

E-waste management in Kenya

By

Dr. Ayub Macharia

Director Environmental Enforcement

National Environment Management Authority

Kenya

Kenya E-waste Management Strategy 2019-2024

Vision

- “Towards Zero negative impact of e-Waste in Kenya by 2030”.

Goal

- “Achieve a sustainable e-waste management system in Kenya”



Key Result Areas

1. Policy, legal and regulatory framework
2. Awareness creation and capacity building
3. Infrastructure for e-waste handling and management
4. Coordinated national sound e-waste management
5. Resource mobilization for the e-waste management strategy
6. Monitoring and evaluation

Policy, legal and regulatory frameworks

- The main legislation guiding e-waste management in Kenya is the Environmental Management and Coordination Act 1999 (Revised 2015) and the Waste Management Regulations (2006).
- These laws prohibit handling, transportation and disposal of waste without valid licenses issued by the National Management Authority (NEMA).
- Import of E-waste to Kenya is prohibited

Important policy and legislation on waste management and EPR

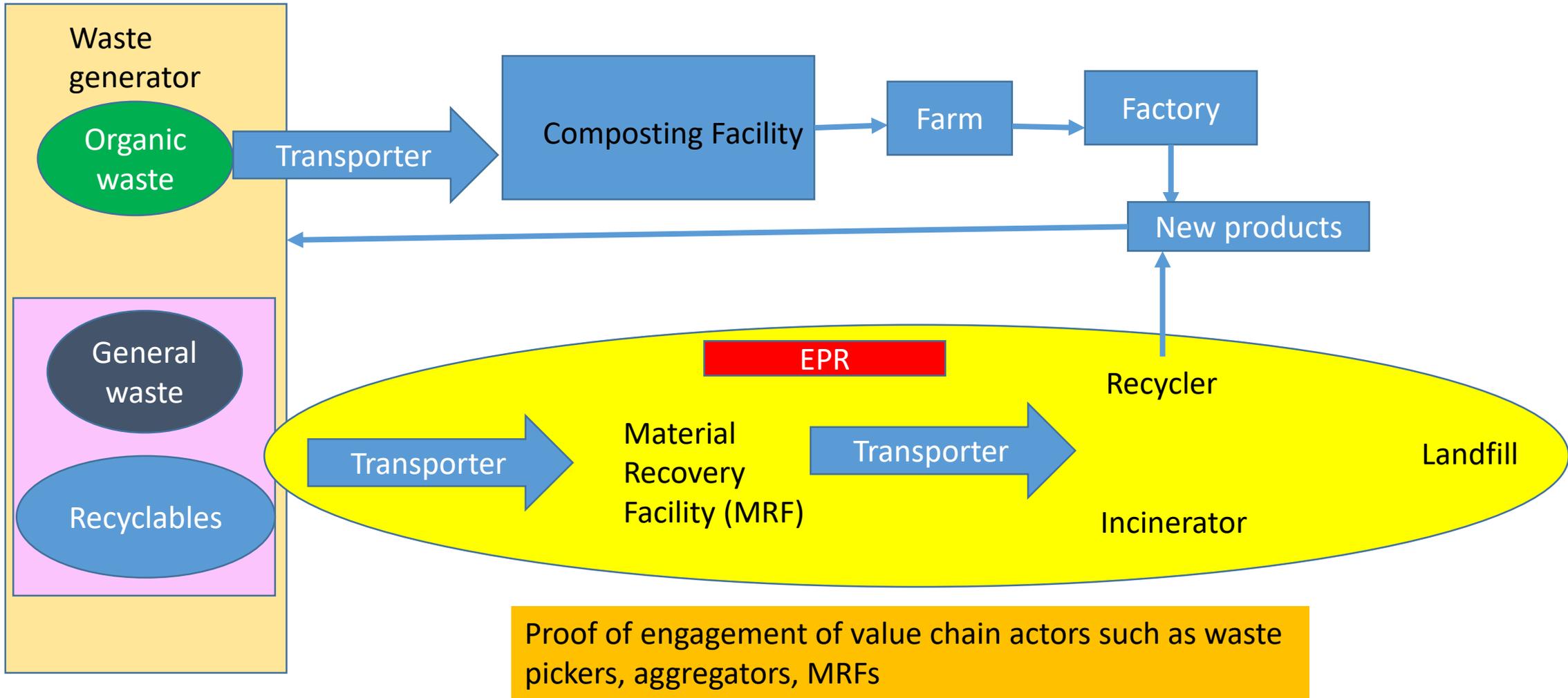
- Environmental Management and Coordination Act 1999 (revised 2015)
- Sustainable Waste Management Policy 2021
- Sustainable Waste Management Act 2022
- Extended Producer Responsibility Regulations 2024
- Waste Management Regulations 2024
- Plastic Packaging Management Regulations 2024
- Public Procurement and disposal Act

