promoting the growth of the CE sector in Kenya

Financiers consulted for the development of CESIP identified five barriers to growth in the CE sector: a lack of investable pipeline despite existing enterprises, limited risk-sharing mechanisms that leave bank capital undeployed, collateral requirements that circular businesses cannot meet, financing tenures and structures mismatched to enterprise cash cycles, and grant funding that is poorly linked to enterprises' eventual move to commercial capital.¹¹² Four steps would make the sector more bankable.

¹¹¹Ministry of Environment, Climate Change and Forestry, national carbon markets guide, 2026; reported in Business Day, Kenya unveils carbon market guide, 2026.

¹¹²CESIP Finance and Investment Focus Group Discussion, 30 July 2026.

Step 1. Create an enabling environment. Ensure the regulations, standards and infrastructure necessary for the growth of the circular economy are in place. The government leads on three fronts. First, settle the legal position by completing a consultative review of the EPR Regulations that addresses the grounds of the pending cases, with an interim compliance framework, and issuing comprehensive guidelines so producers, PROs and lenders know which rules apply (Section 4.4, CC-4). Second, establish standards and certification before recovery is scaled, so that recovered material has a defined, tradeable quality a buyer can rely on (Section 4.4, CC-1). Third, build the shared recovery infrastructure as specified in Section 4.5. The private sector in turn contributes technical input to standards development, co-invests in shared infrastructure through PPPs, and commits offtake against the facilities it will rely on, so public assets are sized to real demand rather than built speculatively.

Step 2. Stimulate demand. The government can improve the bankability of the sector by creating demand for circular products and recovered materials. Examples include public procurement specifying recycled content in plastic packaging and supplies, inclusion of certified organic fertiliser in the National Fertilizer Subsidy Programme, green public procurement of graded and recycled textiles, purchase incentives for certified refurbished electronics, leasing and product-as-a-service contracts in public procurement, and phased minimum recycled content in government construction tenders and the affordable housing programme. Fiscal incentives can also stimulate demand by making circular products and inputs the affordable choice. The Draft National Green Fiscal Incentives Policy Framework provides a policy basis, proposing tax incentives for recycling enterprises and investment allowances for waste-processing facilities¹¹³. Finally, the private sector reinforces this through corporate offtake commitments and recycled-content pledges.

Table 20 The five aims of the circular economy incentive programme

Aim	What it addresses	Illustrative instruments
1. Correct perverse incentives	Recycled inputs and recovery equipment currently face worse fiscal treatment than virgin alternatives	VAT and duty differentials favouring recycled over virgin inputs; zero-rating of priority recovery equipment
2. Create demand	Circular products lack a predictable market to justify investment	Graduated recycled-content requirements; green public procurement criteria in government purchasing
3. Target incentives where circular activity concentrates	Generic economy-wide incentives are too diffuse to shift behaviour in the clusters where recovery and processing happen	Special Economic Zone and Export Processing Zone instruments; county-level fee rebates and licensing relief
4. Reduce operating-cost pressures	High energy costs undermine the competitiveness of recycling against virgin production	A tariff or relief mechanism for electricity used in recycling
5. Enforce the polluter-pays principle	Incentives have limited effect if non-compliance carries no cost	Eco-modulated EPR fees; penalties and enforcement under the Sustainable Waste Management Act, noting that EPR enforcement is currently suspended by a conservatory order (Section 3.2.1), so this aim is contingent on, and sequenced after, the regulatory review under CC-4 (i)

¹¹³The National Treasury and Economic Planning, Draft National Green Fiscal Incentives Policy Framework, December 2022, published for public comment.

Source CESIP synthesis, drawing on the Draft National Green Fiscal Incentives Policy Framework (National Treasury, 2022), the sector incentive measures in the Strategic Action Plan (Chapter 4), and CESIP stakeholder consultations.

Step 3. Technical assistance to accelerate bankable CE models. Development partners and industry associations can support high-potential circular enterprises to build the capacity to absorb and service capital. This can be achieved through business development support programmes that strengthen business models, financial management, and investor readiness; challenge funds and accelerators that competitively identify and grow promising ventures; and funding for research and development, especially for upstream solutions. The market already offers working models to build on, including a PRO-run circular economy accelerator running a six-month programme transitioning Kenyan SMEs to circular business models with mentorship and investor linkages;¹¹⁴ and CirculaRising, launched by the Absa Kenya Foundation, GIZ and the African Guarantee Fund, which combines an academy for over 2,000 micro-enterprises, an accelerator for 150 growth-stage small enterprises and a scale-up track for medium and large firms, with a target of mobilising over EUR 2 million by 2028.¹¹⁵ Under CC-8, these programmes will be coordinated into a single national circular enterprise support programme that draws its pipeline from the business models mapped in Annex F (Tables F1 to F5), with particular attention to sub-categories where no established model yet operates.

Step 4. Attract private capital. To scale and sustain the growth of the circular economy, private capital must be mobilised. This can be achieved in three ways. First, establish a national guarantee facility, capitalised by government and DFIs, to share risk with financial institutions and free up capital that is currently underused. In parallel, lenders should adjust their lending requirements to recognise offtake contracts, receivables and warehouse receipts as alternative forms of security alongside conventional collateral. Second, deploy blended capital, using concessional and first-loss tranches to crowd commercial co-investment into the underserved USD 150,000–500,000 financing range. These structures should be designed to revolve, enabling the capital to support multiple rounds of investment. Third, use public-private partnerships (PPPs), alongside project finance and green bonds, to finance the strategy’s capital-intensive assets. Corporate offtake agreements can anchor processing investments, while the Kenya Investment Authority can position investment opportunities through existing channels¹¹⁶. Success should be measured by leverage, with each shilling of public or concessional capital targeted to mobilise a defined multiple of private capital, following the model of Rwanda’s Green Fund, which converted USD 6 million of public seed capital into USD 83 million of project finance.¹¹⁷

Annex A5 applies the four steps across each value chain position, identifying the binding constraint, the steps that matter most, and the interventions that deliver the financing response.

5.4 Financial Instruments and Tools that can be deployed

Annex A5 maps the available financial instruments and sources of capital to each pathway step, showing the instruments available, potential sources of capital and the interventions they would fund.¹¹⁸ To avoid creating too many financing mechanisms, the table below maps each instrument CESIP proposes to an existing Kenyan institution or facility wherever possible, and states whether CESIP proposes a new instrument, a modification or coordination only.

Instruments should also match the business model being financed, because circular models have different cash-flow profiles. Rental, leasing and product-as-a-service models (Circular Use) hold assets on their balance sheet and recover costs over time, so they need asset, lease or receivables-backed finance. Collection,

¹¹⁴KEPRO, Circular Economy Accelerator Program, 2026 cohort.

¹¹⁵Absa Kenya Foundation, GIZ and African Guarantee Fund, CirculaRising programme, launched 2026.

¹¹⁶CESIP Finance and Investment Focus Group Discussion, 30 July 2026.

¹¹⁷Rwanda Green Fund (FONERWA): Trinomics, Circular Economy in Africa-EU Cooperation, Country Report Rwanda, 2023.

¹¹⁸CESIP Finance and Investment Focus Group Discussion, 30 July 2026.

aggregation and recycling models (Circular Value Recovery) are working-capital intensive and depend on offtake, so they suit trade finance, warehouse receipts and offtake-backed lending. Upstream design and material-substitution models (Circular Design and Production) carry technology and market risk, so they need grants, research and development funding and patient equity. Enabling services (Circular Support), such as digital marketplaces, suit early-stage venture and challenge-fund capital. The finance facility under CC-3 and the enterprise support programme under CC-8 should use the business model categories in Section 2.4 to target instruments accordingly.

Table 21 CESIP financing instruments and their relationship to existing institutions

Instrument	Existing institution or facility to build on	New, adapted or coordination only	Code
National Circular Economy Finance Facility with sector windows	To be confirmed at validation	New vehicle or window within an existing institution	CC-3 (i)
National guarantee facility	Existing guarantee providers, such as the African Guarantee Fund or a national credit guarantee scheme	Adapted	CC-3 (i)
Fiscal incentives and fiscal guide	Draft National Green Fiscal Incentives Policy Framework; KRA	Adapted	CC-3 (ii)
Green finance taxonomy with circularity	Kenya Green Finance Taxonomy	Adapted	CC-3 (iii)
County Waste Management Fund, performance-based	County budgets; model County Bill	New, through county legislation	Section 6.3
EPR fees for collection, sorting and recycling	Licensed PROs under the EPR Regulations	Coordination and common rulebook	CC-4, CC-5
Warehouse receipt financing	Warehouse Receipt System Council and lenders	Adapted	ORG-3 (i)
Carbon and results-based finance	National carbon markets framework	Coordination only	Section 5.2.3

6. Governance and Institutional Arrangements

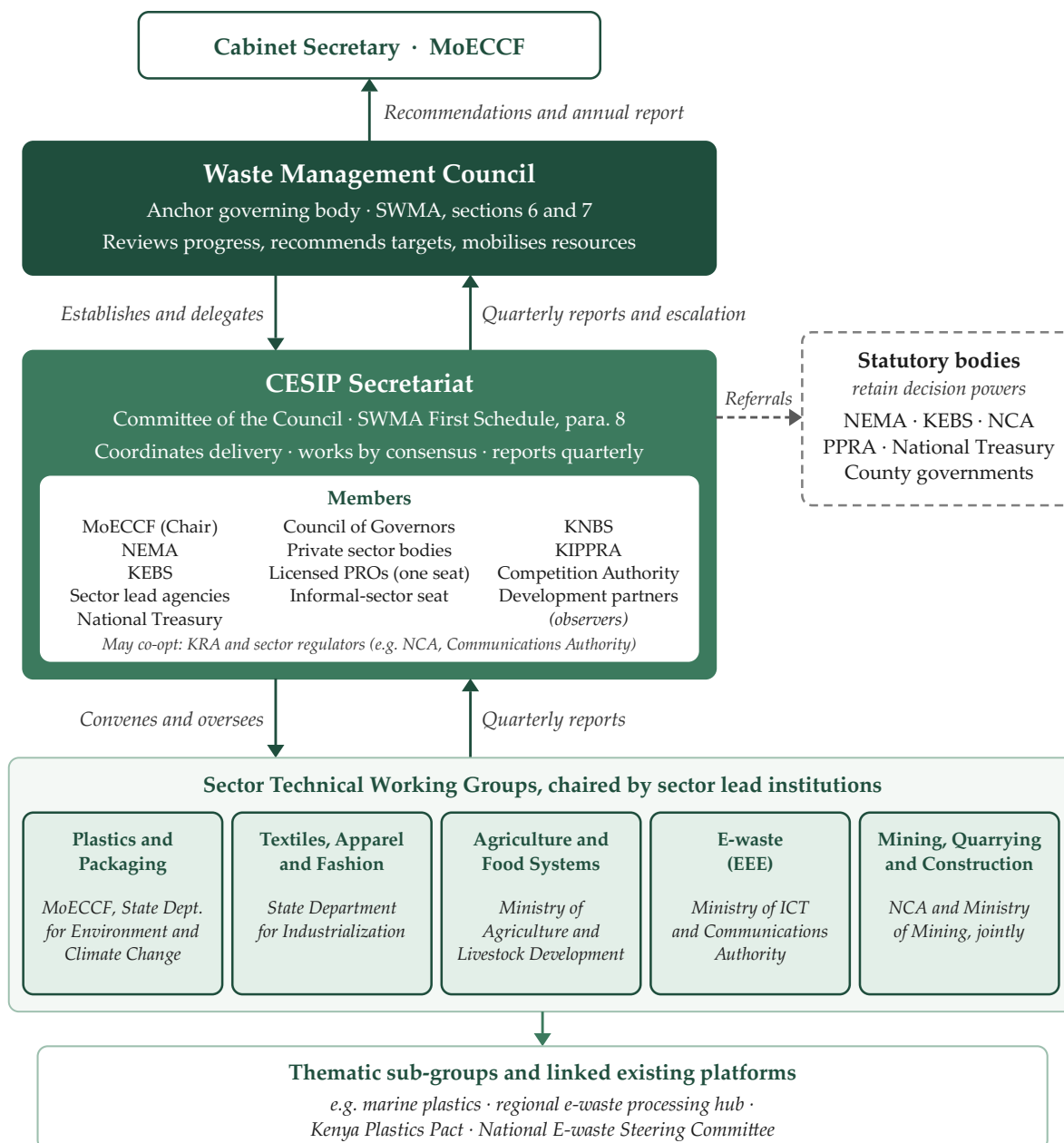
6.1 Governance structure of CESIP

CESIP is governed through three connected bodies, each with a distinct role. The **Waste Management Council** is the anchor governing body and carries the statutory basis. The **CESIP Secretariat**, a committee of the Council, brings together the institutions and stakeholder groups that implement the strategy and coordinates delivery between Council meetings. Five **sector Technical Working Groups** track delivery at sector level. This follows the chapter’s core principle of using existing institutions and mandates instead of creating parallel structures.

Table 22 CESIP governance structure at a glance

Body	Basis	Role in CESIP
Waste Management Council	Sustainable Waste Management Act, 2022 (SWMA), sections 6 and 7	Anchor governing body
CESIP Secretariat	Committee of the Council, SWMA First Schedule, paragraph 8	Brings together the institutions and stakeholder groups needed for implementation, coordinates delivery and reports to the Council each quarter.
Sector Technical Working Groups (five)	Working groups of the CESIP Secretariat	Coordinate delivery of sector-specific interventions.

Figure 4 CESIP governance structure



6.1.1 Waste Management Council

The SWMA already provides for a Waste Management Council. Section 6(1) requires the Cabinet Secretary to establish it, and section 7(1) gives it the functions CESIP most needs: enhancing inter-governmental coordination, reviewing progress on the national waste management strategy, recommending national recycling and recovery targets to the Cabinet Secretary, synchronising waste infrastructure, mobilising resources and recommending incentives. CESIP therefore proposes to operationalise the Council and make it the anchor of CESIP governance, rather than creating a separate steering body.

Why the Council should anchor CESIP governance

- **It already exists in law.** The Council is established under section 6 of the SWMA, so CESIP creates no new institution and needs no new legal basis for its core coordination function. This answers the concern that a coordination body must have a legal anchor.
- **Its mandate matches CESIP's core tasks.** Section 7(1) of the SWMA covers coordination across governments, progress review, recycling and recovery targets, infrastructure, resource mobilisation and incentives. These are the functions the strategy needs from its governing body.

- **It can convene above individual ministries.** The Chair is appointed by the President, the Principal Secretaries for waste management and for the National Treasury and the Director-General of NEMA sit on it, and the Vice-Chair is nominated by the Council of Governors (section 6(2)). National and county government are therefore at one table, which a committee chaired by a single ministry cannot offer.
- **It has built-in accountability.** Under the First Schedule the Council meets quarterly (paragraph 1), needs a quorum of two thirds (paragraph 4), decides by majority vote (paragraph 5), requires members to declare conflicts of interest (paragraph 10) and submits an annual report to the Cabinet Secretary (paragraph 14).
- **It keeps coordination separate from regulation.** The Council coordinates and recommends, while NEMA licenses and enforces (sections 8 and 27) and counties implement (section 9).
- **It outlasts the strategy.** CESIP runs from 2028 to 2032 but the Council is a standing body. It gives CESIP's evidence, targets and lessons a permanent home when the Cabinet Secretary reviews the national waste management strategy and action plan under section 15.

6.1.2 CESIP Secretariat

The CESIP Secretariat is a committee of the Council, established under paragraph 8 of the First Schedule to the SWMA. It is distinct from the Council's own statutory secretariat (section 6(11)), which services the Council. The CESIP Secretariat is the working forum of the institutions that implement CESIP. It coordinates delivery between quarterly Council meetings, advises the Council and reports to it each quarter. It works by consensus and escalates unresolved questions to the Council, where decisions are by majority vote.

Hosting and coordination budget. The CESIP Secretariat is hosted under the Waste Management Council and draws on the Council's statutory secretariat for administrative support, while keeping its own work programme. So that coordination does not depend on the budget of any single member institution, the Secretariat has a dedicated CESIP coordination budget line of about KES 1.0 billion over 2028–2032, costed in Annex A4 under coordination, MEL and the Secretariat. The budget line covers the Secretariat's core technical staff, Secretariat and TWG meetings, the national dashboard and Annual Progress Report, the mid-term and end-of-strategy reviews, and support to county coordination (Section 6.3). It is funded through the MoECCF budget vote within the Medium Term Expenditure Framework, and development partner contributions to coordination are channelled into the same line. The Secretariat prepares an annual work plan and budget for Council approval and reports expenditure to the Council each quarter, and the budget line is subject to audit by the Office of the Auditor-General.

Table 23 Bodies represented in the CESIP Secretariat and their contribution to its functions

Body	Represents	Main functions supported	Contribution
Ministry of Environment, Climate Change and Forestry (MoECCF)	Anchor ministry for circular economy strategy	Coordinate; advise the Council	Chairs the Secretariat, links it to the Council and the Cabinet Secretary, and carries CESIP policy proposals forward.
NEMA	Environmental regulator	Track and report; align PRO governance; resolve overlaps	Supplies aggregated licensing, compliance and PRO sector data and develops the PRO governance and reporting framework.

Body	Represents	Main functions supported	Contribution
Kenya Bureau of Standards (KEBS)	Standards and certification	Resolve overlaps; advise the Council	Takes referred standards questions, advises each TWG on standards for recovered materials and reports on standards activities.
Sector lead agencies	MoECCF, State Department for Environment and Climate Change (plastics and packaging); State Department for Industrialization (textiles); MoALD (agriculture and food systems); Ministry of ICT and Communications Authority (e-waste); NCA and Ministry of Mining jointly (mining, quarrying and construction)	Coordinate; track and report	Chair their sector TWG, own the sector activities in Annex A and report TWG progress.
National Treasury	Public finance	Advise the Council; track and report	Advises on fiscal instruments, affordability and public funds, and reports on financing under CESIP.
Council of Governors (CoG)	The 47 county governments	Coordinate; track and report; resolve overlaps	Provides the county channel, county data and early warning of bylaw conflicts and capacity gaps.
Private sector bodies (for example KAM, KGBS, KEPSA)	Industry and business	Advise the Council; track and report	Bring consolidated industry positions, flag market and investment barriers, mobilise members and report on named activities.
Licensed Producer Responsibility Organisations (one seat, nominated on rotation by the licensed PROs)	Operators of producer-financed collection and recovery	Align PRO governance; track and report	Bring PRO views on EPR design, give guidance on and apply the PRO governance and reporting framework, report on named activities and advise the TWGs on feasibility.
Informal-sector seat	Waste-picker cooperatives and associations	Coordinate; track and report	Advise on livelihood and just transition implications, supply informal-sector data and help verify that payments reach collection-level workers.

Body	Represents	Main functions supported	Contribution
Kenya National Bureau of Statistics (KNBS)	Official statistics	Track and report; advise the Council	Validates statistical series and produces material flow accounts and indicators.
Kenya Institute for Public Policy Research and Analysis (KIPPRA)	Policy research	Advise the Council; track and report	Models targets and instruments, verifies reported progress and with NEMA runs the CESIP Knowledge Hub.
Competition Authority of Kenya	Market conduct	Align PRO governance	Provides market-conduct findings on the PRO landscape, under its own mandate.
Development partners (observers)	Technical and financial support	Coordinate	Align technical assistance and financing with CESIP priorities.

Functions of the Secretariat

1. Coordinate implementation of CESIP between Council meetings and report to the Council each quarter. Convene and oversee the sector TWGs, endorse any new sector coordination mechanism before it is created, and escalate stalled delivery to the Council in line with the triggers in Section 8.5.
2. Track delivery against Annex A, consolidate sector reports, and publish the national dashboard and the Annual Progress Report.
3. Advise the Council on circular economy matters across the whole value chain: upstream (design, production, procurement and market measures), midstream (use, reuse and repair) and downstream (collection, recovery and disposal), plus cross-cutting enablers. Prepare recommendations on targets, infrastructure, resource mobilisation, and incentives using NEMA, KNBS and KIPPRA data.
4. Identify mandate overlaps across agencies and refer them to the competent statutory bodies or, where needed, to the Council and the Cabinet Secretary. Refer technical-standards questions to KEBS and track their resolution.
5. Endorse the harmonised PRO governance and reporting framework developed by NEMA with licensed PROs, consistent with the EPR Regulations, 2024, and receive NEMA and Competition Authority reports on PRO performance and market conduct. Regulatory decisions on PROs remain with NEMA.

6.1.3 Sector Technical Working Groups

Five sector Technical Working Groups (TWGs) are the working level where the lead and partner arrangements specified against every activity in Annex A are coordinated and tracked. Each TWG is chaired by its sector's lead institution and reports to the CESIP Secretariat each quarter. Core governance institutions hold standing seats, informal-sector representatives sit in each TWG, and implementation partners and technical-advisory stakeholders join according to the intervention on the agenda. A TWG may adjust the sequencing of activities within its own intervention without Secretariat approval, and reports any change to the Secretariat. TWGs may set up thematic sub-groups, such as marine plastics under the Plastics TWG, the regional e-waste processing hub under the E-waste TWG and the agriculture window of the finance facility under the Agriculture TWG. Existing sector platforms are linked into the TWGs rather than duplicated.

Table 24 Sector Technical Working Groups

TWG	Chair	Standing and anchor members	Existing platform to link
Plastics and Packaging	Ministry of Environment, Climate Change and Forestry (State Department for Environment and Climate Change)	KEBS, NEMA, licensed packaging PROs, industry associations, counties, informal-sector seat	Kenya Plastics Pact; existing PRO governance forums
Textiles, Apparel and Fashion	State Department for Industrialization	KEBS, NEMA, textiles PRO, research and training institutions, informal-sector seat	None identified
Agriculture and Food Systems	Ministry of Agriculture and Livestock Development	KEBS, NEMA, research institutions, counties, informal-sector seat	None identified
Electrical and Electronic Equipment (E-waste)	Ministry of ICT and Communications Authority of Kenya	KEBS, NEMA, licensed e-waste PROs, recyclers, Jua Kali associations, informal-sector seat	National E-waste Steering Committee
Mining, Quarrying and Construction	National Construction Authority and Ministry of Mining, jointly	KEBS, NEMA, counties, professional bodies, informal-sector seat	Kenya Green Building Society

6.2 Roles and responsibilities of stakeholder groups in the CESIP Secretariat

This section sets out each stakeholder group's role as a member of the CESIP Secretariat. Responsibilities follow the Secretariat's five main functions as outlined in Section 6.1.2 above.

