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Executive Summary

AWWS II was recognized as a pivotal platform for addressing Africa's waste management challenges, emphasizing strategies to transform waste into wealth.

The Africa Waste is Wealth Series (AWWS) is a flagship initiative by the TakaTaka Ni Mali Foundation, featuring regional conferences dedicated to advancing sustainable waste management practices. The inaugural event, AWWS I, was held in Nairobi, Kenya, in June 2023. It brought together delegates from across East Africa and the wider African continent to discuss strategies for promoting effective waste management as a cornerstone of environmental conservation and climate change mitigation.

Building on the success of AWWS I, the second edition (AWWS II), held from October 8–9, 2024, was convened by TakaTaka Ni Mali Foundation, ALN Kenya, The Flipflopi Project, Sustainable Manufacturing and Environmental Pollution (SMEP) Programme, and the East African Business Council (EABC). This transformative conference brought together diverse stakeholders to showcase regional achievements, discuss the proposed **East African Plastic Policy Bill**, and explore innovative strategies for sustainable waste management.

The theme for AWWS II was: "Accelerating Sustainable Initiatives and Highlighting East Africa's Policy Ambitions." Key focus areas included adopting a circular economy approach, implementing regional EPR regulations, and fostering community development as a cornerstone for sustainable environmental practices.

Key discussions topics included:

- The use of plastic credits as a leading strategy for plastic pollution mitigation;
- The role of trade, especially in value added waste, as a solution for averting plastic pollution; and
- Potential solutions to address regulatory barriers, limited organisational capacities, inadequate information, and insufficient skills among industry workers, regulatory bodies, and governments.



Accelerating Sustainable Green Initiatives and Highlighting East Africa's Plastic Policy Ambitions

AWWS II saw more than one hundred experts, including policy makers, legal experts, entrepreneurs, researchers and members of academia, engage in conversation on various aspects of plastic waste management.



AWWS II: Key Takeaways

This report highlights the key takeaways from AWWS II. The presentations and panel discussions held over the two days centred around the five key objectives of AWWS:



To showcase Africa's successes and ongoing efforts in plastic policy and promote the single-use plastic legislation currently under discussion in East Africa.



To strengthen capacities for integrated waste management systems to foster the adoption of circular economy initiatives.



To showcase the role of technology in addressing consumer insights, data management, and disclosures of sustainability initiatives.



To discuss successful regulation approaches and other plastic policies with trade implications.



To discuss the development of plastic standards across the continent, and collaboration between stakeholders, including governments, NGOs, and international organizations, in addressing plastic pollution.

Setting the Scene: the International Context

In March 2022, the resumed session of the United Nations Environment Assembly (UNEA-5.2) convened in Nairobi, Kenya, culminating in a landmark resolution to develop an international legally binding instrument (ILBI) to end plastic pollution, including in the marine environment. The forthcoming global plastics treaty recognises the need for a comprehensive approach that addresses the full life cycle of plastics, including production, design, consumption, and waste management. The imperative for unified action is underscored by the escalating proliferation of plastic waste, particularly in Africa, where recent data indicates the fastest growth rate globally.

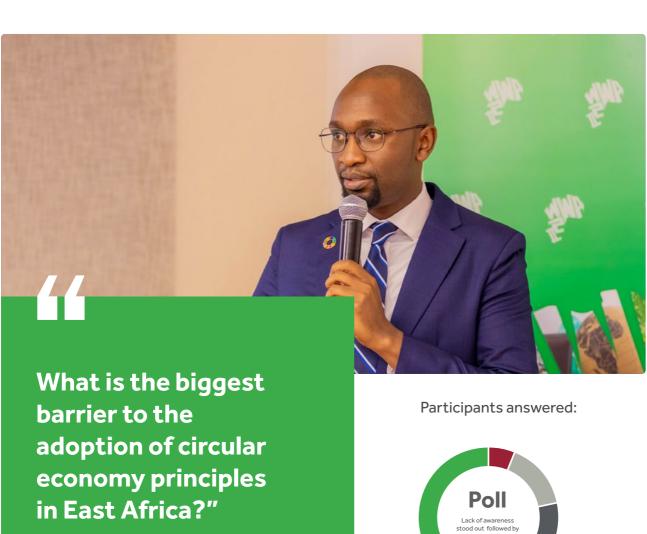
This report highlights the critical need for expedited implementation of the global plastics treaty and complementary initiatives to mitigate the burgeoning plastic waste crisis in Africa.

Projections suggest a potential 500% increase in plastic waste generation by 2060, reaching 116 million tonnes annually. Despite this alarming trajectory, many African nations grapple with insufficient waste management infrastructure. However, a countervailing trend of innovative, entrepreneurial solutions is emerging, leveraging technology and circular economy principles to transform plastic waste into innovative, effective and entrepreneurial solutions.

The AWWS II Conference was convened to address these pressing challenges and seize emerging opportunities by fostering dialogue among key stakeholders and promoting sustainable waste management strategies.