Extended Producer Responsibility (SWM Act 2022)

- 13(1) Every producer shall bear extended producer obligations to reduce pollution and environmental impacts of the **products** they introduce into the Kenyan market and waste arising therefrom.
- (2) Every producer shall fulfill their extended producer responsibility obligations individually or collectively in a compliance scheme.
- Section 2 - “Producer” means an entity that introduces goods, products and packaging into the country using authorized means by manufacturing, importing, converting, filling, refilling, repackaging or rebranding

Waste flow and EPR

1. A person who generates waste in Kenya shall dispose the waste to only licensed waste service providers or at designated collection points (Section 20).



E-waste Management

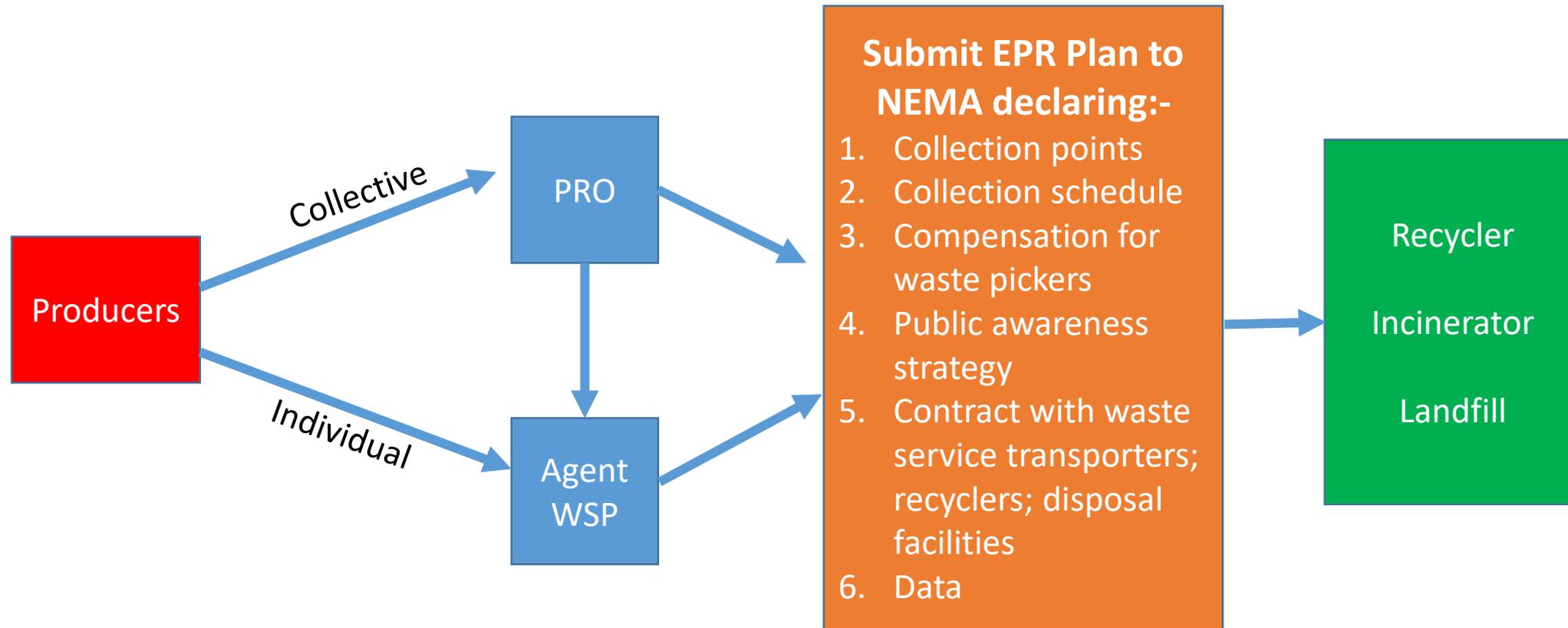
- E-waste subject to EPR
- Producers to fulfil obligation through PROs and agents
- PROs to develop EPR plans declaring collection points, transport, recycling and disposal facilities.
- Infrastructure could be set up by private sector but declared upfront
- Collection points must be approved by NEMA through EIA process
- Transport by NEMA licensed trucks
- PRO or Agent to provide transportation schedule
- Recycling, refurbishing, disposal facilities to be licensed by NEMA