6.2.1 Ministry of Environment, Climate Change and Forestry (MoECCF)

As the anchor ministry for circular economy policy, MoECCF chairs the CESIP Secretariat and links it to the Waste Management Council and the Cabinet Secretary. Through the State Department for Environment and Climate Change it also chairs the Plastics and Packaging TWG. It mainly supports the functions to coordinate and to advise the Council.

Responsibilities to the Secretariat

- Chair the CESIP Secretariat, convene its meetings and submit its quarterly report and recommendations to the Waste Management Council.
- Prepare the Secretariat's annual work plan and budget for Council approval, secure the CESIP coordination budget line through the Ministry's budget vote and administer it on behalf of the Secretariat.
- Carry Council recommendations on targets, incentives and regulation to the Cabinet Secretary, and take forward the policy, legal and regulatory proposals that CESIP requires, including the review of the national waste management strategy and action plan under section 15 of the SWMA.
- Name the data controller and system host for the CESIP dashboard and national repository before they are deployed, and oversee publication of the Annual Progress Report.
- Align CESIP with the Ministry's other national strategies and international commitments, including Kenya's Nationally Determined Contribution and multilateral environmental agreements.
- Chair the Plastics and Packaging TWG and report progress on CESIP activities where MoECCF is named lead partner.

6.2.2 Licensed Producer Responsibility Organisations (PROs)

Licensed PROs contribute producer-side data and delivery capacity to CESIP, mainly supporting the functions to align PRO governance and to track and report. They hold one seat in the Secretariat, filled on rotation by a nominee of the licensed PROs. The seat holder consults the other licensed PROs before each Secretariat meeting and reports back to them afterwards.

Responsibilities to the Secretariat

- Bring PRO views on EPR design, such as fees, eco-modulation and deposit-return, to the Secretariat so that they inform its recommendations.
- Provide guidance on the PRO governance and reporting framework that NEMA develops, and apply it once endorsed.
- Report progress on the CESIP activities where licensed PROs are named as lead partners.
- Participate in the relevant sector TWGs by providing technical input on the feasibility of EPR-related interventions.

6.2.3 Private sector bodies

Industry voice and private investment mobilisation, mainly supporting the functions to advise the Council and to track and report. Private sector bodies such as KAM, KGBS and KEPSA hold the private-sector seat. The seat holder consults the other private sector bodies before each Secretariat meeting and reports back to them afterwards.

Responsibilities to the Secretariat

- Present consolidated industry positions on proposed CESIP measures, and identify market and investment barriers with proposed solutions, so that they inform the Secretariat's recommendations.
- Mobilise members to deliver the CESIP activities in which private sector bodies are named partners, and to co-invest alongside public and development finance.
- Report progress on CESIP activities where private sector bodies are named lead partners, and on the relevant CESIP indicators.
- Participate in the relevant sector TWGs and link existing industry platforms, such as the Kenya Plastics Pact and the Kenya Green Building Society, so that industry initiatives reinforce CESIP activities and do not duplicate them.

6.2.4 Informal sector

Direct representation of collectors, aggregators and informal recyclers, so that CESIP is designed and delivered to protect and advance their livelihoods. The informal sector holds a standing seat in the Secretariat and a seat in each TWG, and mainly supports the functions to coordinate and to track and report. Waste-picker cooperatives, national and county associations and Jua Kali associations nominate the seat holder, who consults the other associations before each Secretariat meeting and reports back to them afterwards.

Responsibilities to the Secretariat

- Advise on the livelihood and just transition implications of proposed CESIP measures, so that they inform the Secretariat's recommendations.
- Participate in each sector TWG and nominate its informal-sector representatives.
- Report progress on CESIP activities where associations are named partners.

6.2.5 Regulator (NEMA)

Provide regulatory evidence and technical guidance on waste management and EPR, mainly supporting the functions to track and report, to align PRO governance and to resolve overlaps.

Responsibilities to the Secretariat

- Avail quarterly aggregated licensing, compliance and PRO sector data from the national waste information system for the national dashboard.
- Develop the PRO governance and reporting framework in consultation with licensed PROs, table it for the Secretariat's endorsement and report aggregate PRO sector performance to the Secretariat.
- Respond to referrals of mandate overlaps and technical questions that fall within NEMA's remit and report the outcome.
- Participate in each sector TWG and give regulatory guidance on the feasibility of proposed interventions.
- Report progress on CESIP activities where NEMA is named lead partner.

6.2.6 Standard-setting body (KEBS)

Provide technical authority on the standards that CESIP's quality and market-development agenda depends on, with standing representation in all five TWGs.

Responsibilities to the Secretariat

- Respond to standards questions that the Secretariat refers to KEBS, and report how they were resolved.
- Advise each TWG on the standards and certification needed to build markets for recovered and recycled materials, and identify standards gaps that constrain those markets for the Secretariat's recommendations.
- Report progress on the standards activities in CESIP where it is the named lead partner.

6.2.7 County governments and the Council of Governors

Offer county voice and delivery channel, mainly supporting the functions to coordinate, to track and report and to resolve overlaps. County-level coordination is set out in Section 6.3. The Council of Governors holds the standing county seat and is the bridge to the 47 counties. The seat holder consults counties through the Council of Governors' structures before each Secretariat meeting and reports back afterwards.

Responsibilities to the Secretariat

- Nominate and coordinate county representatives in the TWGs.
- Embed CESIP priorities in County Integrated Development Plans and county waste plans, and report progress against the county indicators.
- Provide county implementation data, including progress on CESIP activities where counties are named partners.
- Raise implementation constraints, such as infrastructure gaps, funding shortfalls and bylaw conflicts with national requirements, for referral to the competent body.

- Propose inter-county partnerships for shared recovery infrastructure, so that they inform the Secretariat's recommendations to the Council.

6.2.8 National Treasury

The National Treasury advises on the fiscal instruments, affordability and budget alignment that CESIP depends on, and reports on public and development finance committed to implementation.

Responsibilities to the Secretariat

- Advise on fiscal instruments and incentives for circular investment that the Council may recommend, and on the affordability and budget implications of the activities in Annex A and the investment plan.
- Align CESIP financing needs with the national budget cycle and the Medium Term Expenditure Framework.
- Report on public financing allocated and disbursed to CESIP activities, including the proposed County Waste Management Fund jointly with the Council of Governors.
- Report on development finance and blended finance engagement coordinated with a designated private-sector body.
- Report progress on CESIP activities where the National Treasury is named lead partner, including fiscal incentives.

6.2.9 Research bodies (KNBS, KIPPRA and universities)

They supply the evidence, analysis and technical validation that CESIP implementation relies on, mainly supporting the functions to track and report and to advise the Council.

Responsibilities to the Secretariat

- **KNBS** validates the statistical series feeding the dashboard, produces the material flow accounts and circular economy indicators under CC-6, and flags data-quality gaps.
- **KIPPRA** models the economic effects of proposed targets, incentives and instruments, to support the Secretariat's recommendations to the Council.
- **KIPPRA, with NEMA**, runs the CESIP Knowledge Hub.
- **Universities and technical institutions** (Universities and TVETs, KALRO, icipe, ILRI, KIRDI, KITT) give technical advice and validation through the National Circular Economy Research and Innovation Network.

6.2.10 Other members of the Secretariat

These are additional members that the Secretariat may co-opt as needed. They contribute sector regulation, market oversight, trade and fiscal administration, and partner coordination.

- **Sector regulatory bodies**, such as the National Construction Authority (Mining, Quarrying and Construction TWG) and the Communications Authority of Kenya (E-waste TWG), may hold seats in their sector TWG. They share compliance and licensing data from their own systems and advise the TWG on the feasibility of proposed interventions.
- **Kenya Revenue Authority (KRA)** advises the Secretariat on the customs and tax administration of CESIP fiscal incentives and on the controls on imported goods that CESIP relies on. It shares relevant trade and tax data in aggregate form.
- **Competition Authority of Kenya** shares its market-conduct findings on the PRO landscape with the Secretariat, within its own mandate. The Secretariat does not direct its work.

- **Development partners** attend as observers, coordinate technical assistance through the development-partner group, share information on their funding pipelines to avoid duplication, and align support with CESIP priorities.

6.3 County coordination of CESIP

Solid waste management is a devolved function under the Fourth Schedule of the Constitution, and section 9 of the SWMA places implementation duties on county governments. Most CESIP activities that reach households, collectors and facilities are therefore delivered by counties. CESIP is coordinated within each county through existing county structures rather than new bodies, mirroring the national arrangement of the Council, the Secretariat and the TWGs.

County coordination arrangements

- **County lead department.** Each county designates the department responsible for environment and waste management as the county CESIP lead and names a CESIP focal person, who is the county's contact point with the Council of Governors and the CESIP Secretariat.
- **County CESIP coordination forum.** Chaired by the County Executive Committee Member responsible for environment, the forum meets quarterly ahead of the national TWG and Secretariat cycle. It brings together the relevant county departments (environment, trade and industry, agriculture, planning, health and finance), the NEMA county office, licensed PROs and recyclers operating in the county, private sector, informal-sector associations and waste-picker cooperatives, TVETs and civil society. Where a county already has an environment or waste management committee, that committee serves as the forum rather than a new body being created.
- **Planning and budgeting.** Counties embed their CESIP priorities in the County Integrated Development Plan, the county waste management plan and the annual budget, and align county waste legislation with the model County Bill.
- **Reporting.** The focal person consolidates county data against the indicators in Section 8.3 and submits a quarterly county report through the Council of Governors, which consolidates county reports for the CESIP Secretariat.
- **Inter-county cooperation.** Counties that share recovery infrastructure or a catchment, such as the plastics recovery hub regions, the coastal counties and the Lake Victoria basin, coordinate through regional economic blocs, with the Council of Governors brokering agreements.
- **Escalation.** Issues the county forum cannot resolve, such as conflicts between county bylaws and national requirements, are raised through the Council of Governors' seat for referral by the Secretariat to the competent body.

County coordination is funded from county budgets. The CESIP coordination budget line (Section 6.1.2) supports the Council of Governors' consolidation role and the capacity building of county focal persons under CC-7, while the proposed performance-based County Waste Management Fund (CC-3 (iii)) rewards counties against verified milestones, including on-time county reporting. The Phase 1 delivery counties named in Section 8.3 and Annex A put these arrangements in place first, and other counties follow as their interventions start.

7. Communication and Awareness Strategy

CESIP's communication strategy operates across three mutually reinforcing dimensions, namely public awareness and behaviour change, industry engagement and private sector mobilisation, and knowledge sharing and partnerships. Together they constitute one theory of change, in which informed and motivated citizens create demand for circular goods and services, mobilised and incentivised businesses supply them, and a network of shared knowledge accelerates learning and sustains the political momentum a five-year implementation cycle requires.

7.1 Public Awareness and Behaviour Change

Kenya has strong waste laws, but practice falls short partly through poor communication, as the Sustainable Waste Management Act requires households to separate waste at source, yet more than 90% of plastic still arrives mixed with organic matter. The behaviour change programme therefore runs as one cross-sector campaign rather than five sector campaigns. The behaviours it targets, separating waste at source, returning and reusing packaging and products, choosing repaired, refilled and recycled options, and handing end-of-life items to recognised collection points, are the same behaviours in every sector; what differs is only the material. A single campaign architecture with shared branding, sequenced themes and county localisation avoids duplicating spend and message fatigue and lets every sector intervention plug its specific ask into an already familiar frame. The strategy segments its audiences into five distinct stakeholder groups, defined by the role each plays in material flows rather than by sector. The groups are mutually exclusive by role, so every campaign activity can name exactly who it is for.

Table 25 Stakeholder groups for public awareness and behaviour change

Stakeholder group	Who it includes	Role in material flows and core message
Households and communities	Urban, peri-urban and rural households; residents' associations; nyumba kumi structures	Generate the waste stream and make daily purchasing choices. Core message, separation and return save money and keep your neighbourhood healthy
Youth and learners	Youth aged 15 to 35; school learners; TVET trainees; young creators and innovators	Largest cohort, digital multipliers and the future circular workforce. Core message, the circular economy is economic opportunity, not obligation
Informal economy and producer-facing actors	Market vendors and traders; waste pickers and jua kali operators; smallholder farmers and cooperatives	Control material at the point of sale, collection and on the farm; both a target and a channel. Core message, clean, sorted material is worth more, and formalisation pays
Trusted intermediaries and influencers	Community health workers; village elders; religious leaders; media professionals	Highest-trust communicators who set social norms and frame public perception. Core message, circular living is healthy, responsible stewardship
County and public sector implementers	County environment, market and social services officers; teachers; public procurement officers	Enforce, teach and buy; they decide whether national policy is visible in daily life. Core message, the circular economy is county development, not only environment

Channels are organised into six major categories, from broadcast and digital media to community and interpersonal channels, education and campaign events. Each category is deployed where it is most effective for the groups above, so budget follows reach and trust rather than habit. Annex E sets out the channels and their effectiveness for each group.

Sequencing follows the campaign calendar, with one national theme per year advancing one target behaviour, launched at the annual events, localised by counties into county languages through CIDP communication budgets, reinforced year-round through the community and interpersonal category, and measured through the annual consumer behaviour surveys in the research programme (Section 7.3).

7.2 Industry Engagement and Private Sector Mobilisation

Industry engagement is cross-cutting, since the constraints businesses name, compliance cost, unclear rules, weak demand for circular products and limited access to finance and technology, are the same in every sector, so CESIP runs one engagement programme delivered through the associations that already convene business rather than five parallel sector programmes. The programme has four elements. First, a structured dialogue platform, convened with KEPSA and KAM and open to sector associations, PROs and SMEs, through which business contributes to regulatory design, receives early policy certainty and surfaces implementation problems while they are cheap to fix. Second, compliance and transition support, through plain-language guidance, help-desk support for EPR registration and reporting, and signposting to the incentives and financing instruments in Chapter 5, so that compliance is achievable for small firms and not only for large ones. Third, demand signals, since green public procurement is the strongest message government can send, progressively introducing circular criteria in packaging, construction materials, office supplies, furniture and ICT equipment, giving business a predictable market to invest against (Sections 4.4 and 5.3). Fourth, recognition and accountability, through an annual Kenya Circular Economy Business Forum with published progress reporting and awards, making leadership visible and free-riding harder, developed together with existing fora such as the KAM LOOP Forum rather than as an additional structure, and drawing on frames such as the EU CERC business awards. The forum will showcase Kenyan enterprises running the circular business models mapped in Section 3.3 and Annex F, with peer learning between established and early-stage firms and award categories aligned to the business model categories, so that working models are visible to investors, buyers and new entrants. Sector-specific engagement continues inside each intervention in Section 4.5, through the platforms named there, but under this single cross-cutting architecture.

7.3 Knowledge Sharing and Partnerships

The communication and awareness effort cannot be delivered by government alone; it depends on partners who already hold the trust, reach and infrastructure the strategy needs. Annex E sets out the partnerships to be considered for communication and awareness, and the role each is best placed to play, from media houses and telecommunications providers to faith networks, counties, curriculum bodies, business associations and research institutions.

The knowledge infrastructure behind these partnerships remains as designed, namely the CESIP Knowledge Hub hosted by NEMA with KIPPRA, operational by end of 2028, with its policy library, material flow dashboard, practitioner toolkit, research library and exchange forum; the Kenya Circular Economy Research Programme with its five public products; and the county knowledge support programme of focal points, a six-cluster peer learning network, a county diagnostic tool and investment facilitation linked to Chapter 5. Kenya is positioned as a contributing partner in continental and global knowledge systems, building on AMCEN-20 and the AU Continental Action Plan launch, with one structured South-South learning partnership per priority sector.

7.4 Measuring Behaviour Change

The campaign is judged by changes in behaviour, not by messages sent. Its main measures are the share of households and markets separating waste at source (headline target H4), return rates where deposit-return or take-back schemes operate, and use of certified repair and refurbished goods, tracked through the annual consumer behaviour survey and county reporting described in Chapter 8.

8. Monitoring, Evaluation and Learning Framework

This chapter sets out how CESIP tracks delivery of the priority interventions in Chapter 4 and feeds evidence back into implementation decisions. It is designed around the same logic used throughout the strategy, namely a small number of outcome indicators at national level, matched by county-level tracking of devolved delivery, running on data infrastructure that already exists rather than a parallel system built for CESIP alone. Indicators are drawn directly from the headline targets in Section 4.1 and the targets and expected outcomes stated against each activity in Annex A, so that what CESIP measures is what CESIP actually committed to deliver.

8.1 MEL Architecture and Design Principles

CESIP's MEL architecture follows the results chain running through Chapter 4, in which each priority intervention produces defined outputs (standards gazetted, facilities commissioned, systems established), which drive sector-level outcomes (recovery rates, formalised jobs, certified volumes), which in turn accumulate into the strategy's national circular economy objectives. Four tiers of indicators run through this chapter.

- **National headline targets (Sections 4.1 and 8.2)**, thirteen measures by which the strategy as a whole is judged.
- **National outcome indicators (Section 8.2 and Annex B)**, one set per sector, tracking whether the sector-level targets are being met.
- **County-level and devolved indicators (Section 8.3)**, tracking the county role in delivery, since a majority of priority interventions depend on county governments for land, licensing, and enforcement.
- **Intervention and activity milestones**, the year-by-year delivery milestones already carried in the phased roadmap (Section 4.6) and in the implementation plan in Annex A, which this chapter does not repeat but which feed the reviews described in Section 8.5.

Design principles

- **Build on existing systems first.** NEMA's waste data platforms, KNBS's national statistics programme, the livestock traceability system, and PRO reporting obligations under the EPR Regulations already collect most of the data CESIP needs; the MEL framework routes through these rather than establishing parallel collection.
- **Keep the indicator set small and decision-useful.** Each sector carries four to seven national indicators, chosen because they are the ones a sector working group would actually look at to decide whether an intervention needs to be adjusted, not a full monitoring log of every activity.
- **Indicators trace to Chapter 4 and Annex A outcomes.** Every indicator is drawn from a stated target or expected outcome against a named activity, so a change in an indicator can always be traced back to the intervention responsible for moving it.
- **Every indicator fully defined.** Each indicator in Annex B states its definition, baseline, 2030 milestone, 2032 target, class, source, reporting frequency and lead institution. Targets are graded confirmed, provisional or developmental and stay provisional until the baseline is approved.
- **Disaggregate for equity.** Where an intervention names informal workers, women or youth, county and PRO reporting templates disaggregate by sex and age so participation and benefit-sharing can be tracked, not assumed.
- **Independent verification.** NEMA and KNBS compile the data, while periodic third-party verification by universities, KIPPRA, research institutions or independent auditors checks the claims most open to dispute, namely EPR recovery claims, recycled-content declarations, waste-diversion figures, carbon credits and job-creation claims.

- **Learning is built into the sequence, not bolted on.** The quarterly and annual reviews in Section 8.5 are the mechanism through which indicator evidence changes standards, financing instruments, or sequencing, so MEL is treated as a management tool, not a compliance exercise.
- **County and national reporting are one system.** The same indicator definitions are used at both levels so that Council of Governors consolidated reporting (Section 6.3) rolls up directly into the national indicators without re-definition.

8.2 Headline Targets and National-Level Quantifiable Indicators

The headline targets in Section 4.1 are the measures by which the strategy as a whole is judged. Table 26 links each to the strategic objective it serves, the interventions expected to move it, the lead institution and the data source. Each target is currently graded provisional (an estimated baseline that the 2028 baseline studies will confirm) or developmental (the baseline studies must first establish it), and becomes confirmed once its baseline is approved.

Table 26 Headline targets, contributing interventions and data sources

Code	Indicator	Baseline	2030 milestone	2032 target	Class	Objective	Contributing interventions	Lead and source
H1	Material circularity rate (secondary materials as a share of total material use)	To be established in 2028 (CC-6 (ii))	2028 baseline plus 1 percentage point	2028 baseline plus 2 percentage points	Developmental	Goal	All; measured through CC-6	KNBS, NEMA material flow account
H2	Material productivity (GDP per tonne of domestic material consumption)	To be established in 2028 (CC-6 (ii))	5% above the 2028 baseline	10% above the 2028 baseline	Developmental	Goal	CC-8 (ii), PLA-1, CON-1, TEX-1	KNBS
H3	Municipal solid waste generated per person	About 150 to 170 kg per person a year (8 to 8.8 million tonnes a year nationally)	No higher than the 2028 baseline per person a year	5% below the 2028 baseline per person a year	Provisional	ii	PLA-1, PLA-2, ORG-3, CC-7 (iii)	NEMA, county waste accounts
H4	Share of municipal waste separated at source	About 5% of generators	15% of generators	30% of generators	Provisional	ii	ORG-7, PLA-3, CC-7 (iii)	County waste departments
H5	Share of municipal waste recycled, composted or digested	To be established in 2028 (CC-6 (ii))	At least 15% of municipal waste a year	At least 25% of municipal waste a year	Developmental	ii	ORG-1, ORG-7, PLA-3, EEE-4, TEX-4, CON-3	NEMA, KNBS
H6	Share of waste going to uncontrolled dumpsites	Over 75% of waste mismanaged (estimate)	Below 65%	Below 55%	Provisional	ii	PLA-3, ORG-7, CC-4 (v)	NEMA, county waste accounts

Cod e	Indicator	Baseline	2030 milestone	2032 target	Class	Objecti ve	Contributi ng interventio ns	Lead and source
	or open burning							
H7	Food loss and waste	About 40% of production (about 10 million tonnes a year)	35% of production	30% of production	Provisional	ii	ORG-3, ORG-5, ORG-6	MoALD, KNBS
H8	Plastics recycling rate	About 9% (2024)	20%	30%	Provisional	ii	PLA-1, PLA-3, CC-4, CC-5	NEMA, KNBS
H9	E-waste formally collected and recycled, as a share of generation	Under 5% (2025)	15%	25%	Provisional	ii	EEE-3, EEE-4, EEE-5, CC-5	NEMA, licensed e-waste PROs
H10	Construction and demolition waste recovery rate	Near zero; no measured baseline	Baseline verified (CC-6 (ii))	20%, aligned with the NCA Strategy	Developmental	ii	CON-1 to CON-4, CC-6 (ii)	NCA
H11	Share of public procurement spending meeting circular criteria	0%	10%	20%	Developmental	i	CC-2	PPRA, National Treasury
H12	Circular economy jobs, including formalised informal workers, by sex and age	Upwards of 46,000 (2023 estimate); confirmed in 2028	15,000 above the 2028 baseline, by sex and age	30,000 above the 2028 baseline, by sex and age	Developmental	iv	CC-5, CC-8, ORG-7, EEE-4, TEX-4, CON-3	KNBS, county labour departments
H13	Plastic leakage to	About 37,000 tonnes a year	30,000 tonnes a year	25,000 tonnes a year	Provisional	ii	PLA-1 (ii), PLA-2, PLA-3 (iii)	NEMA, NPAP

Cod e	Indicator	Baseline	2030 milestone	2032 target	Class	Objecti ve	Contributi ng interventio ns	Lead and source
	land and waterways	reaching waterways						

Progress on Objective iii, lasting institutional capacity, is tracked through the delivery milestones in Annex A and the governance indicators in Annex B.