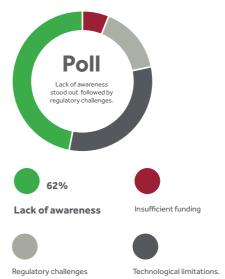
DAY 1

Opening of AWWS II: Waste as an engine of opportunities Welcome from Maina Chege



Maina Chege

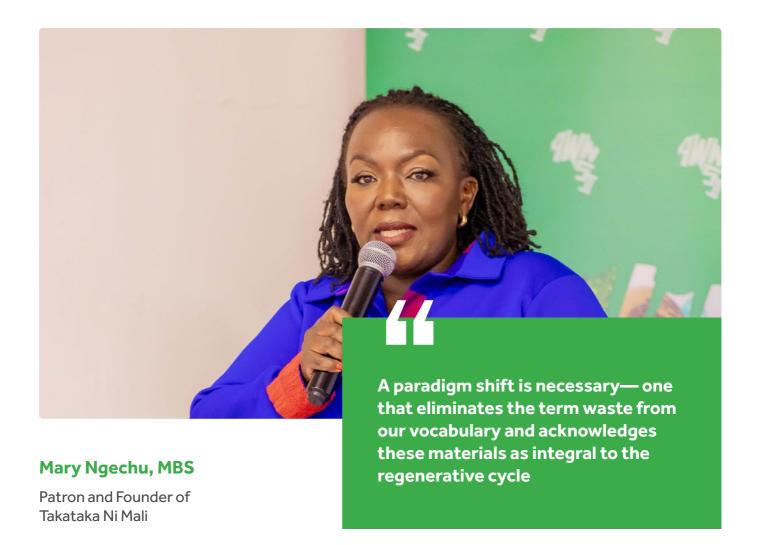
Host of Trading Bell, a popular kenyan television business show



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Opening of AWWS II: Waste as an engine of opportunities

Opening Remarks from Mary Ngechu, Patron & Founder of TakaTaka Ni Mali



Turning Waste into Wealth

As part of her opening speech, Ms. Ngechu announced plans to establish the East Africa Waste Management Coalition, which will bring together governments, private sector, civil society and local communities, to harmonise waste management efforts across the region, ensuring that policies, resources and innovation work cohesively to amplify the impact of integrated waste management.

Keynote addresses

Carole Kariuki

CEO, Kenya Private Sector Alliance (KEPSA)

"The global circular economy is projected to be worth over USD4.4 trillion by 2030 and East Africa can lead in this, in turning this into an economic opportunity for our people."



Leigh Stubblefield

Deputy British High Commissioner to Kenya

"We're using the equivalent of 1.6 planet Earths to maintain our current way of life, and ecosystems cannot keep up with our demands. Finding solutions and opportunities that benefit nature, climate and people is critical, and the waste management and circular economy approaches offer those solutions." Ms. Stubblefield also announced her government's eagerness to continue partnering in the transformation of waste into wealth, driving forward plastic policies and legislation in East Africa, as well as supporting the implementation of Kenya's Solid Waste Management Act.

Luck OchiengManaging Director, Unilever East Africa

"Unilever Kenya is at the forefront of achieving our ambitious sustainability targets, making the most significant progress among all our global locations. This success is driven by strategic partnerships that enable us to integrate recycled materials into our operations while creating meaningful social and economic impact. So far, we have successfully incorporated 60 metric tonnes of recycled plastic into our operations, with the potential to scale up to 20,000 metric tonnes based on a successful proof of concept. By scaling these efforts, we have the potential to transform waste management and sustainability in Kenya."





Mrs. Teresia Mbaika, CBS

Principal Secretary, State Department for Devolution

"Kenya's journey toward environmental recovery and sustainable waste management is driven by strategic policies, community-led initiatives, and strong institutional frameworks. From riparian land restoration to the plastic bag ban and the Nairobi Rivers Commission, we have made significant strides in safeguarding our environment. Through a multisectoral approach and key policies like the Extended Producer Responsibility framework and the Sustainable Waste Management Act, we are fostering long-term solutions. Collaboration between communities, national, and county governments remains vital to ensuring lasting success and a cleaner, sustainable future for all."



Panel 1:

Exploring opportunities for community engagement in integrated waste management

This session emphasized the following:

- The vital role of community leadership in integrated waste management, showcasing how active participation can drive sustainable practices;
- The importance of fostering relationships amongst residents and waste pickers to address local waste challenges; and
- Strategies to strengthen community involvement, advocate for waste pickers' rights, and develop integrated approaches that benefit both the environment and local livelihoods.

Setting the Scene: A Case Study of Project STOP in Indonesia



Adam Hidana Senior Officer at Systemiq



Ronny LaudienDigital Transformation Senior
Manager at Accenture Song



Photo: Project STOP Banyuwangi Hijau App





Scan to see the project document film on Youtube

About the Project:

Launched in 2017 by Borealis and Systemiq, Project STOP (Stop Ocean Plastics) works hand-in-hand with city governments to create effective circular waste management systems in high-need areas of Southeast Asia. The initiative supports cities with technical expertise to achieve zero-leakage of waste, increase recycling, build economically sustainable programs, creating new jobs and reducing the harmful impact of mismanaged waste and uncontrolled waste burning on public health, climate change, tourism, and fisheries.