Waste Management Regulations 2024

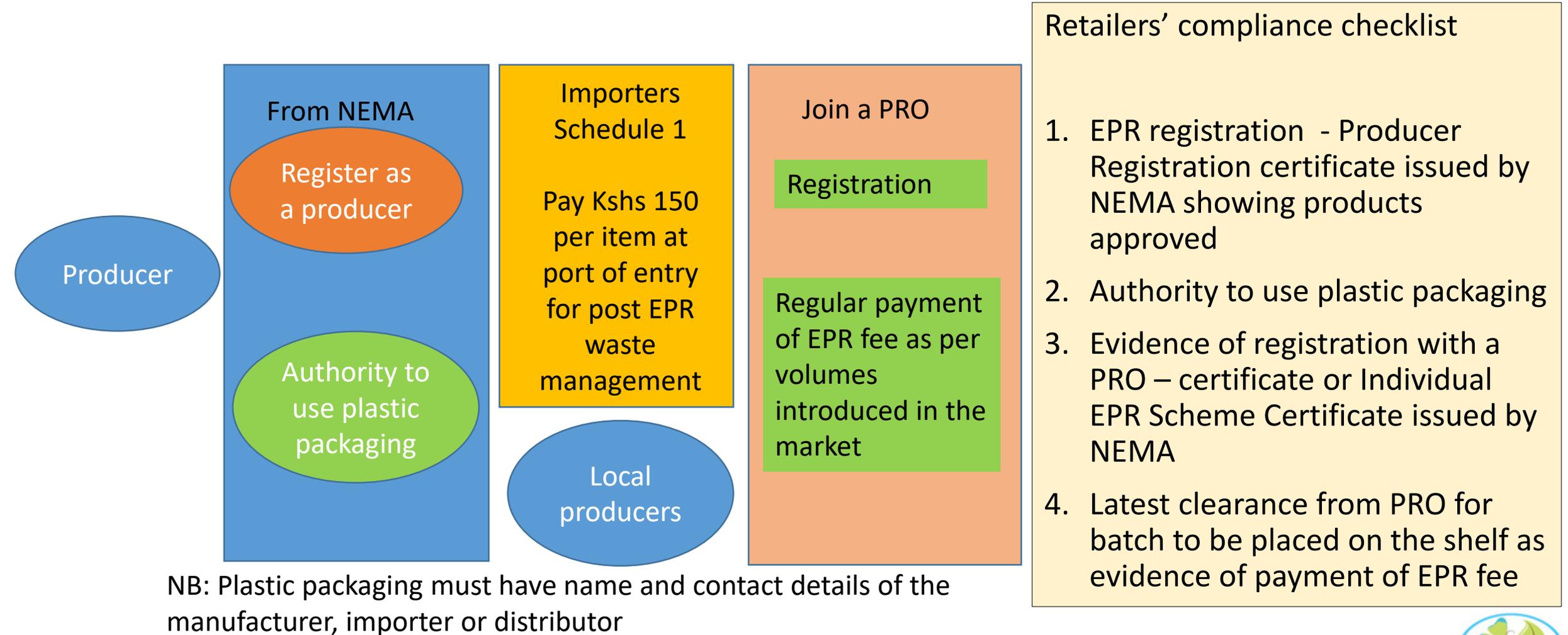
- Retained waste management standards
- Introduced national color code – Green (organic waste); black (general waste); blue (recyclables).
- Applicable fees for waste service providers (Fourth Schedule)