The sector indicators in Annex B track the sector-level targets and expected outcomes named against the priority interventions in Chapter 4. Baselines reflect the figures stated in Annex A and Chapter 3 where available; where no baseline currently exists, the 2028 baseline studies (Section 4.6) establish it, and the indicator reads “baseline to be established by Q4 2028; target set by mid-2029” rather than a vague target.

8.3 County-Level Indicators and Devolved Implementation Tracking

Sections 6.2.7 and 6.3 set out the devolved role of counties and the Council of Governors, namely segregation enforcement, licensing, land and permits for facilities, model legislation roll-out, harmonised cross-county fees, and consolidated county reporting. The indicators below track that role directly, rather than duplicating the national sector indicators at county scale.

Table 27 County level circular economy tracking framework

Indicator	Baseline	Target	Data source
Counties operating under the harmonised waste licensing and fee schedule	0 (fragmented county licensing)	All counties on the harmonised schedule by 2031	Council of Governors / NEMA
Reclaimer cooperatives and community-based organisations registered as recognised suppliers	To be verified; several counties, including Mombasa, Nyeri and Kisii, have registered such entities	Registered, equipped and supply-contracted in hub regions, then nationally	County governments / licensed packaging PROs
Source-segregation rate in pilot counties, defined as households or establishments correctly separating specified streams divided by those assessed, using a common sampling protocol	Dated baseline survey in 2028	Numeric, time-bound target for each pilot county set after the baseline survey	County waste management departments
County-level facility sites with feasibility completed (sorting hubs, aggregation centres, flagship facilities)	0	Sites secured for flagship and priority regional facilities	County governments / NCA / MCAK
Consolidated county CE reports submitted on schedule	No standing reporting requirement	On-time quarterly submission from all reporting counties	Council of Governors

Indicator	Baseline	Target	Data source
Counties receiving performance-based grants from the County Waste Management Fund against verified milestones	0	[To be set with the Fund design]	National Treasury / Council of Governors

Phase 1 delivery counties follow those already named against specific interventions in Annex A and Section 4.6, namely Nairobi, Mombasa and Kisumu for urban pilots (take-back incentives, technician registration, segregation, organic waste collection); the plastics recovery hub regions outside Nairobi and Mombasa; coastal counties and the Lake Victoria basin for leakage control; and the named agriculture counties (Murang'a, Kiambu, Kirinyaga, Meru, Nakuru, Kisii for produce certification; Nyandarua, Uasin Gishu, Baringo, Narok, Kajiado and Isiolo for cold-chain infrastructure). County indicators should be read against this same sequencing rather than tracked uniformly across all 47 counties from 2028.

8.4 Data Systems, Collection and Quality Assurance

CESIP does not build a new national data system. It connects to and, where necessary, extends four systems that already exist or are already planned, consistent with the design principle of routing through existing infrastructure.

- **NEMA waste data platforms and county implementation toolkits**, the primary channel for PRO reporting, licensing status, and county waste accounts referenced throughout this chapter.
- **KNBS national statistics integration**, annual publication of waste characterisation and material flow accounts, incorporating circular economy metrics as an integrated statistical series rather than a standalone CESIP report.
- **The national livestock traceability system**, extended (ORG-4 (ii)) to carry hides, skins and by-product data fields, making recovered volumes visible for the first time.
- **PRO and EPR reporting portals under the EPR Regulations**, which capture producer-level fee collection and disbursement data used in the textiles and plastics indicators.

Where these systems do not yet capture a CESIP indicator (for example, DfD assessment completion, or hub-level throughput at newly commissioned facilities), the lead institution named in Annex A is responsible for a simple facility- or programme-level register that feeds into the sector's return, rather than a bespoke platform. A lightweight CESIP reporting dashboard, maintained by the CESIP Secretariat, consolidates indicator values from these sources for the reviews described in Section 8.5; it is a reporting layer over existing systems, not a replacement for them.

Data roles and governance. NEMA collects and regulates data from licensed operators and PROs; KNBS produces official statistics and material flow accounts; and the Waste Management Council, through the CESIP Secretariat (Section 6.1.2), holds the neutral national repository. Before the unified portal (CC-6 (iii)) and the dashboard are deployed, MoECCF names the data controller and system host, and the Secretariat agrees data standards, reporting obligations, interoperability, data-sharing agreements, validation rules, access rights and public access, privacy and cybersecurity, continuity arrangements and maintenance financing.

Table 28 Collection responsibilities and frequency

Level	Responsible for collection	What is collected	Frequency
Facility / operator	PROs, hub and facility operators, licensed recyclers	Volumes processed, jobs created, compliance status at the point of operation	Monthly (internal); quarterly submission

Level	Responsible for collection	What is collected	Frequency
County	County environment, agriculture, labour, trade, works and mining departments	County-level indicators in Section 8.3	Quarterly, consolidated by the Council of Governors
Sector regulator	NEMA, KEBS, Communications Authority, National Construction Authority, MoALD	Sector compliance, standards adoption, licensing and registration data from their own systems	Quarterly to Secretariat; annual to KNBS
National statistics	KNBS	Consolidated national indicators, material flow accounts, waste characterisation updates	Annual
CESIP Secretariat	CESIP Secretariat, hosted under the Waste Management Council	Consolidation of all of the above into the national dashboard and review reports	Quarterly dashboard update; annual consolidated report

Data quality assurance

- **Source verification.** Indicators drawn from regulatory or licensing registries (NEMA, KEBS, Communications Authority) are treated as verified at source; indicators drawn from operator or PRO self-reporting are subject to the spot-check and audit arrangements below.
- **Independent audit of PRO/EPR revenue.** Annual third-party audit of fee collection and disbursement for each registered PRO, published alongside the transparency indicators in Annex B, consistent with the audited-reporting target set for PRO/EPR revenue.
- **County data validation.** The Council of Governors cross-checks a sample of county returns each quarter against site records before consolidation; discrepancies are referred back to the originating county department rather than corrected centrally.
- **Baseline confirmation.** Indicators without a confirmed baseline in Annex B and Section 8.3 are converted to a fixed baseline once the corresponding 2028 characterisation or baseline study (Section 4.6) has been completed and reviewed by the relevant sector regulator.
- **Disaggregation checks.** Employment and registration data are rejected at intake if submitted without sex and youth disaggregation, consistent with the design principle in Section 8.1.
- **Validation responsibilities and escalation.** Each data source has a named validator, namely the sector regulator for its own registries, the Council of Governors for county returns, NEMA for PRO returns and KNBS for statistical series. Missing or inconsistent data are flagged by the Secretariat to the validator within one reporting cycle, and escalated to the Waste Management Council through the CESIP Secretariat if unresolved after two cycles.

8.5 Progress Review and Adaptive Management

Reviews follow the phasing in Section 4.6, with frequent, operational review during the foundation phase, stepping down to strategic phase-gate review as the programme moves into regulation, scale and regional integration.

Table 29 Review cycle

Forum	Frequency	Composition	Function
Sector Technical Working Group review	Quarterly	TWG chair (sector lead institution), sector regulator, lead and partner institutions named in Annex A, informal-sector representative	Reviews sector indicator movement, resolves activity-level delivery issues, escalates indicators off track for two consecutive quarters
Waste Management Council review	Quarterly	Waste Management Council members, on the quarterly report of the CESIP Secretariat (chaired by the Ministry of Environment, Climate Change and Forestry)	Reviews the consolidated national dashboard, agrees corrective action on off-track indicators, confirms phase-gate readiness against Section 4.6
Annual CESIP Progress Report	Annual	CESIP Secretariat, with sector regulator sign-off	Publishes the full national and county indicator set against baseline and target, consistent with the transparency commitments in Section 8.4
Mid-term review	2030	Independent reviewer, Waste Management Council, CESIP Secretariat, sector regulators	Assesses whether 2028–2029 foundation milestones (Section 4.6) were met and whether 2032 targets remain realistic
End-of-strategy review	2032	Independent reviewer, Waste Management Council, CESIP Secretariat, Ministry of Environment, Climate Change and Forestry	Assesses achievement against the headline targets and informs the successor strategy

Adaptive management triggers

The following pre-agreed triggers move an indicator from routine reporting into a corrective-action discussion, so that adaptation is a standing part of the cycle rather than an ad hoc response.

- An indicator shows no movement for two consecutive quarterly reporting periods, which is raised at the next sector TWG review with the responsible lead institution.
- A 2028–2029 foundation milestone in Section 4.6 (a baseline study, a standard, or a governance structure) is not delivered within the phase window, which is raised by the CESIP Secretariat with the Waste Management Council, since later phases are sequenced to depend on it.
- A county-level indicator diverges materially from the national trend for the same measure, which is referred to the Council of Governors for county-specific follow-up before it is treated as a national-level problem.
- An independent PRO/EPR audit identifies a material discrepancy, which is referred to NEMA for compliance action outside the standard review cycle.
- A lead institution fails to deliver a committed activity for two consecutive reviews, which is escalated by the Waste Management Council to the institution's accounting officer and reported in the Annual Progress Report.

Findings from each review are fed back into implementation through three channels. Sector TWGs adjust activity sequencing within their own intervention (Annex A) without requiring Secretariat approval; the

CESIP Secretariat can revise county or regional sequencing within the phasing in Section 4.6; and only the Waste Management Council, informed by the mid-term review, can recommend revision of a national target or baseline itself, which keeps day-to-day adaptive management close to the sector teams while protecting the integrity of the headline targets in Section 4.1.

Annex A Implementation Plan

This annex is the operational core of CESIP. It carries the detail moved out of Chapter 4, in a form the CESIP Secretariat and the sector Technical Working Groups can manage, update and report against. Annex A1 shows the timeline, Annex A2 and A3 give the implementation matrix for every activity, Annex A4 sets out the investment plan template, and Annex A5 carries the financing pathway detail moved from Chapter 5. The codes match those in Chapter 4.

Columns for indicative cost, key assumptions and dependencies, and key risks are populated where Draft 1 provided the information. Where it did not, the cell is highlighted for completion by the lead institution and the TWG before final validation.

A1 Implementation timeline

The strategy period runs from 2028 to 2032, with 2027 as a preparatory year for validation, adoption and setting up the Secretariat. Shading shows the years in which each intervention's activities are scheduled. Green marks the short term (2028–2029), amber the medium term (2030–2032) and blue activities that continue or deliver beyond 2032.

Table A1 Implementation timeline by intervention, 2028–2032 and beyond

Code	Intervention	2028	2029	2030	2031	2032	Beyond 2032
CC-1	Set enforceable quality standards across recovered material streams						
CC-2	Use public procurement to create demand for circular and recovered products						
CC-3	Mobilise public and private finance for circular investment						
CC-4	Secure legal certainty for EPR and make fees pay for recovery						
CC-5	Integrate the informal economy through contracts and associations						
CC-6	Build a national waste data system and baseline						
CC-7	Build institutional and research capacity for circular transition						
CC-8	Build an investment-ready pipeline of circular enterprises						
Agriculture and Food Systems (Organic Waste)							
ORG-1	Implement organic fertiliser certification standards and market development						
ORG-2	Formulate and publish circular feed ingredient standards						
ORG-3	Invest in first-mile storage, drying and cold chain infrastructure						
ORG-4	Implement livestock by-product value retention and recovery						

Code	Intervention	2028	2029	2030	2031	2032	Beyond 2032
ORG-5	Strengthen crop and agro-industrial residue valorisation						
ORG-6	Formalise, facilitate and encourage value addition to agricultural byproducts						
ORG-7	Establish household and market-level organic waste segregation and community collection						
Plastics and Packaging							
PLA-1	Adopt phased standards for recyclability, reuse and recycled content						
PLA-2	Assess and introduce deposit-return and reuse systems						
PLA-3	Develop aggregation, recovery, and disposal infrastructure						
PLA-4	Regulate hard-to-recycle and hazardous streams						
Electrical and Electronic Equipment (E-waste)							
EEE-1	Implement circularity obligations at market entry through type approval reform						
EEE-2	Scale repair, refurbishment and technician certification						
EEE-3	Mandate retailer take-back and incentivise consumer collection						
EEE-4	Build domestic E-waste material recovery capacity						
EEE-5	Establish a regional (East Africa) e-waste processing hub						
Textiles, Apparel and Fashion							
TEX-1	Prepare Kenyan textile exporters for ecodesign and digital product passport requirements						
TEX-2	Strengthen local manufacturing, resale and fibre-recovery capacity						
TEX-3	Strengthen textile standards for textile materials and natural-fibre content						
TEX-4	Establish a textile sorting and aggregation hub						
TEX-5	Set up a PRO for textiles						
Mining, Quarrying and Construction							
CON-1	Mainstream design for disassembly and scale material-recovery and circular mining models						
CON-2	Standards, testing and certification for recycled and secondary materials						

Code	Intervention	2028	2029	2030	2031	2032	Beyond 2032
CON-3	Flagship Nairobi C&D waste sorting and processing facility						
CON-4	Align CESIP with, and resource, the NCA's C&D Waste Management Strategy						

A2 Implementation matrix, cross-cutting priorities

Table A2 Implementation matrix for the cross-cutting priorities

Code	Activity and geography	Lead and partners	Estimated cost for activities	Horizon and timing	Key assumptions and dependencies	Key risks
CC-1 Set enforceable quality standards across recovered material streams. Scope National, covering all five priority sectors: agriculture and food, plastics and packaging, e-waste, textiles, and mining, quarrying and construction. Priority-level outcome A complete suite of published, legally enforceable standards for recovered materials in each priority sector, backed by accredited testing and an affordable certification pathway for small producers						
Estimated cost for intervention KES 0.24 billion			Indicative source of funding Main Funding sources: KEBS and NEMA operating budgets Supplementary sources: Donor technical assistance (GIZ, JICA); regulatory instruments (low direct cost)			
CC-1 (i)	Develop and gazette core standards for priority recovered materials <i>National</i>	KEBS (lead); MoALD; NEMA; NCA; research institutes; industry associations; licensed PROs	KES 31 million <i>One cross-sector safeguards standard (KES 6m) and 5 sector evidence studies at c. KES 5m each [S2]. The nine sector standards are costed once, at their higher sector estimates, under ORG-1 (i), ORG-2 (i) and (ii), PLA-1 (i), EEE-2 (i), TEX-3 (i) and CON-2 (i)</i>	2028–2029	- KEBS technical committees convene with industry, PRO and regulator seats. - Feedstock-availability study completed before recycled-content thresholds are set. - Standard drafting previously costed under ORG-1, ORG-2, EEE-2, TEX-3 and CON-2 is carried here.	- Industry contests grading and recycled-content thresholds. - Public enquiry and gazettelement take longer than planned. - Double counting if sector budgets are not adjusted.
CC-1 (ii)	Build accredited testing capacity <i>National</i>	KEBS (lead); KENAS; universities	KES 152.5 million <i>Five sector test suites at the KEBS central laboratory at c. KES 18m each; regional screening laboratories in Mombasa and Kisumu at c. KES 10m each; KENAS</i>	2028–2031	- KENAS can accredit new test methods within 12–18 months. - Equipment procured under donor co-financing.	- Accreditation delays push certification beyond 2029. - Equipment import costs exceed budget with exchange-rate movement.

Code	Activity and geography	Lead and partners	Estimated cost for activities	Horizon and timing	Key assumptions and dependencies	Key risks
			<i>accreditation of c. 15 methods; training of c. 25 analysts; outsourced specialist tests (KES 15m) [S2]</i>		Specialist tests (e.g. rPET challenge tests) outsourced until local capacity exists.	Trained analysts leave KEBS.
CC-1 (iii)	Set up certification with tiered fees for small producers <i>National</i>	KEBS (lead); producer associations; MSEA	KES 40 million <i>Certification scheme, mark and auditor training (KES 10m); first-cycle fee support for c. 150 small firms (c. 30 per sector) at c. KES 0.2m each</i>	2028–2031	Producers pay tiered certification fees once first-cycle support ends.	- Certification fees remain too high for small recyclers and producers. - Low uptake where buyers do not ask for certified products.
CC-1 (iv)	Monitor compliance through market surveillance <i>National</i>	KEBS (lead); NEMA; AFA; Communications Authority; NCA	KES 16 million <i>Sampling, testing and joint enforcement protocol with NEMA and sector regulators at c. KES 4m per sector for four sectors; plastics compliance monitoring is costed under PLA-1 (i)</i>	2030–2032	- NEMA and sector regulators sign a joint compliance protocol. - Surveillance covers products supplied under public tenders (CC-2) and EPR contracts (CC-4).	- Weak enforcement allows non-compliant products to carry certification claims. - Limited inspection budgets in sector regulators.
CC-2 Use public procurement to create demand for circular and recovered products. Scope National, all public institutions and state agencies, including the 47 county governments. Priority-level outcome Amended procurement regulations in force; circular criteria and model tenders in use for each priority sector; measurable year-on-year increase in green procurement spend tracked through e-GP						
Estimated cost for intervention KES 0.09 billion			Indicative source of funding Lead: Government procurement budget reallocation (no net new cost) Support: National Treasury and PPRA administrative budgets			
CC-2 (i)	Amend the procurement regulations <i>National</i>	National Treasury (lead); PPRA	KES 15 million <i>Legal drafting of the regulation amendment and Regulatory Impact Assessment; purchases</i>	2028–2029	PPRA and National Treasury support amendment of the procurement regulations.	- Legal challenge or slow gazettment. - Procuring entities default to lowest-price criteria.

Code	Activity and geography	Lead and partners	Estimated cost for activities	Horizon and timing	Key assumptions and dependencies	Key risks
			<i>themselves are reallocated spend [S10]</i>		Purchases are reallocated within existing budgets, so only drafting and RIA are costed.	
CC-2 (ii)	Issue circular procurement criteria, model tenders and framework contracts <i>National</i>	PPRA (lead); KEBS; NCA; ICT Authority	KES 25 million <i>Five sector criteria sets at c. KES 3m each (certified organic inputs, recycled content, refurbished ICT, recycled textiles, recycled construction materials); five model tender and framework/product-as-a-service template sets at c. KES 2m each [S10]</i>	2028–2030	- CC-1 standards available so tenders can specify certified products. - ICT Authority and uniform-buying agencies agree to pilot framework and take-back contracts.	- Insufficient certified supply to meet tenders. - Perceived higher unit prices for circular products. - Data-security concerns over refurbished devices.
CC-2 (iii)	Build the capacity of public procuring entities <i>National</i>	PPRA (lead); KSG; CoG	KES 27.5 million <i>Training of c. 1,000 procurement officers across MDAs and 47 counties at c. KES 20,000 each; guidance and helpdesk at c. KES 1.5m a year for 5 years</i>	2029–2031	MDAs and counties release procurement officers for training, starting with high-spend categories.	- Officer turnover dilutes training. - Weak verification allows non-compliant products.
CC-2 (iv)	Track green procurement spend <i>National</i>	National Treasury (lead); PPRA	KES 21 million <i>Green procurement module in e-GP (KES 15m); annual reporting 2029–2032 at c. KES 1.5m a year</i>	2029–2032	Procuring entities tag circular purchases in e-GP.	- Incomplete tagging understates green spend. - System integration delays.
CC-3 Mobilise public and private finance for circular investment. Scope National, cross-cutting across the circular value chain, from circular design and repair to remanufacturing and recycling. Priority-level outcome National circular economy finance facility capitalised and lending through sector windows, with at least 20% reaching MSMEs and informal enterprises; circular expenditure tagged in national and county budgets; circular activities covered by the Kenya Green Finance Taxonomy						

Code	Activity and geography	Lead and partners	Estimated cost for activities	Horizon and timing	Key assumptions and dependencies	Key risks
Estimated cost for intervention KES 3.61 billion			Indicative source of funding Lead: Catalytic public seed capital; concessional DFI debt and first-loss guarantees Support: Commercial co-lending; NDC-linked climate finance; carbon revenue Note: Leveraged senior debt and tax revenue forgone are not costed.			
CC-3 (i)	Establish a national circular economy finance facility <i>National</i>	National Treasury (lead); DFIs; commercial banks; fund manager	KES 3,485 million <i>First-loss capital of c. USD 25m (KES 3,250m) anchoring a USD 100–125m facility; design, legal set-up and fund manager selection (KES 40m); fund management for 5 years (KES 150m); due diligence on c. 30 transactions (KES 45m) [S6]</i>	2028 design; deployed through 2032	- First-loss tranche leverages senior DFI and bank debt at roughly 1:4 or better. - Fund manager selected competitively. - Pipeline drawn from CC-8 and the sector interventions.	- Insufficient bankable pipeline. - DFI co-financing not secured. - Exchange-rate risk on hard-currency funds.
CC-3 (ii)	Align public finance and fiscal incentives with circular investment <i>National</i>	National Treasury (lead); KRA; KEBS; CoG	KES 60 million <i>Budget tagging guidance, tax-expenditure review and Finance Bill proposals (KES 20m); KRA classification guidance (KES 10m); investment plans and PPP preparation in 10 pilot counties at c. KES 3m each; revenue forgone not costed</i>	2028–2029	- National Treasury willing to include VAT measures in a Finance Bill. - Revenue forgone is reported separately and not costed here. - Pilot counties commit staff to PPP preparation.	- Fiscal consolidation limits new tax expenditures. - Incentives misused without clear eligibility rules.
CC-3 (iii)	Extend the Kenya Green Finance Taxonomy to circular activities <i>National</i>	CBK (lead); KBA; National Treasury	KES 30 million <i>Technical screening criteria, five sets at c. KES 4m each; bank reporting templates and training (KES 10m) [S7]</i>	2028–2030	- CBK agrees to extend the Kenya Green Finance Taxonomy to circular activities. - Banks report against it.	- Delay in taxonomy revision. - Weak bank uptake without supervisory reporting requirements.