The first city partnership was established in 2017 in the municipality of Muncar, East Java, followed by others in Pasuruan, East Java and Jembrana, Bali. Between February 2022 and June 2023, all three Project STOP city partnerships were fully handed over to the local regency governments. The focus of Project STOP is now to provide Indonesia's first Regency-wide circular waste management system (Project STOP Banyuwangi Hijau).

For more information on Project STOP Click Here

About the Project STOP Banyuwangi Hijau App:

The collaboration between Accenture Song and Project STOP is showcasing how innovation can drive system-change. The Project STOP Banyuwangi Hijau App marks an important milestone in transforming and scaling circular waste management systems in Indonesia.

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Keynote addresses



H.E. Dr Wilber K. Ottichilo E.G.H Governor, Vihiga County

"Kenya has sufficient regulations for waste management, but implementation remains our greatest challenge. The mindset that waste can be discarded anywhere persists, even where segregation bins are provided. Public awareness is key—when people understand that waste holds value, they will treat it as a resource rather than a burden. The private sector must step up to support awareness initiatives and create viable economic opportunities around waste. If we commercialize waste and demonstrate its worth, enforcement will become secondary, and sustainability will follow naturally."



Mamo Boru Mamo, EBS Director General of Kenya's National Environmental Management Authority (NEMA)

"Effective waste management begins with community education and sensitization. Our waste segregation trial in Nairobi highlighted the urgent need to equip both residents and waste handlers with the right knowledge and tools. The implementation of the Extended Producer Responsibility (EPR) regulation, alongside the Sustainable Waste Management Act, will ensure that producers take full accountability for the environmental impact of their products. However, for real change, we must go beyond national efforts—collaboration across the East African region is essential. A unified regulatory framework will not only streamline enforcement but also strengthen our collective ability to manage plastics and waste sustainably."



Alfred Ombudo K'Ombudo ,CBS Principal Secretary, Trade, Government of Kenya

"It is crucial to establish good standards and raise awareness about biodegradation and compostability. I am encouraged by the East African Legislative Assembly's initiatives regarding single-use plastics. The draft Single Use Plastics Bill represents a step towards regional plastic policy harmonization, promoting trade and providing raw materials for industries that depend on them. Meanwhile, trade continues to play a vital role in mitigating pollution from organic waste while driving value from it. Many current trade agreements emphasize the importance of traceability, and businesses need to communicate effectively about their products to consumers, ensuring they understand the ethical sourcing and recycling processes involved. Investing in traceability, labelling, and packaging systems can not only make waste products more viable but also allow businesses to command a premium for ethically made products."

Panel Discussion: Opportunities for Community Engagement in Integrated Waste Management

- Moderated by Faith Macharia, Partner, ALN Kenya

Key messages from the panel included:

- Awareness creation and capacity building through the training of professionals to enhance the appreciation by communities of the need to regard waste as wealth is critical;
- Existing regulations need to be localised and simplified in a manner that is actionable by different players in the waste management cycle;
- Technology plays a crucial role in advancing best practices in waste management; and
- Waste pickers play a critical role in the waste to wealth value chains. To this end, panelists recommended:
 - Legislation at the sub-national level that recognises waste pickers and their operations (borrowing from a successful Ghanaian model); and
 - **2.** That waste pickers form cooperatives, enhancing their capacities to identify markets and negotiate terms.



Faith Macharia Partner, ALN Kenya

The role of technology in advancing best Practices in Waste Management

TakaTaka Ni Mali has been working to empower waste pickers by assisting them in collecting and organizing their data. This approach has made waste pickers more appealing to financial institutions for lending and to larger recyclers seeking opportunities for business expansion.

TakaTaka Ni Mali has developed a digital platform with the two following components, with the aim of circularizing the waste management ecosystem:

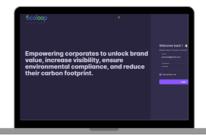
- 1. Ecomali: An integrated waste regeneration eco-system that leverages technology to track waste movement, conversion, and environmental impact; and
- Ecoloop: An advisory ecosystem focused on ESG reporting, advisory services, research membership, corporate capacity building, and green events, which would link households.

To download Ecomali, <u>Click Here</u>
To Ecoloop website, <u>Click Here</u>









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Q&A With James Boyd-Moss



Why are you currently selling your fibre to a handful of countries:

Ans: We are primarily accessing some of the existing existing pineapple fibre markets which are Vietnam, Spain, Taiwan, Thailand, they have experience in terms of dealing with pineapple fibre.

The one issue that pineapple fibre comes up against with regard to turning it into fabrics is that it has a long staple length, which means it's a long fibre. In comparison polyester fibres or cotton fibres, are much shorter and the mainstream technology that exists worldwide is primarily geared towards cotton and polyester.

We have taken our fibres to thicker spinning mills and we've put them on the table in front of them and they look at it and there's nothing they can do with it. There are some additional steps which go into the fibre - a cottonization process, where they basically chop it up and fluff it such that it conforms with the properties of cotton.