	Application fee (Kshs)	License
Waste transportation	5,000	10,000
Own/operate a waste storage and processing plant/site	5,000	80,000
Own/operate a waste treatment plant and disposal plant/site	5,000	100,000
to export waste per consignment	5,000	50,000

EPR implementation models



Process of compliance to EPR at retail level

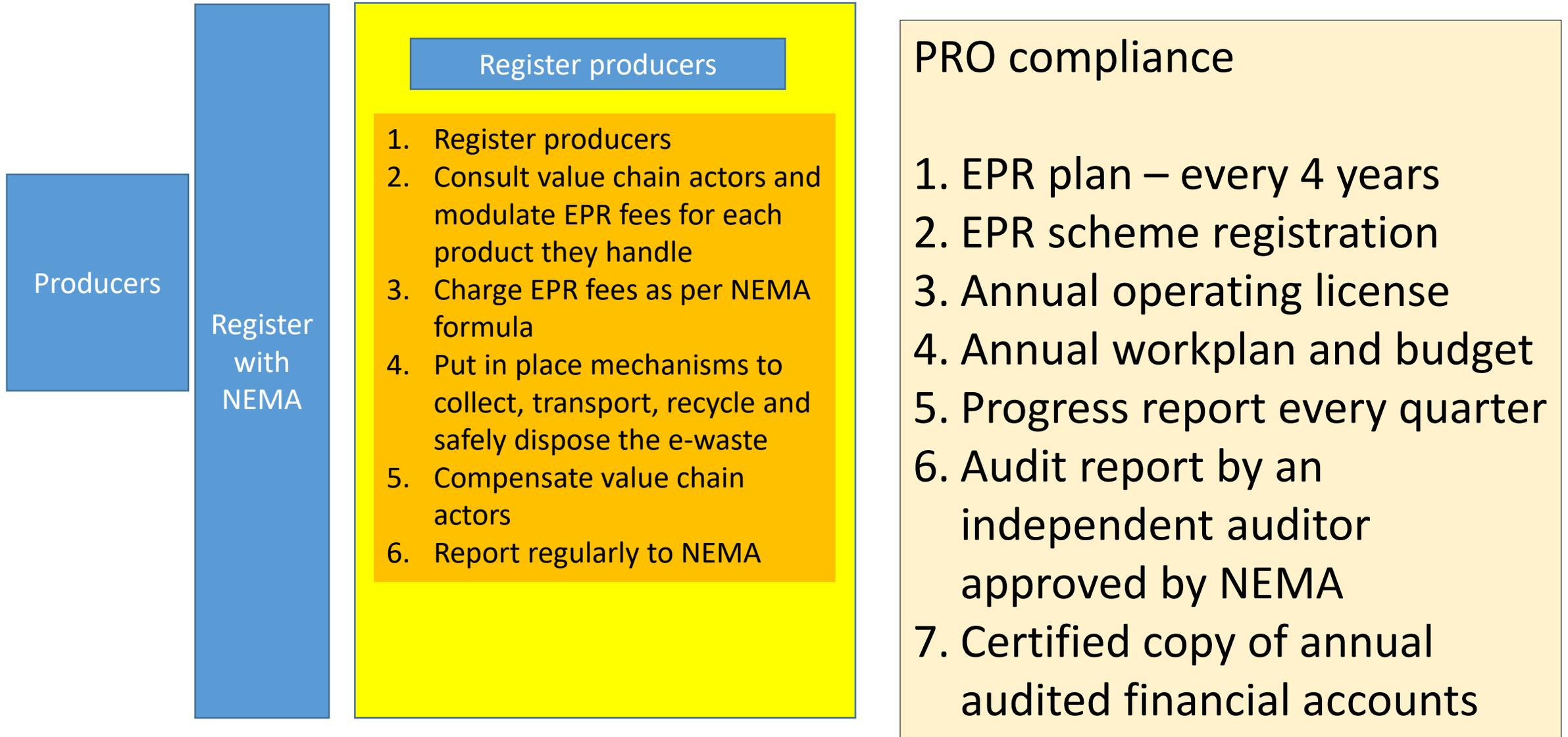


NB: Plastic packaging must have name and contact details of the manufacturer, importer or distributor