Code	Activity and geography	Lead and partners	Estimated cost for activities	Horizon and timing	Key assumptions and dependencies	Key risks
CC-3 (iv)	Advance regional harmonisation through the EAC and AfCFTA <i>National</i>	State Department for EAC (lead); National Treasury; KRA; KEBS; NEMA	KES 30 million <i>Regional policy proposals on CET relief, standards harmonisation and cross-border rules (KES 15m); participation in EAC and AfCFTA technical committees at c. KES 3m a year for 5 years</i>	2028–2032	- EAC partner states are open to CET relief for recycling equipment. - Proposals align with Basel Convention obligations.	- Slow EAC decision-making delays duty relief. - Partner states resist harmonised standards.
CC-4 Secure legal certainty for EPR and make fees pay for recovery. Scope National, all 47 counties and all EPR-regulated product streams. Priority-level outcome Grounds raised in the pending EPR litigation addressed through a consultative regulatory review; PRO coverage extended to unserved and hard-to-recycle streams; fee-modulation guidance and cross-sectoral EPR guidelines published; county waste laws and licensing in all 47 counties harmonised with the SWMA						
Estimated cost for intervention KES 0.33 billion			Indicative source of funding Lead: Government administrative budgets, including the Office of the Attorney-General Support: Council of Governors coordination; donor technical assistance for legal drafting and fee modelling; EPR fees (revenue-generating once operational)			
CC-4 (i)	Review the EPR Regulations through a consultative process <i>National</i>	MoECCF (lead); NEMA; Office of the Attorney General; licensed PROs; KAM; waste-picker associations	KES 49 million <i>Legal review and Regulatory Impact Assessment (KES 25m); eight regional public participation forums at c. KES 3m each; also covers the textile producer obligations under TEX-5 (ii)</i>	2028	- Review completed within 12 months with national public participation. - Attorney General and NEMA support redrafting.	- Court challenges or industry opposition stall gazettment. - Public participation extends timelines.
CC-4 (ii)	Extend PRO coverage to unserved and hard-to-recycle streams <i>National</i>	NEMA (lead); licensed PROs; producers; CAK	KES 46 million <i>Coverage gap assessment and licensing review with Competition Authority input (KES 30m); PRO onboarding and producer registration in four streams at c. KES 4m each, using the CC-6 system;</i>	2029–2030	- Existing PROs willing to take on unserved streams through ring-fenced fee lines. - Producer registration runs on the CC-6	- Low fee income in small streams makes coverage uneconomic. - Competition concerns between PROs.

Code	Activity and geography	Lead and partners	Estimated cost for activities	Horizon and timing	Key assumptions and dependencies	Key risks
			<i>textile PRO set-up is costed under TEX-5 (i) (KES 40 million)</i>		national waste information system.	
CC-4 (iii)	Issue fee-modulation guidance within the Regulation 18 framework <i>National</i>	NEMA (lead); licensed PROs; producers; KAM	KES 30 million <i>Cost-of-service study and fee-modulation criteria for five streams at c. KES 6m each [S9]</i>	2029–2030	Cost-of-service data available from PROs and counties.	- Poor cost data weakens fee design. - Producers shift to unrecyclable formats if modulation is too weak.
CC-4 (iv)	Issue cross-sectoral EPR guidelines <i>National</i>	NEMA (lead); licensed PROs; producers; KAM	KES 65 million <i>Common registration and reporting templates (KES 15m); tonnage-verification protocol (KES 15m); three pilot payment-verification audit cycles at c. KES 5m each; core guidelines with one annex per stream (KES 20m) [S9]</i>	2029–2031	- Guidelines follow the revised Regulations under CC-4 (i). - Verification protocol agreed by PROs and counties.	- Guidelines issued before the Regulations are settled and need reissue. - Fraudulent tonnage claims.
CC-4 (v)	Harmonise county waste laws and licensing with the SWMA <i>National</i>	MoECCF and Council of Governors (lead); NEMA; county assemblies; licensed PROs; National Treasury	KES 141 million <i>Model by-law and drafting support, incl. harmonised transporter licensing and fees, for 47 counties at c. KES 3m each [S11]; also covers the harmonised licence and fee schedule under PLA-3 (ii)</i>	2029–2032	Counties adopt a model by-law at c. KES 3m support each.	- Uneven county uptake and assembly delays. - Counties resist losing licence and fee revenue.
CC-5 Integrate the informal economy through contracts and associations. Scope National, delivered through informal-worker associations and their county networks across all five priority sectors. Priority-level outcome Informal workers mapped and registered through a tiered system linked to SHA and NSSF; associations and cooperatives contracting as recognised suppliers at published buy-back prices; PPE and health screening in place; 15,000 workers certified in circular trades by 2032						

Code	Activity and geography	Lead and partners	Estimated cost for activities	Horizon and timing	Key assumptions and dependencies	Key risks
Estimated cost for intervention KES 0.86 billion			Indicative source of funding Lead: EPR levy set-asides; CESIP programme budget Support: Development partner grants; county health co-financing; county and TVET budgets			
CC-5 (i)	Map informal livelihoods across sectors and counties <i>National</i>	KNBS (lead); MoECCF; counties; waste-picker and informal-worker associations	KES 60 million <i>National sample survey with KNBS, co-delivered with worker associations, incl. a child labour module</i>	2028	- KNBS can run a sample survey within its survey programme. - Associations mobilise members through their county networks.	- Survey misses mobile and seasonal workers. - Results delayed.
CC-5 (ii)	Register informal workers through a tiered system <i>National</i>	MoECCF (lead); waste-picker and informal-worker associations; counties; SHA; NSSF	KES 100 million <i>Digital registration system build (KES 40m); registration and tiered ID for c. 40,000 workers at c. KES 1,500 each, incl. SHA and NSSF enrolment</i>	2028–2030	- Register built on existing association registries such as KeNaWPWA. C. 40,000 workers registered at c. KES 1,500 each.	- Workers fear tax or harassment and avoid registration. - Data protection concerns.
CC-5 (iii)	Formalise associations and cooperatives with contracts <i>National</i>	State Department for Cooperatives (lead); PROs; counties	KES 60 million <i>Registration support, supplier accreditation and model contracts (incl. mandatory PPE cost line) in five sectors at c. KES 10m each; annual buy-back price benchmarking 2029–2032 at c. KES 2.5m a year</i>	2029–2031	- Cooperatives can register and meet supplier accreditation criteria. - PROs and buyers adopt the model contracts.	- PROs prefer large aggregators. - Weak cooperative governance.
CC-5 (iv)	Provide protective equipment and health screening <i>National</i>	MoH and counties (lead); worker associations; DOSHS; SHA; PROs	KES 275 million <i>First-year PPE and screening for c. 30,000 workers at c. KES 7,500 each (KES 225m); occupational screening protocol (KES 10m); training of c. 1,000 community health</i>	2028–2029	PPE carried as a mandatory cost line in supplier contracts after year one.	- Recurrent funding not sustained after year one. - Low uptake of screening.

Code	Activity and geography	Lead and partners	Estimated cost for activities	Horizon and timing	Key assumptions and dependencies	Key risks
			<i>promoters (KES 20m); PPE standard and inspections 2029–2032 (KES 20m)</i>		Screening absorbed into SHA primary healthcare cover.	
CC-5 (v)	Build a national skills and certification pathway for circular trades <i>National</i>	State Department for TVET (lead); TVET CDACC; NITA; KNQA; county vocational training centres; worker associations	KES 362 million <i>Occupational standards and curricula in four sectors (KES 24m; the e-waste curriculum is costed under EEE-2 (ii)); training of c. 500 trainers (KES 50m); Phase 1 certification of c. 2,400 workers in four sectors at c. KES 40,000 each (KES 96m); Phase 2 scale-up for c. 9,600 workers at c. KES 20,000 each (KES 192m); e-waste workers are certified under EEE-2 (ii) [S8]</i>	2029–2032	- Recognition of prior learning and NITA trade testing shorten certification for experienced workers. - County and TVET budgets sustain training beyond 2032.	- Certified workers revert to unsafe practices if certified channels pay less. - Slow curriculum approval.
CC-6 Build a national waste data system and baseline. Scope National, all 47 counties and all priority material streams, including agricultural, mining and construction waste. Priority-level outcome National estimation methodology adopted; verified national material flow baseline published; national waste information system operational as the single source of data, with an informal-sector layer and open dashboard; national recycling and recovery targets recommended						
Estimated cost for intervention KES 0.72 billion			Indicative source of funding Lead: Government budget Support: Donor and technical assistance grants; regulatory instruments (low direct cost)			
CC-6 (i)	Adopt a national estimation methodology <i>National</i>	KNBS (lead); MoECCF; NEMA; counties	KES 30 million <i>Methodology development and inter-agency data-sharing protocol (NEMA, KNBS, counties, PROs)</i>	2028	KNBS leads the methodology, building on the JICA plastics model.	Methodology not aligned with county data practices.

Code	Activity and geography	Lead and partners	Estimated cost for activities	Horizon and timing	Key assumptions and dependencies	Key risks
CC-6 (ii)	Publish and update the material flow baseline <i>National</i>	NEMA (lead); KNBS; MoECCF; counties; sector ministries	KES 436 million <i>Phased waste characterisation in all 47 counties at c. KES 8m each (KES 376m); stream-level material flow studies in five sectors at c. KES 12m each [S4]</i>	2028–2032	- Counties cooperate in phased characterisation. - Baseline updated every five years.	- Seasonal variation not captured. - County cooperation uneven.
CC-6 (iii)	Establish the national waste information system <i>National</i>	NEMA (lead); PROs; counties; KNBS; worker associations; ICT Authority	KES 245 million <i>Portal with traceability module and public dashboard (KES 150m); integration with PRO and county systems costed under ORG-7 (ii) (KES 60 million); informal-sector data layer (KES 15m); 3 years of hosting and support (KES 60m); circular enterprise register and annual updates (KES 20m)</i>	2029–2032	- PROs, recyclers and counties report through the system. - Hosting absorbed into NEMA's budget after year 3. - Informal-sector layer complies with the Data Protection Act, 2019.	- Systems integration problems. - Low reporting compliance. - Commercial sensitivity limits data sharing.
CC-6 (iv)	Recommend national recycling and recovery targets <i>National</i>	Waste Management Council (lead); MoECCF; NEMA; KNBS; counties	KES 10 million <i>Target-setting analysis and stakeholder consultation under SWMA s.7(1)(c)</i>	2031–2032	- Baseline published in time to inform targets. - Waste Management Council operational.	Industry contests stream-level targets.
CC-7 Build institutional and research capacity for circular transition. Scope National, with county implementation capacity built across all 47 counties. Priority-level outcome County officials in all 47 counties equipped to license, inspect, enforce and report; national circular economy research agenda in place and proven Kenyan models documented; measurable increase in household segregation at source						
Estimated cost for intervention KES 0.33 billion			Indicative source of funding Lead: County budgets; government programme budgets Support: Development partner grants and technical assistance; EPR fee set-asides			
CC-7 (i)	Build county implementation capacity	County governments (lead); Council of	KES 235 million <i>Licensing, inspection and enforcement training and</i>	2029–2031	Counties release staff for training.	Staff turnover after elections.

Code	Activity and geography	Lead and partners	Estimated cost for activities	Horizon and timing	Key assumptions and dependencies	Key risks
	<i>National</i>	Governors; MoECCF; NEMA	<i>toolkits at c. KES 4m per county; waste data reporting training and tools at c. KES 1m per county; 47 counties</i>		• Toolkits aligned with CC-4 and CC-6.	• Counties lack enforcement budgets.
CC-7 (ii)	Establish a national circular economy research coordination mechanism <i>National</i>	NACOSTI (lead); NRF; KIRDI; universities; KEPSA; industry associations	KES 90 million <i>Coordination secretariat and research agenda at c. KES 15m a year for 4 years; c. 20 case studies and replication guides (c. 4 per sector) at c. KES 1.5m each</i>	2028–2032	• NACOSTI hosts the mechanism within its mandate. • Enough proven models exist to document and replicate.	• Research not linked to industry needs. • Case studies not used by implementers.
CC-7 (iii)	Run a national awareness and behaviour change campaign <i>National</i>	County governments (lead); NEMA; Ministry of Education; worker associations; PROs	KES 0 (costed under Coordination, MEL and Secretariat) <i>Campaign delivered through the KES 250 million communication and awareness line in Table A4, the higher of the two estimates, which replaces the earlier KES 174 million estimate</i>	2029–2032	• Counties deliver campaigns using common NEMA messaging. • Separate collection services are in place where segregation is promoted.	• Behaviour change not sustained without collection services. • Uneven county delivery.
CC-8 Build an investment-ready pipeline of circular enterprises. Scope National, across the five priority sectors, with industrial symbiosis projects in industrial parks and SEZs. Priority-level outcome At least 500 circular enterprises supported from ideation to growth stage, at least 40% women- and youth-led; at least 30% securing follow-on finance or offtake agreements; by-product exchange feasibility studies completed in five industrial parks or SEZs						
Estimated cost for intervention KES 0.75 billion			Indicative source of funding Lead: Government MSME programme budgets Support: Development partner grants; Women Enterprise Fund and Youth Enterprise Development Fund; private incubator and investor co-financing; EPZA and SEZA budgets			
CC-8 (i)	Establish a circular enterprise incubation and	State Department for MSMEs (lead); KEPSA; KeNIA; KenInvest; PPRA; incubators;	KES 695 million <i>Incubation of 500 enterprises (5 sectors × 4 cohorts × 25) at c. KES 0.8m each (KES</i>	2029–2032	• Incubators with circular expertise available in each sector.	• Enterprises not viable without reliable offtake. • Elite capture of programme support.

Code	Activity and geography	Lead and partners	Estimated cost for activities	Horizon and timing	Key assumptions and dependencies	Key risks
	investment-readiness programme <i>National</i>	Women Enterprise Fund; Youth Enterprise Development Fund	400m); programme management (KES 75m); 10 investor and buyer matchmaking events (KES 30m); investment- and tender-readiness support for c. 150 enterprises (KES 150m); preparation of c. 16 larger projects (KES 40m)		CC-3 facility and CC-2 tenders provide follow-on finance and offtake.	Too few deals reach bankability.
CC-8 (ii)	Develop industrial symbiosis projects in industrial parks and SEZs <i>National</i>	EPZA (lead); SEZA; KAM; KIRDI	KES 50 million <i>Feasibility studies for by-product exchange in five industrial parks or SEZs at c. KES 10m each; resulting investments financed through CC-3 [S12]</i>	2030–2032	EPZ and SEZ operators host studies, benchmarked on UNIDO eco-industrial park practice.	- Firms reluctant to share by-product data. - Logistics costs undermine exchanges.
Total, cross-cutting priorities: KES 6.91 billion (2028–2029: KES 2.72 billion; 2030–2032: KES 4.19 billion). Constant 2026 prices; USD 1 = KES 130. Excludes redirected procurement spend, tax revenue forgone, EPR fee revenue and leveraged senior debt.						

A3 Implementation matrix, sector interventions

Table A3 Implementation matrix for the sector interventions

Code	Activity and geography	Lead and partners	Estimated cost for activity	Horizon and timing	Key assumptions and dependencies	Key risks
Agriculture and Food Systems (Organic Waste)						
ORG-1 Implement organic fertiliser certification standards and market development.						
Lead institution: KEBS						

Code	Activity and geography	Lead and partners	Estimated cost for activity	Horizon and timing	Key assumptions and dependencies	Key risks
Estimated cost for intervention KES 0.31 billion			Indicative source of funding Lead: KEBS standards budget; reallocation within the existing fertiliser subsidy envelope Support: Carbon finance already flowing to the programme; cooperative and SACCO credit lines; subsidy channel once bio-slurry is a specified class Note: The Nairobi Declaration commitment to triple certified fertiliser supply by 2034 provides the mandate.			
ORG-1 (i)	Complete and gazette the feedstock-differentiated revision of KS 2290 <i>National. One standard with annexes for at least four feedstock classes</i>	KEBS TC 009 Organic Farming (lead); organic fertiliser and input manufacturers as drafting members; Pest Control Products Board (PCPB); MoALD	KES 45 million <i>Revision of KS 2290 with four feedstock annexes, including field-trial evidence; also covers the organic fertiliser standard under CC-1 (i)</i>	2028–2029	- Feedstock evidence from producers and research institutes. - KEBS committee capacity. - Revision costed at KES 45m including field trials. - KEBS TC 009 has capacity to complete the revision in 2028.	- Producers contest feedstock thresholds. - Field-trial results delayed by seasons.
ORG-1 (ii)	Specify bio-slurry as a tradeable class and scale through cooperative hubs <i>National; existing 22 to 25 biogas marketing hubs, extended to at least ten additional dairy cooperatives</i>	Kenya Biogas Programme / African Bioenergy Programmes Ltd (lead on delivery); KEBS TC 009 for the class specification; Kenya Dairy Board; dairy, coffee and tea cooperatives; county livestock departments	KES 200 million <i>Drying, bagging and quality-testing hubs for 10 additional dairy cooperatives at c. KES 15m each, plus specification and market development</i>	2029 specification with ORG-1 (i); cooperative rollout through 2032	- Depends on ORG-1 (i). 10 additional dairy cooperatives host drying and bagging hubs at c. KES 15m each. - Cooperatives contribute land and labour.	- Weak demand for bio-slurry at a price that covers drying costs. - Quality varies between cooperatives.
ORG-1 (iii)	Add certified organic fertiliser to the National Fertilizer Subsidy Programme schedule	MoALD State Department for Crops (lead); National Treasury; NCPB as the redemption channel; KEBS for conformity assessment;	KES 60 million <i>Conformity assessment and e-voucher integration only;</i>	Amendment by 2028; first redemptions in the 2029 long rains	- Depends on ORG-1 (i) standard being in force. - Organic fertiliser volume is reallocated within the existing NFSP envelope.	- Uncertified products enter the subsidy channel. - Political pressure to keep subsidy on

Code	Activity and geography	Lead and partners	Estimated cost for activity	Horizon and timing	Key assumptions and dependencies	Key risks
	<i>National, phased. First phase in counties with existing certified supply (Kiambu, Murang'a, Kirinyaga, Nakuru, Machakos)</i>	county agriculture departments for extension messaging	<i>organic share of subsidy volume is reallocated within the existing NFSP envelope (no net new cost)</i>		E-voucher platform can add a new product class.	mineral fertiliser only.
ORG-2 Formulate and publish circular feed ingredient standards. Lead institution: KEBS						
Estimated cost for intervention KES 0.07 billion			Indicative source of funding Lead: KEBS and PCPB standards budgets Support: Development partner technical assistance, including ICIPE; industry in-kind participation			
ORG-2 (i)	Issue insect meal specifications <i>National. Specification for insect-derived protein meal, with an accompanying testing method</i>	KEBS animal feeds technical committee (lead); International Centre of Insect Physiology and Ecology (ICIPE) for technical evidence for the compositional evidence base; Association of Kenya Feed Manufacturers; commercial insect-meal producers; commercial feed offtakers.	KES 20 million <i>Specification and test method drafting with ICIPE evidence; also covers the insect meal standard under CC-1 (i)</i>	2028–2029	ICIPE evidence is enough for KEBS to finalise specifications.	- Food-safety concerns over insect meal. - Slow committee approval.
ORG-2 (ii)	Publish the permitted circular feed ingredient schedule <i>National ingredient schedule covering at least the listed ingredient classes, in conjunction with handling and testing guidance.</i>	KEBS animal feeds technical committee (lead); MoALD State Department for Livestock Development; Kenya Fisheries Service for aquatic by-products; Association of Kenya Feed	KES 50 million <i>Ingredient schedule, inclusion-limit trials and aflatoxin testing guidance; also covers the</i>	2028–2030	- Depends on ORG-2 (i). - Inclusion-limit trials completed within 18 months. - KDB and DVS support the schedule.	- Aflatoxin or contamination incidents undermine trust. - Feed millers slow to adopt.

Code	Activity and geography	Lead and partners	Estimated cost for activity	Horizon and timing	Key assumptions and dependencies	Key risks
		Manufacturers; KALRO and ILRI on inclusion-limit evidence; agro-processors and millers supplying by-product streams	<i>circular feed standard under CC-1 (i)</i>			
ORG-3 Invest in first-mile storage, drying and cold chain infrastructure.						
Lead institution: Warehouse Receipt System Council and county governments						
Estimated cost for intervention KES 1.25 billion			Indicative source of funding Lead: Warehouse receipt financing on the electronic WRS; DFI concessional debt for warehouse upgrading Support: WRSC operating budget; county development budgets; asset finance and results-based subsidies for coolers; carbon finance on displaced diesel cooling			
ORG-3 (i)	Extend Warehouse Receipt System certification to incorporate other agricultural produce <i>Twelve or more additional certified warehouses</i>	Warehouse Receipt System Council (lead); NCPB; Agriculture and Food Authority; Agricultural Finance Corporation, Equity Bank and Co-operative Bank for receipt financing; producer cooperatives as depositors	KES 520 million <i>Upgrading and certifying 12 warehouses at c. KES 40m each plus e-WRS extension (KES 40m)</i>	2029–2032	12 warehouses upgraded and certified at c. KES 40m each. - Private operators co-invest.	- Low use by smallholders. - Operators unwilling to co-invest without throughput guarantees.
ORG-3 (ii)	Develop aggregation, drying and cold chain infrastructure for perishable produce <i>Eight to ten high production counties: Murang'a, Kiambu, Kirinyaga, Meru, Nakuru and Kisii; solar milk coolers in Nyandarua, Nakuru, Uasin</i>	County governments; Agriculture and Food Authority; Kenya Dairy Board and dairy cooperatives; solar cooling private providers; Agricultural Finance	KES 725 million <i>20 aggregation and drying centres at c. KES 25m each, plus c. 150 solar milk coolers at c. KES 1.5m (USD 11,500) each [S5]</i>	Capacity commissioned through 2032	20 centres at c. KES 25m each and c. 150 solar milk coolers at c. KES 1.5m each. - Cooperatives manage operations.	- Poor maintenance and grid or solar reliability. - Centres under-utilised outside peak seasons.