And then it is blended with cotton and a yarn is produced, which is usually, 20%-30% pineapple fibre and the remainder is cotton. The company that we're selling our fibre to adds value through the cottonization process. I think the next challenge for us is to incorporate this additional value added step. And at that point, the fibre would be able to make its way into Kenya, Uganda and Tanzania's spinning mills.

At the moment, the proof of concept is to produce the fibre to demonstrate that the business model is viable and then these additional technologies can be bolted on.

Q: How expensive is the technology that you use. Is it something that can be adopted or transferred easily for the parts of the region so that our people can be able to venture into that kind of productive business?

Ans: The extraction machinery we use is actually designed and built in Kenya.

All its components have been machined by manufacturers within Nairobi and we assemble, test and modify them to get to the models that we are using today. In terms of cost, it's really not enormous.

We haven't put any machines on the market, but if they were to go on the market, they might retail around USD 40,000 - 50,000 each.

About Mananasi Fibre

"Mananasi Fibre LTD, a Kenya-based start-up that emerged from natural fibre research and development by The Chequered Flag Limited. Mananasi Fibre turn waste into opportunities - through innovative technology, they extract high-quality fibres from discarded pineapple leaves, which can be used in textile production. Simultaneously, they transform the remaining plant material into nutrient-rich compost that rejuvenates the soil and supports sustainable agriculture. The initiative is supported by the Sustainable Manufacturing and Environmental Pollution (SMEP) Programme, funded by the United Kingdom's Foreign, Commonwealth and Development Office (FCDO) and implemented in partnership with UN Trade and Development (UNCTAD)"

James Boyd-MossFounder, Mananasi Fibre

Panel 2:

Thinking outside the sink:

Driving sustainable organic pollution-control strategies through trade

Panel discussion: strategies for driving sustainable organic pollution control strategies though trade - Moderated by Dr. Henrique Pacini, the Economic Affairs Officer, UN Trade and Development (UNCTAD).

This panel discussion drew attention to barriers to circularity and offered practical solutions to enhance South-South cooperation.

Key messages from the panel included:

- The transition to circularity begins with the separation of waste at source, enabling organic materials to be used for composting, biogas production, or fibre extraction, while inorganic waste can be directed to appropriate recycling streams.
- Regional action is required in identifying and implementing solutions. In particular, Hon. Uwumukiza warned that the achievement of critical Sustainable Development Goals (SDGs) (notably SDG 1) is in jeopardy if waste management is not sufficiently handled.



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Organic Waste Management Projects - Examples



Ms. Anita Siro highlighted several organic waste management projects that the United Kingdom invests in, including through the FCDO-UNCTAD Sustainable Manufacturing and Environmental Pollution (SMEP) Programme. SMEP in Kenya supports several initiatives that converts pineapple waste into alternative fibres, use black soldier flies (BSF) to accelerate compost production, and one that is trialling seaweed-based biodegradable fishing ropes and nets, which has the potential to biodegrade with zero microplastics or toxins when lost at sea.

Ms. Anita Siro

Environment and Biodiversity Officer, British High Commission Nairobi

Ms. Muhia showcased a project from Nairobi, where vegetable waste from a farmers' market has found new value through linkages with organisations that have the capacity to convert it to compost. That project, she noted, has outlined several policy gaps that must be bridged through frameworks that guide the management of organic waste using both contemporary and traditional techniques.

Meanwhile, she also noted the need to enhance wastewater recycling at the point of generation to prevent a common challenge, particularly in urban areas, where untreated wastewater is discharged into rivers and lakes.

Ms. Eva MuhiaCommissioner, Nairobi Rivers Commission





Dr. Jane Nyakang'o *CEO, Kenya National Cleaner Production Centre*

Dr. Nyakang'o emphasised the importance of implementing cleaner technologies and techniques to prevent or minimise pollution released into the environment. She described the approach taken by her organisation, KNCPC, including:

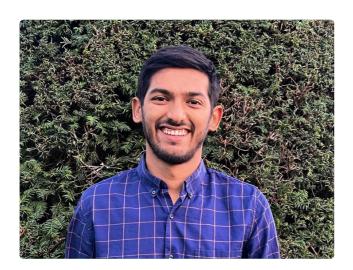
- That KNCPC is exploring additional technologies for waste management, such as converting it to energy or repurposing it into valuable products; and
- KNCPC has established a partnership with a financial institution that assesses various industries, determining the kind of technology required to reduce pollution.



"The financial services partner converts or packages the environmental solution problem into an investment proposal, through which we are able to engage with the financial institutions to access private or commercial funding."

The Role of Outcomes Based Financing in National EPR and Waste Regulations in East Africa

Setting the Scene: rePurpose's Outcomes-Based Financing Mechanism



Outcomes-Based Financial Mechanism for Waste Prevention:

In partnership with Earth Action, GreenBlue and Upstream, rePurpose Global commissioned a report, which explores how Outcomes-Based Waste Prevention, an innovative financial modality that incentivizes measurable reduction in plastic waste, can be used to bridge the funding gap hindering progress towards mitigating plastic pollution. The report sets the stage for developing a tool within the financing landscape to address the plastic crisis by defining key terms, introducing concepts and exploring existing applications.