Finished imported products subject to payment of 1USD to NEMA at port of entry per item

1. Packaging for non-hazardous products (plastics, aluminium, composite, paper and its corrugates, glass, cardboard and carton).
2. Hazardous products' packaging (Industrial chemicals, oil and lubricants, pharmaceuticals, agrochemicals, veterinary, cosmetics, paints and solvents), treated wood and agricultural films.
3. **Electrical and Electronic Equipment, Mercury Auto Switches, thermostats, Battery and Accumulators.**
4. End of life motor vehicles, automobiles, aircrafts, locomotives.
5. Non packaging items (Plastics, glass, paper, cardboard), Furniture (except wooden, metallic), Rubber and Tyres, textiles, leather, artificial hair, diapers and sanitary towels.

Process of PRO compliance to EPR



EPR schemes in Kenya

4 Collective voluntary schemes exist

- PAKPRO – Voluntary scheme since 2018
- KEPRO – Voluntary scheme since 2019
- HAPROK - 2023
- EPROK – 2023

Deadline for registration of EPR schemes was 3rd May 2025

CALCULATION OF EPR FEE (s18.1)

EPR fees calculated using the same parameters for all the producers in a given scheme, varying from one producer to another, taking into account the—

- (a) quantity of products introduced to the market;
- (b) existence of mechanism for segregation of products at source;
- (c) recyclability and recoverability of the products;
- (d) existence of markets for use of producer's secondary raw material;
- (e) absence or presence of hazardous or none hazardous but disruptive additives;
- (f) products with or without defined environmental foot prints; and
- (g) fulfilment of extended producer responsibility obligations.

Summary of EPR fee cost drivers

EPR fee = Cost of (waste handling + waste processing/product chemistry + waste disposal + Enablers) x Quantity

	Value chain actor	Compensation advisory
Waste handling	Waste picker	Waste Picker Payment = (Average daily recoverable weight ÷ Standard recoverable weight) × Minimum daily wage
	MRF/Aggregator	<ol style="list-style-type: none"> 1. Storage 2. Sorting 3. Baling 4. Residual waste handling
	Transporter	Adapt guidelines from credible transport institution
waste processing/product chemistry	Recycler	<ol style="list-style-type: none"> 1. Disruptive additives (sticky labels and chemicals of concern) calculated using percentile of recyclability. 2. Recyclability of materials – which is paid as an upfront incentive. 3. Residual disposal costs
Waste disposal	Incinerator	Per weight incinerated
	Landfill	Per tipping
	Enablers	<ol style="list-style-type: none"> 1. Market development 2. Product life cycle assessment 3. Circular economy initiatives 4. Public awareness 5. Research 6. Reporting 7. Administration

Offences

- Failure to sort waste at source - Kshs 20,000 fine or 6 months jail term
- Waste service provider transporting mixed waste – Kshs 50,000 or 6 months jail term – enforcement starting in January 2025
- Operating a waste management facility illegally - Kshs 2 – 4 million or jail term of between 1-4 years or both (EMCA 1999 s144).
- PRO/Producer - Failure to undertake any obligation under the regulations (s21.1)
- Retailer - Introducing in the market a product on behalf of a producer who is not listed in the register published by the Authority (s21.3)
- Producer/PRO - giving misleading or false information on quantities held or managed under the extended producer responsibility scheme (s21.4).
- Producer – not being a member of a related producer responsibility organization, a free rider and does not fulfil their individual obligations (s21.5).
- Penalty – If convicted – a fine of between Kshs 2 – 4 million or jail term of between 1-4 years or both (EMCA 1999 s144).

E-waste EPR enforcement challenges

- EPR still new concept – Enforcement framework being developed
- EPROK (e-waste PRO) registered in July 2023 – still forming
- Resistance to reality of EPR fee based on NEMA formula
- Inadequate infrastructure for refurbish, recycle, safe disposal.
- Automation of EPR registry
- Inadequate capacity of the e-waste value chain actors

Other ongoing initiatives

- Finalization of standalone E-waste regulations
- Finalization of Reviewed Environment Policy – E-waste prioritized as a stream.
- Revised E-waste Strategy – to be considered later

End