Code	Activity and geography	Lead and partners	Estimated cost for activity	Horizon and timing	Key assumptions and dependencies	Key risks
	<i>Gishu, Baringo, Narok, Kajiado and Isiolo</i>	Corporation and commercial banks				
ORG-4 Implement livestock by-product value retention and recovery. Lead institution: MoALD State Department for Livestock Development						
Estimated cost for intervention KES 1.32 billion			Indicative source of funding Lead: MoALD system budget; Kenya Leather Development Council programme budget Support: KCB leather sector facility; county budgets; PPP financing, including de-hider placement; concessional DFI loans; revenue from selling meal, tallow and hides; blended finance; donor technical assistance on system development			
ORG-4 (i)	Deploy flaying machines and training around high volume slaughterhouses <i>Twenty to thirty high-output slaughterhouses across main slaughter corridors</i>	Kenya Leather Development Council (lead); county veterinary departments for compliance; Kenya Meat Commission and private slaughterhouse operators; Alpharama Ltd and member tanneries as offtakers; KCB through the leather sector facility	KES 125 million <i>Flaying equipment and training at 25 slaughterhouses at c. KES 5m each</i>	Equipment and training rolling from 2029	25 high-volume slaughterhouses adopt flaying machines at c. KES 5m each. - Operators trained.	- Hide prices too low to reward better flaying. - Machine downtime without spare parts.
ORG-4 (ii)	Extend the livestock traceability system to carry hides, skins and by-product data <i>National, applied at all licensed slaughter facilities</i>	MoALD State Department for Livestock Development (lead, system owner); Directorate of Veterinary Services; Kenya Leather Development Council; KNBS for reporting integration; county veterinary departments as data originators	KES 90 million <i>Extension of the livestock traceability system to hides, skins and by-products; also delivers the by-product traceability and licensing protocol under ORG-6 (i)</i>	2028–2030	Existing livestock traceability system can be extended to hides, skins and by-products.	- Low compliance at small slaughter slabs. - Data not shared with tanneries.

Code	Activity and geography	Lead and partners	Estimated cost for activity	Horizon and timing	Key assumptions and dependencies	Key risks
ORG-4 (iii)	Set up shared processing and digestion facilities <i>Five to six shared facilities, covering 15–20 high-volume slaughterhouses.</i>	MoALD State Department for Livestock Development and Directorate of Veterinary Services (lead); county veterinary and public health departments; NEMA on effluent compliance; Kenya Meat Commission as technical model; private abattoir operators and butcher associations; feed millers as meal offtakers	KES 1,100 million <i>Three of five to six shared rendering and digestion facilities built in-period at c. KES 350m (USD 2.7m) each, plus PPP structuring; full network beyond 2032</i>	2030 onwards; full network beyond 2032	• PPP structuring and offtake for meal, tallow and biogas. • Three facilities built in-period at c. KES 350m each through PPPs. • Full network of five to six completed after 2032.	• No investor appetite without assured offtake for meal, tallow and biogas. • Land and permitting delays.
ORG-5 Strengthen crop and agro-industrial residue valorisation. Lead institution: MoALD and Ministry of Energy and Petroleum						
Estimated cost for intervention KES 9.51 billion			Indicative source of funding Lead: Blended finance (concessional DFI debt, government guarantees and private co-investment), secured by a firm PPA Support: County budgets; concessional debt and zero-rating for hub equipment; carbon finance for avoided burning; EPRA and Ministry of Energy operating budgets; donor technical assistance on tariff modelling			
ORG-5 (i)	Set up regional hubs to upgrade crop residues into dry-season animal feed <i>Eight to ten high-producing agricultural counties – Trans Nzoia, Uasin Gishu, Nakuru, Narok, Bomet, Meru, Nyandarua, Kiambu</i>	MoALD and Regional livestock departments (siting and co-financing), with support from national research institutes (KALRO, ILRI) on technology, and farmer cooperatives as operators and offtakers.	KES 480 million <i>Eight residue-to-feed hubs (chopping, ensiling, baling) at c. KES 60m each</i>	First hubs commissioned 2030	• Eight residue-to-feed hubs at c. KES 60m each. • Livestock keepers buy feed in the dry season.	• Feed price not competitive with open grazing. • Residue supply disrupted by drought.

Code	Activity and geography	Lead and partners	Estimated cost for activity	Horizon and timing	Key assumptions and dependencies	Key risks
ORG-5 (ii)	Clarify grid rules and tariff terms for exporting power from crop residues <i>National regulatory review covering all operating sugar factories</i>	Ministry of Energy and Petroleum and EPRA (joint lead); Kenya Power on connection and power purchase agreements; the relevant crop industry boards, KenGen on technical review; National Treasury	KES 25 million <i>Regulatory review and tariff modelling</i>	Review published Q4 2028	EPRA and KPLC agree export rules and tariff terms for residue-based power.	- Tariff not cost-reflective. - Grid connection queues.
ORG-5 (iii)	Upgrade processing plant energy equipment to export surplus power <i>Phased across eligible processing facilities nationwide.</i>	Sugar millers and large processors (lead, as investors); Kenya Sugar Board (facilitation); National Treasury (guarantees); DFIs as lenders; Kenya Power as offtaker; EPRA as regulator	KES 9,000 million <i>First phase of c. 30 MW export-capable bagasse cogeneration at c. USD 2,300 per kW installed [S3]; later phases beyond 2032</i>	2030 onwards; phased beyond 2032	- Depends on ORG-5 (ii). - Firm PPA required for each investment. - First phase of c. 30 MW at c. USD 2,300 per kW, financed mainly by mills and DFIs. - Later phases after 2032.	- PPA signature delayed by KPLC procurement constraints. - Sugar-sector restructuring delays investment. - Capex exceeds estimate.
ORG-6 Formalise, facilitate and encourage value addition to agricultural byproducts. Lead institution: MoALD and Kenya Fisheries Service						
Estimated cost for intervention KES 0.54 billion			Indicative source of funding Lead: Ring-fenced licence and export levy revenue; Kenya Fisheries Service operating budget Support: County budgets; processor co-investment and private investment; blended finance; grants for pilot plants and matching loans; donor technical assistance on framework design			
ORG-6 (i)	Develop a by-product traceability and licensing protocol, aligned with	Kenya Fisheries Service and MoALD with support from research institutes (innovation, valuation and	KES 0 (costed under ORG-4 (ii))	2028–2030	Legal and operational assessment of any whole-fish landing rule.	- Weak enforcement at landing sites. - Resistance from traders.

Code	Activity and geography	Lead and partners	Estimated cost for activity	Horizon and timing	Key assumptions and dependencies	Key risks
	resource management measures <i>National framework, piloted in high-production zones.</i>	stock assessment), beach management units and producer organisations (enforcement).	<i>Protocol design, licensing system and pilot delivered through the traceability system extension costed under ORG-4 (ii) (KES 90 million), the higher estimate</i>		KeFS and county fisheries officers operate the licensing system in high-production zones.	
ORG-6 (ii)	Build collection and aggregation infrastructure at key production points <i>Phased rollout, starting with the highest-throughput locations.</i>	County agriculture/livestock/fisheries departments, with producer organisations as operators and private processors as off-takers.	KES 300 million <i>Collection and aggregation infrastructure at c. 15 sites at c. KES 20m each</i>	2029–2032	C. 15 sites at c. KES 20m each. - Beach Management Units operate facilities.	- Poor maintenance and power supply. - Low throughput outside fishing seasons.
ORG-6 (iii)	Promote local value-addition processing <i>Pilot in three value chains (fisheries, livestock, crops) before scaling.</i>	County trade and industrialisation departments, with technical assistance from research institutes and private sector off-takers.	KES 240 million <i>Value-addition pilots in three value chains at c. KES 80m each</i>	2029–2032	Pilots in three value chains at c. KES 80m each with private processors.	- Products do not find markets. - Processors exit after grant support ends.
ORG-7 Establish household and market-level organic waste segregation and community collection.						
Lead institution: County governments						
Estimated cost for intervention KES 0.39 billion			Indicative source of funding Lead: County budgets Support: Circular Economy Finance Facility window (CC-3 (i)); development partner grants and technical assistance; platform operators			
ORG-7 (i)	Establish community buy-back and aggregation points	County governments (lead); market associations; community-based	KES 330 million	2029–2032	County segregation enforcement.	Counties do not enforce source separation.

Code	Activity and geography	Lead and partners	Estimated cost for activity	Horizon and timing	Key assumptions and dependencies	Key risks
	for source-separated organic waste <i>Pilot counties (Nairobi, Kisumu, Mombasa), then other urban counties</i>	organisations; composting, insect-conversion and biogas operators as offtakers	60 buy-back points in Nairobi, Kisumu and Mombasa at c. KES 3m each, plus 50 points in further urban counties from 2031 [S4]		Reliable offtake. 60 buy-back points in Nairobi, Kisumu and Mombasa at c. KES 3m each, plus 50 more in other urban counties from 2031.	Contamination lowers the value of collected material.
ORG-7 (ii)	Introduce digital collection tracking interoperable with the national portal <i>Pilot counties</i>	County governments and NEMA (lead); digital collection platform operators	KES 60 million <i>Digital collection tracking and portal interoperability in pilot counties; also covers integration of county and PRO systems with the national portal under CC-6 (iii), the higher estimate</i>	2029–2031	- Depends on CC-7 (iii) portal. - Pilot counties adopt digital tracking that feeds the national portal.	- Low digital uptake among collectors. - Portal delays.

Plastics and Packaging

PLA-1 Adopt phased standards for recyclability, reuse and recycled content.

Lead institution: KEBS and NEMA

Estimated cost for intervention KES 0.31 billion			Indicative source of funding Lead: Producer budgets, including reformulation costs Support: Donor technical assistance and research grants; tax expenditure			
PLA-1 (i)	Adopt and phase in standards for recyclability, reuse and recycled content <i>National (Flexible packaging first, extending by format and category)</i>	KEBS (lead, standards; mandatory requirements made by regulation through MoECCF) + NEMA + Kenya Plastics Pact + KAM and	KES 60 million <i>Phased standards, conformity scheme and compliance monitoring; also covers the plastics</i>	2029–2032	- Feedstock-availability study. - Food-contact certification route (CC-1 (iii)). - Standards phased in over the period with producer and PRO co-funding.	- Industry lobbying delays standards. - Insufficient recycle supply to meet recycled-content targets.

Code	Activity and geography	Lead and partners	Estimated cost for activity	Horizon and timing	Key assumptions and dependencies	Key risks
		converters + KRA + licensed PROs	<i>standards under CC-1 (i) and plastics market surveillance under CC-1 (iv)</i>			
PLA-1 (ii)	Restrict problematic formats and support alternatives <i>National, prioritising flexible, multilayer and hygiene formats</i>	MoECCF (lead, restrictions by gazette notice); NEMA (enforcement); KEBS; National Treasury and KRA; KIRDI and universities; brand owners and Kenya Plastics Pact	KES 250 million <i>Gazette notices plus a co-funded alternatives R&D programme</i>	2029–2032	- Restrictions phased in with notice. - Co-funded R&D on alternatives.	- Alternatives more costly or less available. - Enforcement gaps at informal markets.
PLA-2 Assess and introduce deposit-return and reuse systems. Lead institution: NEMA						
Estimated cost for intervention KES 0.70 billion			Indicative source of funding Lead: Producer-funded deposits, fees and co-funding Support: NEMA regulatory budget; development partner technical assistance; DFI and impact capital; county funds			
PLA-2 (i)	Assess the feasibility, cost and distributional effects of a beverage-container deposit-return scheme <i>National</i>	NEMA (lead); MoECCF; producers, importers and licensed packaging PROs; retailers; waste-picker associations	KES 40 million <i>Feasibility, cost and distributional study, benchmarked on international DRS designs [S9]</i>	2028–2029	- None. - Precondition for PLA-2 (ii). - Study benchmarks international deposit-return schemes and models Kenyan costs and effects on low-income households.	- Findings show weak business case. - Beverage industry opposes the scheme.
PLA-2 (ii)	Make regulations for a deposit-return scheme within the EPR system <i>National</i>	MoECCF (lead, regulation-making); NEMA (drafting, licensing and oversight); Office of the Attorney-	KES 25 million <i>Drafting, public participation and</i>	2030–2031	- Depends on PLA-2 (i) findings. - Public participation and RIA.	Drafting delays from overlap with EPR review.

Code	Activity and geography	Lead and partners	Estimated cost for activity	Horizon and timing	Key assumptions and dependencies	Key risks
		General; producers, importers and licensed packaging PROs; retailers	<i>Regulatory Impact Assessment</i>		Regulations drafted and consulted within 12 months of the study.	
PLA-2 (iii)	Pilot the deposit-return scheme in a defined geography <i>One county or urban area for the pilot</i>	Producer-led system operator and licensed packaging PROs (lead, operations); NEMA (oversight); county government; retailers; reclaimer associations	KES 450 million <i>Single-area pilot: system operator set-up, return points and reverse logistics (c. USD 3.5m) [S9]; return points also serve the reuse system under PLA-2 (iv)</i>	2031–2032 pilot; national rollout beyond 2032	- Depends on PLA-2 (ii) regulations. - Single-area pilot of c. USD 3.5m. - Beverage producers fund most of the operator costs.	- Low return rates. - Deposit fraud. - Informal collectors displaced.
PLA-2 (iv)	Develop the shared infrastructure that reuse depends on <i>Pilot county, then national</i>	NEMA and county governments (lead); retailers and reuse operators; licensed PROs; community organisations	KES 180 million <i>Three shared washing hubs at c. KES 60m each; return points are shared with the deposit-return network costed under PLA-2 (iii) (KES 450 million), the higher estimate</i>	2029–2032	Three washing hubs at c. KES 60m and c. 100 return points at c. KES 1m.	- Reuse volumes too low to sustain hubs. - Hygiene concerns.
PLA-3 Develop aggregation, recovery, and disposal infrastructure. Lead institution: County governments and NEMA						

Code	Activity and geography	Lead and partners	Estimated cost for activity	Horizon and timing	Key assumptions and dependencies	Key risks
Estimated cost for intervention KES 9.30 billion			Indicative source of funding Lead: EPR fees for the collection, sorting and recycling of products and packaging within EPR scope Support: DFI concessional debt; county Waste Management Fund for residual waste management and disposal; donor and climate finance; county budgets; administrative costs within existing functions			
PLA-3 (i)	Establish a three-tier, multi-stream recovery and disposal network <i>Five to six regions, each covering three to four counties outside Nairobi and Mombasa</i>	County governments + NEMA + licensed PROs across streams + offtake recyclers + DFIs	KES 9,000 million <i>Five regions at c. KES 1.8bn each: material recovery facility, aggregation centres and first sanitary landfill cell, consistent with World Bank landfill and MRF cost ranges [S4]; dumpsite transition plans included</i>	2029–2032	- Contracted offtake before commissioning. - Agreed transition plans before any dumpsite closure. - Five regions at c. KES 1.8bn each, consistent with World Bank landfill and MRF cost ranges. - County clusters and DFI financing secured.	- Land acquisition disputes. - Counties unable to pay gate fees. - Cost overruns. - Community opposition to landfill sites.
PLA-3 (ii)	Harmonise county and national licensing for waste movement <i>National</i>	Council of Governors + NEMA + National Treasury	KES 0 (costed under CC-4 (v)) <i>Harmonised licence and fee schedule delivered through the county law and licensing harmonisation costed under CC-4 (v) (KES 141</i>	2028–2029	Council of Governors agrees a harmonised licence and fee schedule.	Counties reluctant to give up licence revenue.

Code	Activity and geography	Lead and partners	Estimated cost for activity	Horizon and timing	Key assumptions and dependencies	Key risks
			<i>million), the higher estimate</i>			
PLA-3 (iii)	Control plastic leakage into rivers, lakes, and oceans <i>Coastal counties and the Lake Victoria basin</i>	County governments, including coastal county governments, + NEMA + Kenya Maritime Authority + Kenya Fisheries Service + port and tourism actors (subject to mandate verification) + community groups	KES 300 million <i>Interception at c. 20 river and coastal sites (booms, traps, collection) at c. KES 10m each, plus fishing-gear recovery</i>	2029–2032	C. 20 river and coastal interception sites at c. KES 10m each. - Counties maintain sites.	- Floods damage booms and traps. - Recurrent cleaning costs not funded.
PLA-4 Regulate hard-to-recycle and hazardous streams.						
Lead institution: NEMA						
Estimated cost for intervention KES 0.23 billion			Indicative source of funding Lead: Producer-funded take-back and EPR fees set to full treatment cost, including for hard-to-recycle formats Support: NEMA existing budget for the determination; donor technical assistance; grants for cooperative collection points; PPP, catalytic and venture capital			
PLA-4 (i)	Assign the governing regime for each stream and set cost-reflective hazardous fees with take-back <i>National, covering all four streams</i>	MoECCF and NEMA (lead; fee schedule by regulation, determination and enforcement by NEMA); industry associations; producers	KES 80 million <i>Regime determination, cost-reflective fee study and take-back collection points</i>	2028–2029 determination and fee; 2030–2032 take-back	- Regime for each stream determined with NEMA and the Ministry of Health. - Fees set to recover handling cost.	Overlap between health-care and EPR regimes causes confusion.
PLA-4 (ii)	Extend PRO coverage and treatment routes to absorbent hygiene products <i>National</i>	NEMA + licensed PROs + diaper and hygiene product producers	KES 120 million <i>PRO fee line and trial of treatment</i>	2029–2032	PRO fee line for absorbent hygiene products agreed with producers.	No viable treatment route proves cost-effective.

Code	Activity and geography	Lead and partners	Estimated cost for activity	Horizon and timing	Key assumptions and dependencies	Key risks
			<i>routes for absorbent hygiene products</i>			
PLA-4 (iii)	Explore chemical recycling as a long-term, regional and niche option <i>Nairobi metropolitan feedstock shed first</i>	State Department for Industrialization and NEMA (lead, assessment); MoECCF; EAC partner states; private developers; DFIs	KES 30 million <i>Regional feasibility and safeguards assessment only; any plant beyond 2032</i>	Scoping 2030–2032; any plant beyond 2032	- Regional feedstock aggregation. - Safeguards. - Price differential versus virgin feedstock. - Feasibility only. - Any plant would be built after 2032.	Pressure to invest early before economics or safeguards are proven.

Electrical and Electronic Equipment (E-waste)

EEE-1 Implement circularity obligations at market entry through type approval reform.

Lead institution: Communications Authority of Kenya

Estimated cost for intervention KES 0.09 billion			Indicative source of funding Lead: Government operational budget (CA and NEMA) Support: UNEP/Basel Convention and World Customs Organisation technical assistance			
EEE-1 (i)	Add circularity conditions to the Type Approval Regulations 2026 <i>National (all EEE imported or manufactured in Kenya)</i>	Ministry of ICT and Communications Authority (lead, regulation-making); NEMA; KEBS	KES 25 million <i>Regulation amendment and type-approval form update [S8]</i>	2028–2029	Communications Authority amends type approval to include circularity conditions.	- Importers contest conditions. - Slow amendment.
EEE-1 (ii)	Establish a joint CA, NEMA and KRA enforcement protocol at market entry <i>National (all ports of entry and domestic market)</i>	Communications Authority + NEMA + Kenya Revenue Authority (KRA)	KES 60 million <i>Joint protocol, port-of-entry training, test kits and data sharing</i>	2028–2029	- CA, NEMA and KRA sign a joint enforcement protocol. - Port officers trained and equipped.	- Inter-agency coordination weak. - Corruption at entry points.

EEE-2 Scale repair, refurbishment and technician certification.

Code	Activity and geography	Lead and partners	Estimated cost for activity	Horizon and timing	Key assumptions and dependencies	Key risks
Lead institution: KEBS						
Estimated cost for intervention KES 0.20 billion			Indicative source of funding Lead: Government budget Support: Development partner co-financing			
EEE-2 (i)	Develop national repair and refurbishment standards <i>National</i>	KEBS, licensed recyclers (e.g. WEEE Centre), Jua Kali associations	KES 15 million <i>Standard drafting and validation (also covers the e-waste standard under CC-1 (i))</i>	2029–2031	Standards drafted with refurbishers and KEBS.	Small repairers cannot meet standards.
EEE-2 (ii)	Build a TVET-delivered technician certification pathway <i>National</i>	TVET institutions, KEBS, Jua Kali associations	KES 170 million <i>Curriculum (KES 20m) and certification of c. 3,000 technicians at c. KES 50,000 each; also covers certification of e-waste workers under CC-5 (v), the higher estimate</i>	2029–2031	- Curriculum at KES 20m. C. 3,000 technicians certified at c. KES 50,000 each through TVET.	Low enrolment if certification does not raise incomes.
EEE-2 (iii)	Establish a legal framework for refurbished-product warranties <i>National</i>	Competition Authority of Kenya (lead, consumer protection); KEBS; State Department for Industrialization; licensed recyclers	KES 15 million <i>Legal drafting and consumer-protection guidance</i>	2029–2031	Warranty framework aligned with consumer-protection law.	Refurbishers unable to fund warranty obligations.
EEE-3 Mandate retailer take-back and incentivise consumer collection.						
Lead institution: EPROK and licensed e-waste PROs						

Code	Activity and geography	Lead and partners	Estimated cost for activity	Horizon and timing	Key assumptions and dependencies	Key risks
Estimated cost for intervention KES 0.24 billion			Indicative source of funding Lead: Producer EPR obligations Support: EPR fund for the incentive pilot			
EEE-3 (i)	Require take-back points at retailers, distributors and institutions, with incentives <i>National for the take-back mandate; pilot consumer incentive schemes in major urban centres (Nairobi, Mombasa, Kisumu), scaling based on results</i>	MoECCF (lead, take-back obligation by regulation); licensed e-waste PROs (operations); retailers' association; ICT Authority for public institutions	KES 240 million <i>c. 300 take-back points at c. KES 0.5m each plus incentive pilots in three cities [S8]</i>	2028–2030	C. 300 take-back points at c. KES 0.5m each funded mainly by PROs. - Incentive pilots in three cities.	- Low consumer returns. - Devices diverted to informal dismantlers offering higher prices.
EEE-4 Build domestic E-waste material recovery capacity. Lead institution: NEMA						
Estimated cost for intervention KES 1.23 billion			Indicative source of funding Lead: Private sector investment and EPR financing Support: Concessional and blended finance; development partner technical assistance			
EEE-4 (i)	Develop a national e-waste recovery roadmap <i>National, with priority given to major e-waste generation and processing hubs and existing recycling and aggregation hubs.</i>	NEMA, Ministry of Environment, EPROM, licensed recyclers, KEBS, Kenya Investment Authority (KenInvest), financial institutions and development partners	KES 30 million <i>Fraction-by-fraction recovery roadmap and investment pipeline [S8]</i>	2028–2029	Roadmap prepared using the national baseline and Global E-waste Monitor data.	Poor data on volumes by fraction.
EEE-4 (ii)	Scale domestic fraction-specific pre-processing capacity	Licensed recyclers and investors (lead, investment); NEMA (licensing); licensed e-waste PROs; KenInvest;	KES 1,200 million <i>Three fraction-specific pre-</i>	2030–2032	- Depends on EEE-4 (i). - Three pre-processing lines at c. KES 400m each, mainly private and EPR-funded.	- Insufficient feedstock. - Volatile metal prices. - Competition from informal channels.