Varun Vithalani

rePurpose Global

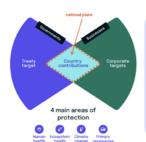
Scan the QR code to see the report:

About rePurpose Global





Role of OBF in Global Policy and the legally binding agreement on plastic pollution

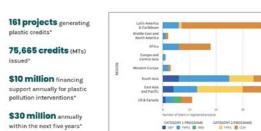


Recognize outcomes-based financing and payment-by-result waste prevention programs, as innovative financial schemes.

Stimulate various forms of innovative financial schemes, with strong environmental and environmental and social safeguards to enhance the pace, effectiveness, and scale of resource mobilization and use.

3. Leverage outcomes based financing to unlock more financial resources from public and private sources towards capacity building in SIDS, LDCs, and other developing

An Overview of the Plastic Credits Market



The World Bank
*Estimations as of December 2023

Panel discussion:

- Moderated by: Varun Vithalani, rePurpose Global

The panel discussion offered perspectives on the opportunities for mitigating plastic waste through plastic credits, and addressing challenges in scaling the adoption of high-quality, verified plastic waste reduction outcomes. Presenters also addressed how plastic credits can support national plastic action plans and regional circularity roadmaps. The conversation furthercovered the regulatory applications of plastic credits, particularly in the context of national EPR schemes in developing countries.

Key messages from the panel included:

- There are significant opportunities in innovative financing instruments such as plastic credits and especially in the East Africa context;
- One such opportunity is the role of plastic credits in facilitating access to new capital; plastic credits, like carbon credits, can be traded for affordable capital;
- Plastic credits are instrumental in funding the transformation of remote regions.
- Policy gaps pose a challenge to plastic credits and there needs to be greater harmonisation of the different regulations (for Kenya, some of the legislations proposed for alignment include the Sustainable Waste Management Act, Carbon Regulations and the Extended Producer Responsibility Act); and
- There is a risk of social injustice in respect of the implementation of plastic credits (as has been noted with carbon credits), where the raised revenues do not sufficiently reach the worst affected communities.



"It is a lot of work to set up EPR, but there is, especially in emerging markets or developing economies, a really big infrastructure deficit. Once you get EPR going and you start receiving programme funds and you don't have the infrastructure to collect and recycle, there is no way to deploy those funds. So, if you are able to use plastic credits in a voluntary context to help scale that infrastructure while policy is being developed, it just makes the implementation and impact infinitely quicker."

Kristen Linscott, CPA, Manager, Financial Planning and Analysis, Verra



"Plastic credits are a lifeline for remote regions, where infrastructure is lacking, yet transformation is urgent. By turning marine plastics into valuable products, we unlock circular solutions that empower even the most isolated communities."

Davina Ngei Program Manager | Flipflopi



"The regulations are meant to come out sometime this year, which will then give guidance how the manufacturers are meant to track the plastics or waste they produce for recycling purposes. Financiers or investors want assurance that their investments will yield profits. And plastic credits allow for this objective way of measuring the collection or recycling impact of an investment while at the same time supporting locally specific interventions."

Sandeep Main Partner, Head of Private Enterprise, KPMG East Africa



"KCB has committed to a transition of at least 25% of its own portfolio to green projects by 2025, with notable interest from players in renewable energy and waste management."

Ms. Judith Sidi Odhiambo
KCB Group Head of Corporate and Regulatory Affairs and Sustainability

DAY 2

The second day of AWWS II focused on the proposed East African Community Single Use Plastics Bill, which was drafted by the African Legal Network (ALN), an Alliance of leading African law firms, together with key stakeholders, and is currently undergoing legal and technical review at the East African Legislative Assembly.

Setting the Scene: EAC States National Plastic Policy Landscape

Countries across East Africa are at different stages of developing their own regulations around single use plastics (SUPs). All eight East African Community (EAC) member states that consist of Burundi, Kenya, Rwanda, South Sudan, Tanzania, Uganda, the Democratic Republic of Congo and the newest member state, Somalia, have taken legislative action against certain SUPs, mainly plastic bags.

ALN, together with the Flipflopi Project, Sustainable Inclusive Business, UNCTAD and SMEP, published a comprehensive analysis of all EAC states' national plastic policy landscape, and recommendations for strengthening regulations in order to foster innovative and sustainable inter-regional trade through a harmonised SUP legal framework.

The full report can be found **Here**.

The Single Use Plastics Bill (SUP Bill)

It is increasingly important to harmonise the requirements of the individual country programs in order to ensure widespread impact. This is a task that ALN has initiated by drafting the EAC SUP Bill.

The SUP Bill seeks to prohibit the manufacture, import, sale or use of specific non-essential SUP items, including SUP cutlery, plates, cups, cotton buds, straws, stirrers, wet wipes, carrier bags, balloons, food containers and sweet wrappers. The SUP Bill is a critical step toward aligning polices, creating legal certainty, and fostering sustainable business practices across the region.

16,000+ citizens have signed a petition and backed the SUP Bill calling for an end to unnecessary SUPs across the EAC. If you want to join the movement for a cleaner and healthier East Africa sign the petition linked below.