Code	Activity and geography	Lead and partners	Estimated cost for activity	Horizon and timing	Key assumptions and dependencies	Key risks
	<i>National, prioritising major generation and processing hubs</i>	financial institutions and development partners	<i>processing lines at c. KES 400m (USD 3m) each [58]</i>			
EEE-5 Establish a regional (East Africa) e-waste processing hub. Lead institution: NEMA and MoECCF						
Estimated cost for intervention KES 0.19 billion			Indicative source of funding Lead: Government diplomatic and technical budget; government land and licensing Support: Private equity, DFI debt and regional funds; development partner technical assistance on Basel Convention compliance			
EEE-5 (i)	Establish a legal framework for cross-border e-waste movement <i>Kenya and the four named EAC states for the legal framework; Nairobi Industrial Area or SEZ, with intake from Kenya and neighbouring EAC states, for the processing facility</i>	MoECCF (lead, Basel Convention focal point); NEMA, counterpart environmental authorities in Uganda, Tanzania, Rwanda and South Sudan, EAC Secretariat, EACO (regional coordination)	KES 40 million <i>Basel Convention-compliant bilateral and EAC agreements</i>	2028–2030, before any capital commitment	• Bilateral and EAC agreements are consistent with the Basel Convention.	• Slow negotiation with partner states.
EEE-5 (ii)	Structure a regional e-waste processing PPP <i>Nairobi Industrial Area or SEZ, with intake from Kenya and neighbouring EAC states</i>	NEMA and MoECCF (lead); EAC Secretariat; EACO; counterpart environmental authorities; private operator	KES 150 million <i>PPP transaction advisory only; facility beyond 2032</i>	PPP structuring 2031–2032; facility beyond 2032	• Depends on EEE-5 (i) and EEE-4 (i) findings. • Transaction advisory only. • Facility built after 2032.	• No qualified PPP bidder. • Regional volumes insufficient.
Textiles, Apparel and Fashion						
TEX-1 Prepare Kenyan textile exporters for ecodesign and digital product passport requirements. Lead institution: State Department for Industrialization						

Code	Activity and geography	Lead and partners	Estimated cost for activity	Horizon and timing	Key assumptions and dependencies	Key risks
Estimated cost for intervention KES 0.26 billion			Indicative source of funding Lead: Development partner technical assistance Support: Industry and buyer co-financing			
TEX-1 (i)	Establish a textile ecodesign and digital product passport readiness programme <i>Export-oriented manufacturers and EPZ firms</i>	EPZA and KAM (lead, delivery to EPZ and member firms); State Department for Industrialization; EU CERC; export-oriented manufacturers	KES 160 million <i>Traceability and passport readiness for c. 40 export firms at c. KES 4m each</i>	2029–2032	C. 40 export firms prepare for digital product passports at c. KES 4m each with buyer co-funding.	- EU requirements change. - Firms unable to bear compliance costs.
TEX-1 (ii)	Deliver a national textile ecodesign capacity-building and buyer-pilot programme <i>National</i>	Kenya Institute of Textile and Technology and KAM (lead, training delivery); State Department for Industrialization; EU CERC; buyers	KES 100 million <i>Ecodesign training and buyer-anchored pilots</i>	2029–2032	Buyers anchor ecodesign pilots with local manufacturers.	Buyer commitment not sustained.
TEX-2 Strengthen local manufacturing, resale and fibre-recovery capacity. Lead institution: State Department for Industrialization						
Estimated cost for intervention KES 0.40 billion			Indicative source of funding Lead: Government implementation budget Support: Development finance and technical assistance facility; research grants and development partner co-financing; private investment; youth and women windows of CC-3 (i)			
TEX-2 (i)	Operationalise the CTA Policy <i>Upstream (fibre production, manufacturing).</i>	State Department for Industrialization, NEMA.	KES 20 million <i>Implementation regulations and guidance under the CTA Policy</i>	2028–2029 (contingent on Cabinet approval timing)	- Cabinet approval of the CTA Policy. - Regulations and guidance follow Cabinet approval.	Competing priorities delay implementation.

Code	Activity and geography	Lead and partners	Estimated cost for activity	Horizon and timing	Key assumptions and dependencies	Key risks
TEX-2 (ii)	Strengthen local manufacturing and natural-fibre production <i>Upstream (fibre production, manufacturing).</i>	State Department for Industrialization (lead), AFA Fibre Crops Directorate, MCAK, Kenya Association of Manufacturers, Kenyatta University.	KES 300 million <i>Natural-fibre supply and bio-based fibre pilots</i>	2029–2032 pilots; scale beyond 2032	Natural-fibre and bio-based fibre pilots co-funded with private investors.	- Low cotton yields and ginning capacity. - Imported fibre remains cheaper.
TEX-2 (iii)	Support digital resale and repair platforms <i>National, starting in Nairobi</i>	Micro and Small Enterprises Authority (lead); State Department for Industrialization; MCAK; platform operators; tailor and trader associations	KES 80 million <i>Platform support grants and tailor and trader onboarding</i>	2029–2031	- Platforms grow with support grants. - Tailors and traders onboard.	- Low digital uptake. - Platform businesses fail after grant support.
TEX-3 Strengthen textile standards for textile materials and natural-fibre content.						
Lead institution: KEBS						
Estimated cost for intervention KES 0.03 billion			Indicative source of funding Lead: KEBS standards-development budget Support: Development partner technical assistance; regulatory instrument (low direct cost)			
TEX-3 (i)	Develop KEBS grading standards for sorted and recycled textiles <i>Midstream (grading, standards).</i>	KEBS (lead, through a technical committee); MCAK; textile PRO; recyclers	KES 15 million <i>Grading standards drafting and validation (also covers the textile standard under CC-1 (i))</i>	2028–2030	KEBS drafts standards with traders and recyclers (also covers the textile standard under CC-1 (i)).	Traders resist grading rules.
TEX-3 (ii)	Assess a minimum natural-fibre content requirement <i>National</i>	State Department for Industrialization (lead);	KES 15 million	2030–2031	- Trade and EAC consultation. - Assessment only within the period.	Trade obligations limit options.

Code	Activity and geography	Lead and partners	Estimated cost for activity	Horizon and timing	Key assumptions and dependencies	Key risks
		KEBS; State Department for Trade; MCAK; textile PRO	<i>Threshold assessment and EAC consultation</i>			
TEX-4 Establish a textile sorting and aggregation hub. Lead institution: Textile PRO and Nairobi City County						
Estimated cost for intervention KES 0.20 billion			Indicative source of funding Lead: PRO funds; capital grant plus blended finance (indicative capex KES 150 to 200 million) Support: Development partner technical assistance			
TEX-4 (i)	Complete feasibility, siting and the operating model for the hub <i>Nairobi</i>	Textile PRO and Nairobi City County (lead); MCAK; CESIP Secretariat; PPP Directorate where a PPP is used	KES 20 million <i>Bankable feasibility, siting and operator selection</i>	2028–2029	- Depends on CC-7 (vi) study. - Land availability. - Feasibility study completed for KES 20m.	Suitable site not secured.
TEX-4 (ii)	Build and commission the sorting and aggregation facility <i>Downstream (collection, sorting) with midstream linkages to recyclers/downcyclers.</i>	Private operator under concession (lead, build and operate); textile PRO as anchor client; Nairobi City County; MCAK	KES 175 million <i>Mid-point of the indicative capex of KES 150–200m in Table A3</i>	2030–2031	- Depends on TEX-4 (i). - Contracted feedstock and offtake. - Facility capex of c. KES 175m (mid-point of KES 150–200m), mainly private and DFI-funded.	- Low-grade feedstock limits recovery value. - Capex overrun.
TEX-5 Set up a PRO for textiles. Lead institution: Textile PRO and NEMA						
Estimated cost for intervention KES 0.10 billion			Indicative source of funding Lead: PRO/EPR fee revenue (KES 150 per bale), funded by brands and importers Support: Development partner technical assistance, including for transparency and audit system design; regulatory instrument			

Code	Activity and geography	Lead and partners	Estimated cost for activity	Horizon and timing	Key assumptions and dependencies	Key risks
TEX-5 (i)	Roll out the textile PRO and channel EPR fees transparently <i>Downstream (collection, take-back) with upstream policy implications for importers/brands.</i>	Textile PRO (lead, operations); NEMA (licensing and oversight); State Department for Industrialization	KES 40 million <i>PRO set-up and transparent fee and audit system; fee revenue (KES 150 per bale) shown as revenue, not cost; also covers textile PRO onboarding under CC-4 (ii)</i>	2028	- EPR enforcement currently suspended. - Relies on the interim compliance framework (CC-4 (ii)). - PRO set-up at KES 40m. - Fee revenue of KES 150 per bale counted as revenue, not cost.	- Trader resistance to fees. - Fee leakage without transparent audit.
TEX-5 (ii)	Define textile producers and their obligations in the EPR Regulations <i>Downstream (collection, take-back) with upstream policy implications for importers/brands.</i>	MoECCF (lead, regulation-making); NEMA; State Department for Industrialization; textile PRO; MCAK	KES 0 (costed under CC-4 (i)) <i>Textile producer definitions and obligations drafted within the EPR Regulations review costed under CC-4 (i) (KES 49 million), the higher estimate</i>	2029–2030, pending the CC-6 (ii) baseline	- Depends on CC-4 (i) review and CC-7 (vi) characterisation study. - Drafting follows the EPR review.	Delay if EPR review stalls.
TEX-5 (iii)	Design a textile take-back and buy-back system <i>Downstream (collection, take-back) with upstream policy implications for importers/brands.</i>	Textile PRO (lead); recyclers and collectors; retailers; NEMA	KES 60 million <i>c. 500 collection bins and logistics set-up</i>	2029	C. 500 collection bins and logistics funded through the textile PRO.	- Low public participation. - Bins misused.
Mining, Quarrying and Construction						
CON-1 Mainstream design for disassembly and scale material-recovery and circular mining models.						
Lead institution: National Construction Authority and Ministry of Mining						

Code	Activity and geography	Lead and partners	Estimated cost for activity	Horizon and timing	Key assumptions and dependencies	Key risks
Estimated cost for intervention KES 0.42 billion			Indicative source of funding Lead: Government pilot-funding allocation; KEBS certification budget Support: KGBS technical support; equipment grant fund; geospatial-assessment grant; development partner co-financing and technical assistance; mining sector co-financing			
CON-1 (i)	Require design-for-disassembly assessments and fund pilots <i>National</i>	State Department for Public Works and NCA (lead); Kenya Green Building Society	KES 120 million <i>DfD methodology and incremental design costs for c. 5 public pilot buildings</i>	2028–2029 mandate; 2029–2030 pilots	DfD assessments piloted on c. 5 public buildings, with incremental design costs funded.	- Designers lack skills. - Incremental costs resisted by developers.
CON-1 (ii)	Scale up mining-waste-to-brick production <i>Counties that have dominant mining activities</i>	State Department for Mining (lead, grants); KEBS (certification); existing mining-waste-to-brick ventures	KES 160 million <i>Equipment grants to c. 10 ventures at c. KES 15m each plus KEBS certification</i>	2029–2030	- Equipment grants to c. 10 ventures at c. KES 15m each. - KEBS certifies bricks.	- Products not certified. - Weak market demand versus conventional bricks.
CON-1 (iii)	Map abandoned quarries and side streams for repurposing <i>Counties with dominant mining and quarrying activity</i>	Ministry of Mining, county governments.	KES 60 million <i>Geospatial mapping of abandoned quarries and side streams</i>	2029–2031	Geospatial mapping by the Ministry of Mining and counties.	Incomplete records of abandoned quarries.
CON-1 (iv)	Introduce a circular mining approach <i>National, starting with priority mining areas</i>	Ministry of Mining, Blue Economy and Maritime Affairs (lead); State Department for Mining; county governments; EU CERC; research institutions	KES 80 million <i>Circular mining guidelines and side-stream recovery pilots</i>	2029–2032	- Scope decision on critical raw materials. - Mining waste baseline under CC-7 (vii). - Guidelines and recovery pilots co-funded by mining operators.	Operators do not adopt guidelines without regulatory backing.

Code	Activity and geography	Lead and partners	Estimated cost for activity	Horizon and timing	Key assumptions and dependencies	Key risks
CON-2 Standards, testing and certification for recycled and secondary materials.						
Lead institution: KEBS						
Estimated cost for intervention KES 0.08 billion			Indicative source of funding Lead: KEBS standards-development budget Support: NCA and development partner research budget; KGBS programme budget; development partner technical assistance			
CON-2 (i)	Develop KEBS specifications for secondary construction materials <i>National</i>	Kenya Bureau of Standards (lead), Kenya Green Building Society.	KES 20 million <i>Specifications and testing for recycled aggregate (also covers the construction standards under CC-1 (i))</i>	2028–2029	Specifications and testing completed by KEBS (also covers the construction standards under CC-1 (i)).	Testing capacity limited.
CON-2 (ii)	Map and grade second-hand building material dealers <i>Counties</i>	National Construction Authority, Kenya Green Building Society.	KES 30 million <i>Dealer mapping and grading in major counties</i>	2028–2029	Counties support mapping and grading of dealers.	Dealers avoid registration.
CON-2 (iii)	Develop a Kenya-specific circularity rating tool <i>National</i>	Kenya Green Building Society, KEPSA, Architectural Association of Kenya.	KES 25 million <i>Rating tool development, building on the KGBS framework</i>	2029	Tool builds on the Kenya Green Building Society framework.	Low market adoption without incentives.
CON-3 Flagship Nairobi C&D waste sorting and processing facility.						
Lead institution: National Construction Authority and Nairobi City County						

Code	Activity and geography	Lead and partners	Estimated cost for activity	Horizon and timing	Key assumptions and dependencies	Key risks
Estimated cost for intervention KES 0.20 billion			Indicative source of funding Lead: Capital grant plus blended finance (indicative capex KES 150 to 200 million) Support: NCA budget; development partner technical assistance			
CON-3 (i)	Complete feasibility, siting and the operating model for the facility <i>Nairobi</i>	NCA and Nairobi City County (lead); CESIP Secretariat; PPP Directorate where a PPP is used	KES 20 million <i>Bankable feasibility, siting and operator selection</i>	2028–2029	• Depends on CC-7 (vii) baseline. • Site availability. • Feasibility study completed for KES 20m.	• Suitable site not secured.
CON-3 (ii)	Build and commission the flagship C&D sorting and crushing facility <i>Nairobi</i>	Private operator under concession (lead, build and operate); NCA; Nairobi City County; KEBS for certification of higher-grade uses	KES 175 million <i>Mid-point of the indicative capex of KES 150–200m in Table A3</i>	2030–2031	• Depends on CON-3 (i). • Contracted offtake. • CON-2 (i) specifications for higher-grade uses. • Facility capex of c. KES 175m (mid-point of KES 150–200m), mainly private and DFI-funded.	• Low demand for recycled aggregate. • Capex overrun.
CON-4 Align CESIP with, and resource, the NCA's C&D Waste Management Strategy. Lead institution: National Construction Authority						
Estimated cost for intervention KES 0.06 billion			Indicative source of funding Lead: CESIP implementation budget (coordination absorbed within the Secretariat function) Support: Government co-financing; regulatory and institutional reform (no direct capital cost)			
CON-4 (i)	Align CESIP with the NCA Strategy recovery target <i>National</i>	CESIP Secretariat, National Construction Authority.	KES 5 million <i>Absorbed within the Secretariat; alignment workshops only</i>	2028	• Absorbed within the Secretariat at KES 5m.	• NCA strategy revision timeline misaligned.

Code	Activity and geography	Lead and partners	Estimated cost for activity	Horizon and timing	Key assumptions and dependencies	Key risks
CON-4 (ii)	Co-fund institutional coordination for C&D waste <i>National and County</i>	National Construction Authority, NEMA, KEBS, county governments.	KES 40 million <i>Inter-agency coordination structures over 2 years</i>	2028–2029	Inter-agency coordination co-funded by national and county governments for 2 years.	Coordination lapses after co-funding ends.
CON-4 (iii)	Assess a formal co-regulatory role for NCA <i>National</i>	MoECCF and NCA (lead, any change in mandate requires legal amendment); NEMA; EPZA	KES 15 million <i>Legal and institutional assessment</i>	2029–2030	Assessment only within the period.	Legal constraints on co-regulatory roles.

A4 Investment plan template

The investment plan aggregates the costed activities in Annex A2 and A3. It distinguishes financing needs from projected revenues, confirmed from prospective funding, and public from private shares, and names the institution responsible for project preparation and fiduciary oversight of each major investment. It is to be completed by the Secretariat with National Treasury and the lead institutions before final validation.

Table A4 National Circular Economy Investment Plan, 2028–2032 (KES million)

Sector or priority	Total Funding Required			Indicative Sources of Funding						Funding gap
	2028 – 2029	2030–2032	Total	National government	Counties	EPR	Private	DFI and donor	Total Funding Available	
Cross-cutting priorities (CC-1 to CC-8)	2,723	4,189	6,912	1,940	478	520	143	2,348	5,429	1,483
Agriculture and food systems (ORG)	560	12,810	13,370	297	510	0	4,196	4,376	9,379	3,991
Plastics and packaging (PLA)	207	10,328	10,535	284	1,334	1,855	786	2,694	6,953	3,582
E-waste (EEE)	328	1,617	1,945	188	0	321	477	469	1,455	490
Textiles (TEX)	307	678	985	125	16	91	226	292	750	235
Mining, quarrying and construction (CON)	320	430	750	195	39	0	157	203	594	156
Coordination, MEL and Secretariat	400	600	1,000	510	0	0	0	340	850	150
Total	4,845	30,652	35,497	3,539	2,377	2,787	5,985	10,722	25,410	10,087

Long-term investments that deliver beyond 2032 are shown for their in-period preparation costs only, with indicative full costs noted separately.

Costing assumptions and sources

Costs are indicative, order-of-magnitude estimates. Following the GESIP 2016–2030 approach, each strategy line is costed at a high level, with detailed sectoral costing left to the MTEF process. The estimates rest on six assumptions.

- **Price base.** All costs are at constant 2026 prices and an exchange rate of USD 1 = KES 130. Activity costs are shown in KES million and intervention totals in KES billion.
- **Unit costs.** Each activity is built up from quantities and unit costs drawn from Kenyan programme benchmarks and the international sources listed below, as cited against each activity in Tables A2 and A3.
- **No double counting.** An activity that appears in more than one intervention, including a sector activity that duplicates a cross-cutting one, is costed once, at the higher estimate, and cross-referenced in Tables A2 and A3. On this basis the national awareness campaign under CC-7 (iii) is carried in the communication and awareness line. The CC-3 (i) first-loss tranche is shown at its catalytic value only, because the senior debt it leverages finances capital investments already costed under the sector interventions.
- **Exclusions.** Spending that is redirected rather than new, and revenues, are not counted as cost. This covers purchases redirected through green procurement, subsidy volume reallocated within the National Fertilizer Subsidy Programme, tax expenditure under CC-3 (ii), and revenues such as EPR fees, carbon credits and power sales. These are reported separately.
- **Programme management.** Coordination, MEL and Secretariat costs are estimated separately from activity costs: about KES 120 million a year for the Secretariat, KES 150 million for MEL and evaluations, and KES 250 million for communication and awareness.
- **Funding sources.** Source shares are indicative and follow the funding lines in Tables A2 and A3. No funding is yet confirmed, so all source columns remain prospective until the Secretariat and National Treasury record commitments. The funding gap is the share of each activity for which no financier has yet been identified, taken as 10–35 per cent depending on activity type. The cross-cutting row reflects the KES 6.91 billion costed in Table A2 for CC-1 to CC-8; its source split applies the shares used in the previous estimate and is to be confirmed by the Secretariat and National Treasury.

Annex B Results Framework and Baseline Data Register

This annex sets out how progress under CESIP is measured. Section B1 defines the sector, cross-cutting and gender and youth indicators that sit beneath the headline targets in Section 4.1. Section B2 is the baseline data register for the headline figures used in the strategy.

B1 Indicators

Each indicator states its definition, baseline, 2030 milestone and 2032 target, class, source and reporting frequency, and lead. The Class column gives the target grade (confirmed, provisional or developmental) defined in Section 8.2; the evidence class of each baseline figure is recorded separately in Table B2. Definitions with a numerator and denominator are to be completed by the lead institution before final validation, using the format of the first rows as a model. The codes are those cited in the Linked indicator column of Annex A.

Table B1 Sector, cross-cutting, gender and youth indicators

Code	Indicator and definition	Baseline	2030 milestone	2032 target	Class	Source and frequency	Lead
Agriculture and food systems							
B-ORG-1	Share of National Fertilizer Subsidy Programme volume from certified organic sources (certified organic tonnes redeemed divided by total subsidised tonnes)	0% (currently excluded)	10% of subsidy volume (indicative)	Up to 25% of subsidy volume	Provisional	MoALD and NCPB redemption records, annual	MoALD
B-ORG-2	Circular ingredient share (insect meal and permitted circular ingredients) in registered feed formulations	To be established at specification issue	Baseline set by Q4 2028	At least 10% of registered feed formulations include circular ingredients (indicative)	Developmental	KEBS and feed manufacturers' registry, annual	KEBS
B-ORG-3	Post-harvest loss rate at Warehouse Receipt System-certified aggregation points	Current county-level loss rate (pre-certification)	15% below the pre-certification rate (indicative)	30% below the pre-certification rate (indicative)	Provisional	AFA and county agriculture reports, annual	WRS Council
B-ORG-4	Livestock by-products (hides, blood, offal, paunch) diverted to rendering or value recovery at hub sites	To be established at hub commissioning	Hubs commissioned; at least 25% of by-products at	At least 50% of by-products at hub sites diverted to	Developmental	Leather Development Council and	MoALD

Code	Indicator and definition	Baseline	2030 milestone	2032 target	Class	Source and frequency	Lead
			hub sites diverted (indicative)	value recovery (indicative)		abattoir records, annual	
B-ORG-5	Crop residue upgraded to feed and bagasse power exported to the grid (tonnes; GWh)	To be established through the 2028 baseline studies (CC-6 (ii))	First regional residue hub operating (indicative)	Tonnes upgraded and GWh exported at least 20% above the 2028 baseline (indicative)	Developmental	MoALD, EPRA, annual	MoALD and Ministry of Energy
B-ORG-6	Fisheries and other by-products traded under the traceability protocol (tonnes, by species)	0	Protocol in force	At least three species value chains trading under the protocol (indicative)	Developmental	Kenya Fisheries Service, annual	Kenya Fisheries Service
B-ORG-7	Share of households and markets in pilot counties practising source segregation of organic waste; and tonnes of organic waste diverted from dumpsites through registered community collection points	Baseline set through 2028 surveys and digital collection platforms	15% of households and markets in pilot counties (indicative)	30% of households and markets in pilot counties (indicative)	Developmental	County solid waste accounts and digital collection platforms, quarterly	County governments
Plastics and packaging							
B-PLA-1	National plastics recycling rate (tonnes recycled divided by tonnes generated)	About 9% (Table B2)	20%	30% (headline target H8)	Provisional	NEMA and KNBS annual waste account, annual	NEMA

Code	Indicator and definition	Baseline	2030 milestone	2032 target	Class	Source and frequency	Lead
B-PLA-2	Average recycled content in plastic packaging placed on the market	To be established at KS gazettment	Statutory 30% minimum met	Rising on published schedule	Provisional	KEBS certification records; producer and PRO declarations, annual	KEBS
B-PLA-3	Share of waste directed to controlled disposal (regional recovery network)	27% to dumpsites (NPAP scenario)	Dumpsite share below 22% (indicative)	Dumpsite share falling towards 9% by 2040 (long-term)	Provisional	NEMA regional hub reporting; county waste accounts, annual	NEMA
B-PLA-4	Reclaimers and CBOs registered, equipped and holding supply contracts	Largely informal, undocumented	At least 30% of reclaimers and CBOs in hub regions (indicative)	At least 60% in hub regions, with national roll-out under way (indicative)	Developmental	County registers; hub operator records; PRO records, quarterly	County governments
B-PLA-5	Plastic intercepted before reaching water and fishing gear recovered (tonnes)	To be established through the 2028 baseline studies (CC-6 (ii))	7,000 tonnes a year (indicative, consistent with H13)	12,000 tonnes a year (indicative, consistent with H13)	Developmental	County and NEMA interception records, annual	County governments
B-PLA-6	Hard-to-recycle and hazardous streams under an assigned governing regime with a cost-reflective fee	0 of 4 streams	4 of 4 streams assigned by 2029	Take-back operating for hazardous packaging	Confirmed	NEMA gazette notices, annual	NEMA
B-PLA-7	Packaging PROs reporting audited fee income and expenditure through the national portal, with no double-counted tonnage	0	All licensed packaging PROs	All licensed packaging PROs	Confirmed	NEMA, annual	NEMA
E-waste							

Code	Indicator and definition	Baseline	2030 milestone	2032 target	Class	Source and frequency	Lead
B-EEE-1	Share of EEE entering the market meeting repairability and EPR-registration conditions	0% (no criteria in force)	Amendment in force	At least 50% of EEE placed on the market (indicative)	Developmental	Communications Authority and NEMA, annual	Communications Authority
B-EEE-2	Domestic processing share of commercially viable e-waste fractions; and formal e-waste recycling rate (tonnes formally recycled divided by tonnes generated)	To be established via national recovery roadmap assessment; under 5% formally recycled (Table B2)	Formal recycling rate of 15% (headline target H9); domestic processing share set by the recovery roadmap	Formal recycling rate of 25% (headline target H9)	Provisional	NEMA and licensed e-waste PROs, annual	NEMA
B-EEE-3	Certified repair and refurbishment technicians	0 (no certification pathway)	Pathway operating	About 3,000 certified technicians (EEE-2)	Developmental	TVET institutions and KEBS registry, annual	KEBS
B-EEE-4	Active, signed retailer, distributor and institutional take-back points; and informal dismantlers registered and linked to licensed recyclers	Existing points, largely unsigned and underused	Piloted in Nairobi, Mombasa and Kisumu	About 300 active take-back points (EEE-3), scaled nationally	Developmental	Licensed e-waste PROs, quarterly	Licensed e-waste PROs
Textiles							
B-TEX-1	Volume of end-of-life textiles processed through the formal sorting and aggregation hub	0 (no formal infrastructure)	Hub commissioned and operating by 2031	At least 20,000 tonnes a year (indicative)	Developmental	MCAK and hub operating records, quarterly	MCAK

Code	Indicator and definition	Baseline	2030 milestone	2032 target	Class	Source and frequency	Lead
B-TEX-2	Share of textile PRO (EPR) fee revenue transparently disbursed to collection and recycling	Not currently transparently channelled	Full auditable disbursement from 2028	Full auditable disbursement	Confirmed	NEMA and MCAK audit reports, annual	NEMA
B-TEX-3	Share of textiles sold in Kenya meeting KEBS grading and natural-fibre content standards	0% (no standard in force)	Standards in force	At least 30% of textiles sold (indicative)	Developmental	KEBS market surveillance, annual	KEBS
B-TEX-4	Share of hub jobs held by formerly informal sorters and waste pickers; and change in income of informal sorters and traders linked to the hub	0	Minimum share and job target set in the feasibility study (2029)	At least 50% of hub jobs held by formerly informal workers, with incomes above the 2028 baseline (indicative)	Developmental	MCAK and county labour records; hub operator records; income survey, annual	Hub operator
B-TEX-5	Export manufacturers with digital product passport readiness and completed buyer-anchored ecodesign pilots	0	10 export manufacturers passport-ready; 3 ecodesign pilots completed (indicative)	40 export manufacturers passport-ready; 10 ecodesign pilots completed (indicative)	Developmental	State Department for Industrialization, annual	State Department for Industrialization
Mining, quarrying and construction							
B-CON-1	Construction and demolition waste recovery rate (headline target H10)	Current rate (undocumented)	Baseline verified (CC-6 (ii))	20% by 2032, aligned to the NCA C&D Waste	Developmental	NCA and CESIP Secretariat, annual	NCA

Code	Indicator and definition	Baseline	2030 milestone	2032 target	Class	Source and frequency	Lead
				Management Strategy			
B-CON-2	Recycled concrete aggregate produced by the flagship Nairobi facility	0 (no operating facility)	Commercial-scale output from 2029	At least 100,000 tonnes a year, subject to the feasibility study (indicative)	Developmental	NCA facility records, quarterly	NCA
B-CON-3	Government construction tenders and the affordable-housing programme meeting minimum recycled-content requirements	0% (no requirement in force)	10% (indicative)	Phased to 20% by 2032	Provisional	NCA and State Department for Housing, annual	NCA
B-CON-4	Design-for-Disassembly assessments completed for government-funded projects above KES 100 million	0	Mandated assessments completed from 2029	All qualifying projects	Confirmed	NCA, annual	NCA
B-CON-5	Circular mining approach introduced (yes or no); and volume of metals and materials recovered from mining side streams as a share of total extraction	Not introduced; no data	Approach introduced	At least 5% of extraction volume recovered from side streams (indicative)	Developmental	State Department for Mining, annual	Ministry of Mining
Cross-cutting							
B-DAT-1	Priority sectors with completed baseline characterisation studies, and a published baseline register	0 of 5	5 of 5 by end of 2028	Annual update	Confirmed	KNBS and CESIP Secretariat, annual	KNBS
B-DAT-2	National reporting portal operational with PRO, county, customs and informal-sector data layers	Not operational	Operational	All layers reporting	Confirmed	NEMA, annual	NEMA

Code	Indicator and definition	Baseline	2030 milestone	2032 target	Class	Source and frequency	Lead
B-INF-1	Informal workers registered with formal supply or employment contracts, tracked by county, gender and youth status	To be established via 2028 socio-economic mapping	7,500 workers (indicative)	15,000 workers, aligned with CC-5 certification (indicative)	Developmental	County labour and social-services departments, annual	County governments
B-INF-2	Informal workers receiving protective equipment and baseline occupational health screening	0	7,500 workers (indicative)	15,000 workers (indicative)	Developmental	County health departments, annual	County governments
B-EPR-1	EPR consultative review completed, interim compliance framework in place and dated implementation sequence published	Not in place	Completed by 2029	Implemented	Confirmed	MoECCF and NEMA, annual	MoECCF
B-EPR-2	Licensed PROs operating under the common rulebook and eco-modulated fee methodology	0	All licensed PROs	All licensed PROs	Confirmed	NEMA, annual	NEMA
B-EPR-3	Share of PRO collection volumes procured from registered waste pickers, cooperatives and CBOs at published minimum prices, paid against verified tonnage	To be established through the 2028 baseline studies (CC-6 (ii))	20% of PRO collection volumes (indicative)	40% of PRO collection volumes (indicative)	Developmental	PRO audited reports, annual	NEMA
B-FIN-1	Finance mobilised through the national finance facility, by window, and leverage of private capital per unit of public or concessional capital	0	USD 50 million mobilised; leverage of at least 3:1 (indicative)	USD 100–125 million mobilised; leverage of at least 4:1 (CC-3 (i))	Developmental	Facility reports, annual	National Treasury
B-FIN-2	Fiscal incentives in force and businesses using them	To be established through the 2028	At least two incentives in	At least 200 businesses	Developmental	National Treasury and KRA, annual	National Treasury

Code	Indicator and definition	Baseline	2030 milestone	2032 target	Class	Source and frequency	Lead
		baseline studies (CC-6 (ii))	force (indicative)	using incentives (indicative)			
B-CAP-1	Circular modules embedded in extension, professional and county curricula; research network operating	0	Modules embedded by 2030	Network operating	Confirmed	Sector lead institutions, annual	MoECCF
B-CAP-2	County officials trained to enforce segregation, e-waste and C&D requirements	To be established through the 2028 baseline studies (CC-6 (ii))	Enforcement officers trained in all ten pilot counties (indicative)	Enforcement officers trained in all 47 counties (indicative)	Developmental	Council of Governors, annual	Council of Governors
B-SYM-1	Industrial symbiosis exchanges established and tonnes exchanged	0	At least 5 exchanges (indicative)	At least 15 exchanges, with tonnes reported annually (indicative)	Developmental	State Department for Industrialization, annual	State Department for Industrialization
B-CTY-1	Circular economy indicators integrated into KNBS annual statistical reporting; counties on the harmonised licensing and fee schedule (Section 8.3)	Not integrated	Integrated by 2030	Maintained	Confirmed	KNBS; Council of Governors, annual	KNBS
Gender and youth							
B-GEN-1 to 5	Share of PRO collection contracts held by women-led cooperatives; women beneficiaries and change in income; women's representation in cooperative and TWG governance; share of finance facility disbursements to women-led enterprises; share of facilities meeting safety and siting requirements	Baseline from 2028 mapping	At least 20% of PRO collection contracts with women-led cooperatives; at least 30% women in cooperative	At least 30% of contracts; at least 40% women in governance; other measures set after 2028	Developmental	MEL disaggregated reporting, annual	MoECCF

Code	Indicator and definition	Baseline	2030 milestone	2032 target	Class	Source and frequency	Lead
			and TWG governance (indicative)	mapping (indicative)			
B-YTH-1 to 5	Youth-led enterprises supported; technicians certified; finance mobilised through the youth window; jobs created; innovations commercialised	Baseline from 2028 mapping	At least 100 youth-led enterprises supported (indicative)	At least 200 youth-led enterprises supported, within the CC-8 target of 500 enterprises; other measures set after 2028 mapping (indicative)	Developmental	MEL disaggregated reporting, annual	MoECCF

B2 Baseline data register

Table B2 records the headline figures used in CESIP, so that figures with different denominators, years or methods are not treated as comparable, and so that each provisional figure has a date and an owner for its validation (CC-7 (ii)). Each figure is classed in one of five evidence categories.

- **Verified.** Official statistics or audited records.
- **Modelled.** Outputs of a model or scenario, such as FRAMES or NPAP scenarios.
- **Estimated.** Published estimates from studies or secondary sources.
- **Stakeholder-reported.** Figures reported by an organisation in consultation and not independently verified.
- **To be validated.** Figures flagged for confirmation before publication.

The classification is a first assessment by the drafting team and is to be confirmed by KNBS and the lead institutions.

Table B2 Baseline data register (first assessment)

Figure	Value	Source	Year	Unit and scope	Class	Owner	Indicative validation date
Municipal solid waste generated	8 to 8.8 million tonnes a year	NEMA (press); ANDE	2024–2025	Tonnes, national	Estimated	NEMA	2028 (CC-7 (i))
Waste properly managed	About 25% (over 75% mismanaged)	NEMA	2025	Share of generation, national	Estimated	NEMA	2028 (CC-7 (i))
Daily waste generation	22,000 to 24,000 tonnes	NEMA Ecoflash	2025	Tonnes a day, national	Estimated	NEMA	2028 (CC-7 (i))
Plastic waste generated	About 680,000 tonnes; about 37% collected	NPAP national baseline	2024	Tonnes, national	Modelled (preliminary)	NPAP and NEMA	2028 (CC-7 (i))
Plastics recycling rate	About 9% (regulator estimates 2 to 8%)	NPAP; NEMA	2024	Share of generation	Estimated	NEMA	2029–2030 (CC-7 (iii))
Plastic leakage to waterways	About 37,000 tonnes a year	NPAP; IUCN hotspotting	2018–2024	Tonnes a year	Modelled	NEMA	2028 (CC-7 (i))
Food loss and waste	About 10 million tonnes, about 40% of production, worth KES 72 billion	FAO; WRI Africa	2024–2025	Tonnes; share of production	Estimated	MoALD	2029–2031 (CC-7 (iv))
Crop and agro-processing residue available	5 to 24 million tonnes	Scientific Reports	2026	Tonnes a year	Estimated (wide range)	MoALD and KALRO	2029–2031 (CC-7 (iv))
Generators not segregating at source	About 95%	Sector consultations	2026	Share of generators	Stakeholder-reported	Counties	2029–2030 (CC-7 (iii))
E-waste generated	55,956 tonnes (48,461 in 2020)	KNBS Economic Survey	2025	Tonnes, national	Verified	KNBS	Validated (KNBS Economic Survey 2025)

Figure	Value	Source	Year	Unit and scope	Class	Owner	Indicative validation date
E-waste formally recycled	Under 5%; over 90% informal	KNBS; sector consultations	2025	Share of generation	Estimated	NEMA	2029–2030 (CC-7 (v))
Second-hand clothing imports	About 220,000 tonnes	MCAK	2024	Tonnes imported	Stakeholder-reported	KNBS and KRA	2029–2030 (CC-7 (iii))
Unsellable share of clothing imports	2% (MCAK) to 20 to 50% (independent research)	MCAK; Mulwa 2025	2025–2026	Share of imports	To be validated (CC-7 (vi))	NEMA and KNBS	2028 (CC-7 (vi))
C&D waste share of urban waste	About 40%	NCA C&D Strategy	2026	Share of urban waste	To be validated (CC-7 (vii))	NCA and NEMA	2028–2029 (CC-7 (vii))
Green jobs from the transition	Upwards of 46,000	ANDE	2023	Jobs	Estimated	KNBS	2028–2029 (CC-8 (iii))
Waste-picker association membership	More than 46,000 members in 47 counties	KeNaWPWA	2026	Members	Stakeholder-reported	KeNaWPWA and counties	2028–2029 (CC-6 (i))
Economic opportunity	Over USD 700 million; about 0.5% of GDP by 2030	NEMA FRAMES assessment	[Base year]	[Annual or cumulative; revenue or value added]	Modelled	NEMA	2028 (CC-7 (ii))

Annex C Policy and Regulatory Mapping

This annex maps the policy, legal and regulatory instruments reviewed for CESIP. It replaces the illustrative rows in Draft 1 with the full set of instruments formerly listed in Table 7, extended with the competent authority and the link to CESIP. Before publication, every entry is to be completed with its exact title, year, legal status and official source, and the relevant provision, and any contested provision reviewed against the latest official legal record. Licensed PROs are invited to verify the entries relevant to EPR and packaging.

Table C1 Policy and regulatory instruments reviewed

Ref	Scope	Instrument	Status	Competent authority	Relevance to circularity	CESIP link	Official source
POL-01	Cross-cutting	Constitution of Kenya, 2010 (Fourth Schedule; Art. 42)	In force	National and county governments	Devolves solid waste management to the 47 counties; right to a clean and healthy environment	Section 6.3	[Kenya Law reference]
POL-02	Cross-cutting	Environmental Management and Coordination Act (EMCA), 1999 (amended)	In force	NEMA	Parent environmental statute; NEMA licensing, assessment and enforcement powers; not drafted with circularity in mind	CC-4, CC-8 (ii)	[Cap. 387, latest revision]
POL-03	Cross-cutting	Sustainable Waste Management Act, 2022	In force	MoECCF, NEMA, Waste Management Council, counties	Waste hierarchy as guiding principle; national waste information system; Waste Management Council with target-setting mandate; county MRF duty	CC-4 (v), CC-6, Section 6.1	[Cap. 387C]
POL-04	Cross-cutting	EPR Regulations (LN 176/2024); Plastic Packaging Materials Regulations (LN 181/2024); Waste Management Regulations (LN 178/2024)	In force; EPR enforcement suspended by conservatory order, litigation pending	NEMA	Producer-pays framework, recycled-content requirement, segregation and licensing rules	CC-4, CC-5, PLA-1	[Legal Notices and case references to be confirmed]
POL-05	Cross-cutting	National Sustainable Waste Management Policy, 2021	In force	MoECCF	Macro-level direction on circular economy goals, zero waste and segregation; sets a 40% quota for organic fertiliser in national and county fertiliser subsidy	ORG-1 (iii)	[Policy text reference]

Ref	Scope	Instrument	Status	Competent authority	Relevance to circularity	CESIP link	Official source
					programmes (s. 3.1.5), not yet operationalised		
POL-06	Cross-cutting	Public Procurement and Asset Disposal Act, 2015	In force	National Treasury, PPRA	Governs all public purchasing; contains no circularity or recycled-content criteria	CC-2	[Reference]
POL-07	Cross-cutting	Vision 2030; BETA; Fourth Medium-Term Plan (2023 to 2027); Second NDC (2025); GESIP (2016 to 2030)	In force	National Treasury and Economic Planning; MoECCF	Highest-order mandate anchoring circularity to industrialisation, jobs and climate commitments	Section 2.3	[References]
POL-08	Plastics	Plastic carrier bag prohibition (2017); single-use plastics ban in protected areas (2020)	In force	NEMA	Demonstrate that clear, targeted restrictions can be implemented and enforced	PLA-1 (ii)	Gazette Notice No. 2356 of 28 February 2017
POL-09	Plastics	Kenya Plastics Pact Roadmap to 2030 and Target 1 priority list	Voluntary	Kenya Plastics Pact	Endorsed elimination list and design guidance; candidate for conversion to mandatory standard	PLA-1	[Reference]
POL-10	Plastics	Draft Model County Waste Management Bill (2025); JICA MRF guideline; toxic-chemicals-in-plastics standards process	Draft / in progress	Council of Governors; NEMA; KEBS	County segregation, licensing and waste funds; facility standards; design and safety standards vehicle	PLA-3, CC-4 (v)	[Reference]
POL-11	Agriculture	ASTGS 2019 to 2029; Climate Smart Agriculture Strategy 2017 to 2026; AFA Act; Post-Harvest Management Strategy 2024 to 2028	In force	MoALD; AFA	Control sector budgets and delivery; focus on post-harvest loss without circularity clauses or targets	ORG-3, ORG-5	[References]

Ref	Scope	Instrument	Status	Competent authority	Relevance to circularity	CESIP link	Official source
POL-12	Agriculture	KS 2290 Organic Fertilizer Specification; PCPB certification; Meat Control (Local Slaughterhouses) Regulations; Warehouse Receipt Systems Act, 2019; fertiliser subsidy schedule	In force; KS 2290 under revision (TC 009)	KEBS; PCPB; MoALD; WRS Council	The technical layer that decides circular outcomes, namely product grading, certification cost, structured aggregation and subsidy access	ORG-1, ORG-2, ORG-3, ORG-4	[References]
POL-13	Textiles	National Cotton, Textile and Apparel Policy (2024); National Industrialization Policy (2012)	CTA submitted to Cabinet (mid-2026); 2012 policy under full revision	State Department for Industrialization	Strongest strategic anchoring; frames green standards as competitive differentiator; no enforceable obligations	TEX-2 (i), TEX-5	[References]
POL-14	Textiles	EPZ Act (2012); Used Textiles and Footwear Protocol (2020); Micro and Small Enterprises Act (2012); KRA tariff schedule	In force	EPZA; KEBS; MSEA; KRA	20% domestic-sales ceiling blocks EPZ waste linkage; hygiene-only import control; formalisation channel; 35% duty on recycling machinery	TEX quick wins, CC-3 (ii)	[References]
POL-15	E-waste	Type Approval Regulations (2026); Draft E-Waste Regulations (2025); county instruments (Machakos only)	In force / draft	Communications Authority; NEMA; counties	Market-entry gate with no circularity content; draft regulations set no quantified targets; county tier near absent	EEE-1	[References]
POL-16	Mining, quarrying and construction	Mining Act (2016); NCA Act and Regulations (2014); National Building Code (2024); NCA C&D Waste Management Strategy (2026); PPP Act (2021); KGBS Green Building Guidelines; Road Design Manual (2025 revision)	In force; Code circularity provisions voluntary; KGBS guidelines voluntary	Ministry of Mining; NCA; PPP Directorate; Roads Directorate	Closure plans and bonds treat waste as liability; performance-based Code permits recycled materials; recycled asphalt provisions are the de facto benchmark	CON-1 to CON-4	[References]

Annex D Methodology and Stakeholder Consultation

D1 Development process

CESIP development ran through four phases. **Situational analysis** built the evidence baseline through a three-tier policy review (global, national and county), sector value chain and material flow diagnostics, and stakeholder mapping that captured informal actors, women-led enterprises and county institutions alongside national organisations. **Stakeholder engagement** brought stakeholders in as co-creators rather than reviewers through 30 key informant interviews and seven thematic focus group discussions with more than 110 stakeholders, supplemented by parallel public consultation. **Validation** took the first draft to the National Steering Committee in September 2026 and takes Draft 2 to a national validation workshop and county public participation sessions in October 2026. Governance activation follows adoption, with 2027 as a preparatory year.