Click Here to Sign the Petition



ALN's Commitment to Rooting out Unnecessary Single Use Plastics



As a leading alliance of top-tier law firms, ALN is proud to be part of collective global efforts to accelerate sustainable practices and build a circular economy to drive positive change across Africa.



ALN is deeply committed to addressing the pressing issue of single-use plastics in East Africa and beyond. A core focus of ALN's initiatives is the promotion of circular economy principles, including promoting effective waste management and the adoption of extended user responsibility.

Rosa Nduati-Mutero Managing Partner, ALN Kenya



A unified approach to tackling plastic pollution in East Africa is long overdue. That is why ALN has taken the lead with drafting a regional single-use plastics bill that promotes: shared standards to drive sustainable inter-regional trade, innovative solutions rooted in our East African heritage, and protection of our cross-border ecosystems.

Carlotta Dal Lago HOD, Business Development, ALN Kenya

ALN's Pro Bono Initiatives: Plastics and Waste Management



ALN has supported the Flipflopi Project since its inception through the provision of pro bono legal assistance to help the organisation set up and run its operations. ALN has supported various Flipflopi expeditions to raise awareness of single-use plastic pollution and showcase alternative ways to repurpose 'already-used' plastic. Carlotta Dal Lago, ALN's Head of Business Development, sits on the Flipflopi board.



This year, for the third year, ALN together with key stakeholders, published a comprehensive analysis of all EAC states' national plastic policy landscapes and recommendations for strengthening regulations in order to foster innovation and sustainable inter-regional trade through a harmonised legal framework.



ALN is a key partner of TakaTaka Ni Mali, playing a pivotal role in sponsoring and coordinating the Africa Waste is Wealth Conference 2024. Leveraging its extensive network, ALN has helped to bring together key stakeholders, policymakers, and industry leaders to showcase regional achievements, advocate for the EAC SUP Bill, promote sustainable waste management and circular economy practices and explore regional strategies for EPR regulations.

Meet The Team



Rosa Nduati-Mutero Managing Partner, ALN Kenya



Carlotta Dal Lago
Head of Business Development,
Marketing and Communication



Faith Macharia Partner, ALN Kenya



Fenan Estifanos Associate, ALN Kenya



Eden Gatuiku Associate, ALN Kenya



Sharon Muoki Associate, ALN Kenya

Panel Discussion: Waste Management Regulatory Framework

This session examined the current legal landscape surrounding waste management in East Africa. It highlighted the regulatory gaps, enforcement challenges, and the role of policy in promoting sustainable practices. The session further aimed to provide insights into strengthening frameworks for a circular economy.



Key messages from the panel included:

- There is a critical need for clear guidelines and obligations that encourage businesses to develop new solutions for plastic reduction, recycling and reuse by defining problematic plastics and chemicals of concern;
- Harmonising legislation is important to remove the burden on businesses to create multiple packaging designs to meet the varying national requirements;
- Assigning responsibility for different regulatory requirements is key, notably with regard to labelling and traceability - clear structures are needed to determine who between the manufacturers of plastic packaging or brand owners is required to implement traceability;
 - "Harmonised global rules will create a level playing field which would allow businesses to make long term investment plans with more certainty and less risk. This will also enable companies to implement uniform sustainability practices across regions, which would scale solutions faster and more efficiently."

- There is a need for partnerships to educate producers on the business case for transitioning their packaging into recyclable products; and
- Incentives should be introduced to encourage the transition to sustainable plastics, including through tax breaks.



Ms. Rowena GilpinUnilever Sustainability Unit, speaking on behalf of the Business Coalition for a Global Plastic Treaty

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Addressing Plastic Pollution: A Case Study from South Africa



Dr. Valentina Russo

Senior Engineer at Council for Scientific and Industrial Research (CSIR)

Plastic pollution is growing fast globally, and plastic is increasingly found in places it does not belong to. Urgent actions are needed to curb plastic pollution. In 2020, The Pew Charitable Trust's released the, *Breaking the Plastic Wave*¹, a groundbreaking study that provided the first global assessment to reduce plastic pollution. The study concluded that annual plastics leakage to ocean can be reduced by 80% in 20 years by applying existing technologies and solutions. However, this change requires immediate, ambitious, and concerted global effort, implementing solutions across the entire plastics value chain.

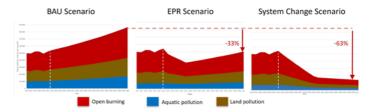
Globally, ongoing efforts and international negotiations are underway to develop a legally binding instrument on plastic pollution for implementation. However, global commitments and binding regulatory instruments will need to align with nationals' contexts. The first step to support local action entails gathering evidence for taking informed decision. Every country must take stock of the internal plastic waste flows, including the end-of-life management and fate of plastic waste.

To that end, South Africa was the first country to collaborate with The Pew Charitable Trusts and Oxford University to test and apply *Pathways*², a modelling framework and software tool which allows for evaluating impacts of different approaches to reducing plastic pollution.

The ultimate goal was to provide the supporting evidence to develop a strategy to address plastic pollution for South Africa³.