The final diagnostic documents the selection criteria for the five priority sectors, consultation coverage by county and actor group, data years and methods, material flow assumptions, uncertainty ranges, and how stakeholder inputs altered the proposed interventions, so that prioritisation and the evidentiary basis are reproducible where national data are incomplete.

Stakeholders were identified through a three-step process. First, the stakeholder universe was defined around the five priority sectors and the cross-cutting dimensions of governance, finance and civil society. Second, the organisations and institutions within each category were identified through desk research, consultation with the Ministry of Environment, Climate Change and Forestry and a review of existing stakeholder databases. Third, a prioritisation exercise determined which stakeholders required the most intensive engagement and which could be reached through broader awareness activities.

Stakeholder categories

The stakeholder universe was organised into six categories, set out in Table D1 with examples of the institutions and groups engaged in each.

Table D1 Stakeholder categories

Category	Description	Examples of institutions and groups engaged
National government	Ministries and agencies with regulatory, fiscal or policy mandates relevant to the circular economy	Ministry of Environment, Climate Change and Forestry; NEMA; State Departments for Industrialization, Agriculture and Public Works; Kenya Bureau of Standards; National Construction Authority; Export Processing Zones Authority; Public Procurement Regulatory Authority; Agriculture and Food Authority
County governments	County executive and legislative bodies responsible for devolved functions, including waste management, land use and local licensing	Council of Governors; county environment and trade officers, including Meru County; county officials in Kisumu, Nakuru, Mombasa and Eldoret through the public consultations
Private sector	Businesses operating across the five priority value chains at formal and informal levels	KEPSA; Kenya Association of Manufacturers; producer responsibility organisations (KEPRO, PAKPRO, EPROK, HAPROK, MCAK); recyclers, manufacturers, retailers and SMEs in each priority sector

Category	Description	Examples of institutions and groups engaged
Development partners and DFIs	International organisations, bilateral partners and development finance institutions supporting Kenya's sustainability agenda	UNEP; UNIDO; JICA; GIZ; UN FAO; African Development Bank; Africa Enterprise Challenge Fund; Sitra; Denmark
Civil society and academia	NGOs, community organisations, research institutions and universities with relevant mandates or expertise	University of Nairobi; Moi University; World Resources Institute; VSO Kenya; PELUM Kenya; CEJAD; Habitat for Humanity; women's and youth organisations
Communities and informal sector	Waste pickers, jua kali recyclers, smallholder farmers and community groups directly affected by the circular economy transition	KeNaWPWA; Kenya Association of Waste Recyclers; waste picker and aggregator groups; community-based organisations; women's groups such as Waste Ladies; producer associations representing smallholders

Stakeholder prioritisation

Stakeholders were then mapped on two dimensions: the degree to which they are affected by the priorities of the CESIP, and their capacity to influence its development and implementation. The resulting four quadrants set the intensity and type of engagement for each group, and each quadrant was matched to the engagement activities described:

Table D2 Stakeholder prioritisation matrix

High Influence / High Impact Engage Intensively	Low Influence / High Impact Consult and Support
Ministry of Environment and other lead ministries NEMA and key regulatory agencies KEPSA and Kenya Association of Manufacturers Major private sector players in priority sectors Key development partners (GIZ, UNEP, World Bank)	Informal waste sector (waste pickers, jua kali recyclers) Smallholder farmers in agri-waste value chains Community-based organisations Women's and youth groups in affected sectors County-level communities near waste hotspots
High Influence / Low Impact Keep Informed and Involved	Low Influence / Low Impact Maintain Awareness
National Treasury and Budget Office Competition Authority of Kenya Academic and research institutions Media organisations	General public International advocacy organisations Students and youth networks Professional associations

Table D3 Stakeholder groups engaged through focus group discussions

Focus group	Stakeholder groups engaged
Plastics and Packaging	Producer responsibility organisations (KEPRO, PAKPRO); recyclers and aggregators; waste handler and waste picker groups; retailers; community-based organisations; KEPSA

Focus group	Stakeholder groups engaged
Agriculture and Food Systems	Agribusinesses and agri-processors; organic waste and insect-protein enterprises; producer associations, including coffee and sugar; PELUM Kenya; UN FAO; World Resources Institute
Textiles and Apparel	Textile manufacturers; garment producers and the Garment Makers Association; textile collectors; Kenya Association of Manufacturers; Kenya Bureau of Standards; Agriculture and Food Authority (Fibre Crops Directorate); training and research institutions
Electrical and Electronic Equipment	E-waste recyclers, collectors and the producer responsibility organisation (EPROK); battery and e-mobility companies; Kenya Association of Manufacturers; Kenya Renewable Energy Association; UNEP
Mining, Quarrying and Construction	National Construction Authority; Kenya Bureau of Standards; State Department for Public Works; Architectural Association of Kenya; UNEP; Habitat for Humanity; building performance and advisory organisations
Informal Workers (cross-cutting)	Waste picker groups, informal recyclers and aggregators, community clean-up groups and women-led waste enterprises
Finance and Investments (cross-cutting)	Development finance institutions, commercial banks, impact investors, enterprise support programmes, development partners and the Public Procurement Regulatory Authority

D2 Prioritisation criteria

Table D4 Criteria used to prioritise interventions

Criterion	What it assesses	Scale
Environmental impact	Reduction in waste, leakage, emissions and virgin material use, favouring higher R strategies	1-5
Economic value	Value retained or created, import substitution and investment attracted	1-5
Job potential	Jobs created or improved, including formalised informal work, women and youth	1-5
Feasibility and readiness	Technical, institutional and market readiness, and existing platforms to build on	1-5
Investment potential	Bankability and fit with available financing	1-5
Policy leverage	Whether the intervention unlocks others, such as a standard or data baseline	1-5
Inclusion	Effect on livelihoods of informal workers, women, youth and smallholders	1-5

Priority score bands: essential, aspirational, desirable or deferred

D3 Consultation coverage

Table D5 Consultation coverage by stakeholder category, sector and geography

Category	Number consulted	Counties represented
National government ministries and agencies	11	47
County governments and Council of Governors	6	6
Private sector, industry associations and PROs	45	6
Informal sector associations and cooperatives	15	7
Civil society, research and academia	17	1
Development partners and financiers	19	1

D4 Stakeholders consulted

Table D6 Key informant interviews conducted

Sector	Total	Stakeholders
Plastics and Packaging	6	Kenya Extended Producer Responsibility Organization (KEPRO); Packaging Producer Responsibility Organization (PAKPRO); United Nations Environment Programme (UNEP); Mr. Green Africa; JICA; Woolworths Home
Agriculture and Food Systems	3	The Export Processing Zones Authority (Agriculture); Camino Ruiz; State Department of Agriculture
E-waste and Electronics	3	Electronic-Waste Producer Responsibility Organization of Kenya (EPROK); WEEE Centre; Enviroserve Kenya
Textile, Apparel and Fashion	3	Mitumba Consortium Association of Kenya (MCAK); Africa Collect Textile; The Export Processing Zones Authority (EPZA)
Mining, Quarrying and Construction	5	Kenya Green Building Society (KGBS); Gjenge Makers; National Construction Authority; Materials Testing and Research Directorate; The Institution of Engineers of Kenya
Cross-cutting	9	State Department for Industrialization; Hazardous Waste Producer Responsibility Organization of Kenya (HAPROK); Council of Governors; The Danish Refugee Council; UNIDO; KeNaWPWA; Kenya Bankers Association; Kenya Association of Manufacturers; Kenya Bureau of Standards (KEBS)

Table D7 Focus group discussion participants

Sector	Participants
Plastics and Packaging	A.P.I.C; AAK-GROW; Action for Progress in Communities; Bandiirika; Baus Taka; CEJAD; CEC/CCO (Meru); Ecobop Solutions; Environmental A.A. (Noru); KAKIR; KEPSA; KEPRO; KWWP-KA; Kisii Industries Ltd; Nairobi Circular Economy Association (NACEA); PAKPRO; Quickmart; Roysambu Waste Handlers and Aggregators; SDECC; SHALOT; T3; Takataka Ni Mali; Two Pearls Bin; VSO Kenya; WOT Kenya; ZAP/NACEA; Zindua Afrika
Agriculture and Food Systems	Agribusiness for African Markets; AgriVentures Insights; Agriculture Sector Network; Ecodudu; Ecoloop Solutions Africa; Kenya Coffee Producers Association (KCPA); PELUM Kenya; Rio Fish Ltd; Safi Organics; Somo Africa Trust; Sugar Campaign for Change (SUCAM); UN FAO; World Resources Institute
E-waste and Electronics	BasiGo; Bopinc; Chloride Exide; EPROK; Enviroserve; KAM; KPMG; KEREa; MICDE; UNEP; URACO Africa; WEEE Centre
Textile, Apparel and Fashion	Kenya Bureau of Standards; Moi University; Tosheka Textiles; Delight Technical College; Afrowema Textiles; Kenya Association of Manufacturers; Garment Makers Association; Agriculture and Food Authority (Fibre Crops Directorate); Africa Collect Textiles; Edukans Kenya; State Department for Industry
Mining, Quarrying and Construction	National Construction Authority; Kenya Bureau of Standards; Architectural Association of Kenya; UNEP SPP; UNEP Mining Industry and Economy; Habitat for Humanity; Global Buildings Performance Network; Mwavino Advisory; State Department for Public Works
Informal Sector	Tranbiz Enterprises; Kibali Industries Ltd.; Kenya Association of Waste Recyclers; Binzplatter Ltd.; Slums Going Green and Clean; Langata Upendo; Waste Ladies; Ubuntu Group; Leliglo Agency
Finance and Investments	Africa Enterprise Challenge Fund (AECF); African Development Bank (AfDB); Alpha Mundi Foundation; ANDE; Equity Bank Kenya; GFS East Africa; GIZ Kenya; GSMA; KCV; Kua Ventures; Micro Enterprises Support Programme Trust (MESPT); National Plastic Action Partnership Kenya; Public Procurement Regulatory Authority; Somo Africa Trust; Sustainable Africa; UNEP Environmental Technology Centre; UNEP Regional Office for Africa; UNEP Sustainable Public Procurement; Village Capital; VSO Kenya

Annex E Communication Channels and Partnerships

This annex supports Chapter 7.

Table E1 Communication channel categories, examples and effectiveness by stakeholder group

Channel category	Examples	Effectiveness for the stakeholder groups
Broadcast media	Targeted advertising and talk-show segments on national television (NTV, KBC, Citizen TV, K24); community radio across roughly 150 stations in local languages	High for households and communities, and the only mass medium with meaningful rural reach for informal economy actors and smallholders; radio call-in formats also carry trusted intermediaries' voices. Low standalone effect on youth
Print and out-of-home	Newspaper features; posters and signage at markets, collection points and matatu stages; county notice boards; billboards on key corridors	Effective as a reminder medium at the point of behaviour for households and market actors; signage sustains norms after campaigns end. Weak for youth and limited persuasion value on its own
Digital and social media	TikTok, Instagram and YouTube creator content through the CE Creator Programme; WhatsApp and SMS county broadcasts; CESIP web and Knowledge Hub content	The primary channel for youth and learners and for media professionals; SMS and WhatsApp extend practical prompts to households and vendors at near-zero cost. Least effective for older rural audiences
Community and interpersonal	Champions Network (500 champions in 2028 scaling to 5,000); community health worker household visits; barazas; faith gatherings; market association meetings	The highest-conversion category for actual behaviour change among households, informal economy actors and communities, because it works through trusted intermediaries; slower and costlier per contact than mass media
Education and institutional	Circular economy content in the CBC at lower secondary (KICD); three TVET competency modules; school clubs and competitions; teacher training through KESI	Builds the long-term behaviour base among youth and learners and reaches households through reverse socialisation; equips county and public sector implementers with a shared curriculum. Effects are cumulative rather than immediate
Campaigns, events and certification	Annual national campaign on World Environment Day and International Zero Waste Day; county campaign weeks; Zero Waste Market and institutional certifications; media awards	Creates visibility peaks and news value across all five groups and gives county implementers a delivery calendar; certification badges convert campaign attention into standing, visible norms for market and institutional actors

Table E2 Partnerships for communication and awareness

Partnership	Role in communication and creating awareness
Media houses and the editors' guild	Carry national campaigns, sustain circular economy journalism through a media fellowship and guidelines, and amplify accountability reporting; host the annual media award

Partnership	Role in communication and creating awareness
Telecommunications providers	Zero-rated or low-cost SMS and WhatsApp campaign broadcasts; data-light access to the Knowledge Hub; reach into every county at marginal cost
Faith networks (NCCCK, interfaith structures)	Weekly access to large congregations through trusted moral voices; stewardship messaging and Zero Waste institution certification for places of worship
County governments and the Council of Governors	Localise national campaigns into county languages through CIDP communication budgets; run county campaign weeks; anchor CESIP focal points and enforcement-aligned messaging
Curriculum and training bodies (KICD, TVETA, KESI)	Embed circular economy content in the CBC and TVET modules; train teachers as standing communicators; run school clubs and competitions
Private sector associations (KEPSA, KAM, Kenya Plastics Pact, MCAK, sector PROs)	Co-brand campaigns, fund collection-point visibility, communicate take-back and EPR obligations to members, and carry the business forum and awards
Community structures (community health worker networks, cooperatives, market associations, nyumba kumi)	The interpersonal delivery backbone, through household visits, market-level campaigns, champions recruitment and norm-setting where behaviour actually happens
Civil society and consumer organisations	Independent watchdog voice that keeps campaigns honest; consumer education; representation of waste pickers and informal workers in campaign design
Development partners (EU CERC, JICA, UN-Habitat)	Co-finance campaign production and the Champions Network; contribute tested behaviour change methods and South-South exchange
Research and knowledge institutions (KIPPRA, universities, KNBS)	Evidence for message design; annual consumer behaviour surveys; the State of the Nation report that gives campaigns and media a standing news moment

Annex F Circular Business Models by Sector

This annex sets out, for each of the five priority sectors, the circular business models operating in Kenya, classified by both methodologies set out in Section 2.4: the EU categorisation of circular economy activities (EU category and sub-category) and the OECD business model typology. Each table lists the circular business models found in the sector with example enterprises. Sub-categories where no established model was identified are not shown; these are where the market is thinnest and where the interventions in Section 4.5 and the financing instruments in Chapter 5 can do most to stimulate new enterprises. All example enterprises listed are Kenyan or operate in Kenya. A summary of the business models in each sector is given in Section 3.3.

Table F1 Circular business models, agriculture and food systems (organic waste)

EU Category	Sub-categories as per EU definition	OECD business model	Circular Business Models (organic waste)	Example Enterprises
Circular Design & Production (Upstream)	Design of circular products & assets	Product life extension (durable design)	Durable, repairable and modular farm equipment; reusable multi-season hermetic storage	Futurepump (Kenya), KickStart International (Kenya), SunCulture (Kenya)
	Circular process technologies	Resource recovery	Biodigesters and on-farm biogas systems	Sistema.bio (Kenya)
	Circular materials (incl. bio-based)	Circular supply	Bio-based fertilisers and biochar	Safi Organics (Kenya), Takachar (Kenya)
	Substitution of substances of concern	Circular supply	Biological crop protection replacing synthetic pesticides	Dudutech (Kenya)
	Secondary raw material substitution	Circular supply	Insect protein replacing fishmeal and soy in animal feed	InsectiPro (Kenya), Sanergy (Kenya)
Circular Use (Midstream)	Reuse, repair, refurbish, remanufacture (movable assets)	Product life extension	Repair, refurbishment and rebuild of tractors, implements and irrigation equipment	Mascor (Kenya), FMD East Africa (Kenya), Jua Kali fabricators and repairers (Kenya)
	Product-as-a-Service / sharing models	Sharing (machinery hire); product-service systems (pay-as-you-go irrigation, Cooling-as-a-Service)	Tractor and machinery hire, pay-as-you-go solar irrigation, Cooling-as-a-Service	Hello Tractor (Kenya), SunCulture (Kenya), SokoFresh (Kenya), Agricultural Mechanisation Services stations (Kenya, public)
	Land rehabilitation / brownfield remediation	No direct OECD model	Regenerative agriculture, restoration of degraded land	Komaza (Kenya)

EU Category	Sub-categories as per EU definition	OECD business model	Circular Business Models (organic waste)	Example Enterprises
Circular Value Recovery (Downstream)	Separate collection & reverse logistics	Resource recovery	Organic waste collection from markets and food businesses	Taka Taka Solutions (Kenya)
	Material recovery & recycling	Resource recovery	Composting and organic fertiliser production	Taka Taka Solutions (Kenya), Ecodudu (Kenya)
	Biomass waste recovery & valorisation	Resource recovery	Briquettes and biogas from crop and agro-processing residues	Chardust (Kenya), Biojoule (Kenya)
	Wastewater reuse/recycling	Resource recovery	Faecal sludge and effluent to fuel and fertiliser	Sanivation (Kenya)
Circular Support	Enabling tools, services & advisory	Enabling platform (no OECD model)	Digital market linkages reducing post-harvest loss	Twiga Foods (Kenya)

Table F2 Circular business models, plastics and packaging

EU Category	Sub-categories as per EU definition	OECD business model	Circular Business Models (plastics/packaging)	Example Enterprises
Circular Design & Production (Upstream)	Design of circular products & assets	Resource recovery (design for recycling)	Mono-material products / recyclable products	SilAfrica (Kenya)
	Circular materials (incl. bio-based)	Circular supply	Alternate materials (bioplastics)	Ecobana (Kenya)
	Secondary raw material substitution	Circular supply	Alternate materials (PCR/PIR)	SilAfrica (Kenya)
Circular Use (Midstream)	Reuse, repair, refurbish, remanufacture (movable assets)	Product life extension	Refill models, returnable packaging systems	EcoTrace (Kenya), Purefresh (Kenya), SilAfrica (Kenya)
Circular Value Recovery (Downstream)	Separate collection & reverse logistics	Resource recovery	Aggregation & pre-processing	Taka Taka Solutions (Kenya), M-Taka (Kenya)
	Material recovery & recycling	Resource recovery	Recycling, product companies (non-packaging)	Universal Recycling Co. (Kenya), Mr. Green Africa (Kenya), Gjenje Makers (Kenya)

EU Category	Sub-categories as per EU definition	OECD business model	Circular Business Models (plastics/packaging)	Example Enterprises
Circular Support	Enabling tools, services & advisory	Enabling platform (no OECD model)	Waste marketplace	Kolekt App (Kenya)

Table F3 Circular business models, electrical and electronic equipment (e-waste)

EU Category	Sub-categories as per EU definition	OECD business model	Circular Business Models (e-waste)	Example Enterprises
Circular Use (Midstream)	Reuse, repair, refurbish, remanufacture (movable assets)	Product life extension	Refurbished phones and computers, repair services	Badili (Kenya), Computers for Schools Kenya
	Product-as-a-Service / sharing models	Product-service systems (pay-as-you-go, battery swapping)	Pay-as-you-go devices, battery swapping	M-KOPA (Kenya), Spiro (Kenya), Arc Ride (Kenya)
Circular Value Recovery (Downstream)	Separate collection & reverse logistics	Resource recovery	Take-back schemes and collection points	WEEE Centre (Kenya)
	Material recovery & recycling	Resource recovery	Dismantling, pre-processing and recycling	East African Compliance Recycling (Kenya), Enviroserve Kenya
Circular Support	Enabling tools, services & advisory	Enabling platform (no OECD model)	Producer compliance and PRO services	Kenya Association of Manufacturers (Kenya)

Table F4 Circular business models, textiles, apparel and fashion

EU Category	Sub-categories as per EU definition	OECD business model	Circular Business Models (textiles)	Example Enterprises
Circular Design & Production (Upstream)	Design of circular products & assets	Product life extension (design for longevity); resource recovery (upcycling)	Upcycled products and design for longevity	Africa Collect Textiles (Kenya)
Circular Use (Midstream)	Reuse, repair, refurbish, remanufacture (movable assets)	Product life extension	Second-hand resale (mitumba), repair and tailoring	Mitumba traders, Gikomba market (Kenya)
Circular Value Recovery (Downstream)	Separate collection & reverse logistics	Resource recovery	Post-consumer and post-industrial textile collection	Africa Collect Textiles (Kenya)

Table F5 Circular business models, mining, quarrying and construction

EU Category	Sub-categories as per EU definition	OECD business model	Circular Business Models (mining & construction)	Example Enterprises
Circular Design & Production (Upstream)	Design of circular products & assets	Product life extension (design for disassembly); circular supply (soil blocks)	Design for disassembly, interlocking stabilised soil blocks	Makiga Engineering (Kenya)
	Circular process technologies	Resource recovery (industrial symbiosis)	Alternative fuels and co-processing in cement kilns	Geocycle with Bamburi Cement (Kenya)
	Secondary raw material substitution	Circular supply	Recycled plastic pavers and lumber, recycled aggregate	Gjenge Makers (Kenya), EcoPost (Kenya)
Circular Use (Midstream)	Product-as-a-Service / sharing models	Sharing; product-service systems (equipment rental)	Equipment and machinery rental	Mantrac (Kenya)
	Land rehabilitation / brownfield remediation	No direct OECD model	Mine and quarry rehabilitation	Base Titanium (Kenya)
Circular Value Recovery (Downstream)	Material recovery & recycling	Resource recovery	Scrap steel recycling	Devki Steel Mills (Kenya)
Circular Support	Enabling tools, services & advisory	Enabling platform (no OECD model)	Construction waste marketplace	NCA waste marketplace (proposed)