Pathways is freely available software⁴, fully customizable to the local context; it has powerful analytical capabilities and can provide insights to possible future by testing policies aimed at addressing plastic pollution as well as performing advanced trade-off analyses. The tool is data driven and allows for plastic characterisation according to data availability.

Applying Pathways in the South African context yielded three major findings⁵. First, plastic pollution is set to almost double in 2040 if no interventions are implemented. Secondly, meeting the newly legislated extended producer responsibility (EPR) targets set for plastic packaging can avoid 33% of projected total pollution over the period of 2023-2040. Lastly, an optimal system change can avoid 63% of total plastic pollution over the period 2023-2040. Thus, applying Pathways at country level in South Africa has proven to be valuable by setting a baseline against which progress towards reducing plastic pollution can be measured; determining the outcome of meeting the legislated EPR targets over time, and informing policy decisions by allowing users to model different scenarios towards an optimal change scenario.



Based on the South African experience, Pathways can be applied effectively in a wide range of countries to develop appropriate strategies based on local data and conditions. Pathways can provide clear guidance on where plastic pollution issues are most pressing and interventions will be effective in reducing plastic pollution, as well as insight into the effectiveness of current interventions over time. Results from the South Africa experience highlighted the importance of stakeholder involvement and local ownership of the process to build capacity to empower stakeholders and enable ongoing analysis. Currently the tool is applied in the Zambian context, through a collaboration between The Pew Charitable Trusts, the CSIR, a researcher from the University of Zambia, and other partners.

- 1. Breaking the Plastic Wave: Top Findings for Preventing Plastic Pollution | The Pew Charitable Trusts
- 2. Download the Breaking the Plastic Wave Pathways Tool | The Pew Charitable Trusts 3
- 3. wasteroadmap.co.za/wp-content/uploads/2022/11/046-CSIR-Final_Report-Reducing-Plastics-Pollution-Pathways.pdf
- 4. https://www.ouce.ox.ac.uk/research/pathways/
- 5. <u>046-CSIR-Final_Briefing-note-Pathways-tool.pdf</u>



THE EAST AFRICAN PLASTIC REVOLUTIONARIES **CALLING FOR AN END TO SINGLE-USE PLASTIC**

The Flipflopi Project (Lamu Archipelago, Kenya) has pioneered an innovative model to tackle plastic pollution in the region.

The "full-systems" approach addresses plastic waste reduction and management holistically through a closed-loop community centered approach while advocating for the elimination of single-use plastics at a regional level.

The community initiative recovers waste plastics which we recycle into planks in order to make high-quality products rooted in local and maritime heritage, inc. traditional furniture and boats.

The low-tech innovation was pioneered in the construction of the world's first 100% recycled plastic sailing dhow, that has become a global symbol in the fight against plastic pollution



Close the loop on waste plastics through a communitycentered approach, manufacturing high quality boats and products rooted in indigenous heritage



Convene multiple stakeholders and change behaviours around waste plastic, starting from East Africa

INFLUENCE

Influence legislative change to ban single-use plastics and ensure all other plastics can be part of a circular economy

THE RECYCLED PLASTIC SAILING DHOW HAILED AS "AFRICA'S BLUE PLANET MOMENT"

The world's first 100% recycled plastic dhow, sailing to inspire a plastic revolution

9mt long, The Flipflopi dhow "Ndogo" was constructed from 10 tonnes of waste plastic and flip-flops.

On expeditions around East Africa, she convened thousands of community members and leaders to support new legislation around SUPs.



CLOSING THE LOOP ON WASTE PLASTICS THROUGH HERITAGE FURNITURE & BOATS



The first-of-its-kind recovery and recycling facility on the remote archipelago of Lamu

2021 The Flipflopi Project was included in Kenya's first National Marine Litter Management Action Plan as a case study for good practice.

2022 we were incorporated into Lamu Municipality's first Solid Waste Management Policy



The Flipflopi is part of a growing network of plastic revolutionaries around Africa

Flipflopi partners with grassroots organisations around East Africa.

Parliamentarians from 7 East Africa Community countries unanimously support us to back our Bill to eliminate unnecessary SUPs.

Making waste management more sustainable together with the community

Incentive based network of hundreds of community members collect ~12 tonnes per month resulting in reduction in GHG emissions

Social surveys have shown well-being and livelihood improvements for employees and collectors



Certified vocational training course established

In 2022, Flipflopi established a vocational training program with 30+ students trained in the first year.

The course aims to build the capacity of young people to work and train in the fields of circular economy, design and plastic recycling as well as heritage crafts like dhow building and carpentry.





Creating high quality artisanal recycled plastic products furniture and boats

To date we developed 40+ unique products, including three types of traditional sailing vessels - embracing and supporting the local craftsmanship like carpentry, weaving, carving and boat building.











AWWSII Outcomes

The following key messages were emphasised over the two days of the AWWSII:

- Plastic waste is getting troublesome for Africa with each passing day and must be quickly addressed before it causes further damage.
- Like with any other new transition, some level of resistance is expected in implementing plastic regulations, but approaches backed by scientific evidence and government leadership will triumph.
- Public education on waste segregation is important in enhancing the management of organic and inorganic waste.

- Community leadership is integral in driving the widespread transition required to sufficiently address the waste management challenge experienced in Africa.
- Plastic credits, the regulations around them and related incentives must be quickly accelerated to enhance their uptake, and to facilitate their role in plastic waste management.
- Communities need sensitisation to begin recognising waste as wealth.
- The harmonisation of plastic policies across Africa and globally is necessary for efficiency in the management of plastic waste and to secure buy-in from all stakeholders.



Looking Ahead: developments in the sector

The AWWS continues in 2025, where delegates will meet to review the progress made since AWWSI and AWWSII and to address emerging issues around waste management.

- INC 5.2: The second part of the fifth session of the Intergovernmental Negotiating Committee (INC-5.2) is scheduled to take place from 5 to 14 August 2025 in Geneva, Switzerland
- EAC SUP Bill: The draft SUP Bill is currently with a legal committee under the Council for review. The legal committee is tasked with reviewing the draft SUP Bill to ensure it aligns with the EAC Treaty.
- The AWWS partners will continue mobilising support for the enactment of EPR across Africa;
- Formation of the East Africa Waste Management Coalition: "The launch of the East Africa Waste Management Coalition is a major milestone that will enable harmonized waste management policies and foster regional collaboration. This coalition will drive circular economy principles and create opportunities for youth and women in the waste management sector, ultimately positioning East Africa as a leader in sustainable innovation." - Closing remarks from Mr. Adrian Njau, Ag. Executive Director of the East African Business Council (EABC).

"As we move forward, the message is clear—waste is not just a problem; it is an opportunity. An opportunity to create jobs, to build sustainable businesses, and to safeguard our environment for future generations. It is upon all of usgovernments, businesses, civil society, and individuals—to take bold steps in turning waste into wealth. Let this conference be a catalyst for action, inspiring us to accelerate the transition to a truly circular economy" Mary Ngechu e move forward, the message is clear—waste is not just a problem; it is an opportunity. An opportunity to create jobs, to build sustainable businesses, and to safequard our environment for future generations. It is upon all of usgovernments, businesses, civil society, and individuals—to take bold steps in turning waste into wealth. Let this conference be a catalyst for action, inspiring us to accelerate the transition to a truly circular economy".

Mary Ngechu, MBS

Patron and Founder, TakaTaka Ni Mali Foundation "It doesn't matter how many policies or laws you have in place; if you don't speak to the mind, if you don't speak to the behaviour change, then most of what they are doing will not really lead to much. You must really focus on how to change the mindset to see waste as a resource. At KARA, we work closely with resident associations to drive this shift, ensuring that communities take ownership of waste management."

Henry Ochieng

CEO, The Kenya Alliance of Resident Associations (KARA).



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Innovations showcased at the Africa Waste Is Wealth Conference (AWWS II)





Eco bottle bins for waste plastic collection. By Libe Green Innovation



Repurposed Creations by The Flipflopi Project





The Mazingira Champions" A Children's Guide to Sustainable Waste Management authored by

Takabot by TakaTaka Ni Mali:

A semi-automated waste segregation machine designed to recover recyclables from municipal waste by efficiently separating materials into wet and dry components for recycling.





INNOVATIONS AND SOLUTIONS FOR SUSTAINABILITY AND ESG REPORTING



OUR VALUE PROPOSITION



Data-Driven Sustainability Reporting



Customized Reporting Frameworks



Integration of Circular Economy Practices



Comprehensive Waste Management Solutions



Enhanced Community Engagement



Support for Green Entrepreneurship

We help cities, businesses, and governments boostsustainability, optimize waste collection, reduce environmental impact, and track progress



Organizations' Background



Takataka ni Mali is a non-profit organization dedicated to addressing waste management challenges across Africa by promoting innovative, sustainable solutions and circular economy practices. Established to combat the growing environmental and socio-economic impacts of waste, the organization empowers communities through education, advocacy, and the development of scalable waste-to-value initiatives.

For more information on TakaTaka ni Mali Click Here.



ALN is an integrated alliance of the preeminent full service corporate law firms in 14 African countries and a regional office in UAE. Together, ALN firms provide clients with seamless practical and business-focused legal, advisory and transactional services across Africa. The ALN Academy provides unique legal training and expert exchange opportunities on the continent of Africa, blending technical and practical rigour, tempered with a degree of social consciousness that promotes smart action. It is set up as a separate body corporate with sustainability and social enterprise being core to its overall function.

For more information on ALN Click Here.



The Flipflopi Project Foundation is a circular economy project registered as a charitable foundation in Kenya that operates across East Africa to promote alternate uses of waste plastic and the viability of a circular economy in the Region. They adopt a full-systems approach to beating plastic pollution: inspiring plastic-reuse innovation, education through artivism, and influencing policy change to end single-use plastics. The Flipflopi Project is also a recipient of the UK-FCDO-UNCTAD SMEP Programme undertaking a project across the Lamu archipelago in northern Kenya to tackle marine ecosystem health and sustainability challenges by combining indigenous knowledge with modern innovation by constructing traditional sailing and motorised vessels from plastic waste.

For more information on Flipflopi Click **Here**.