



Urban Agenda Platform

The global platform for sharing progress, action and knowledge on the implementation of the New Urban Agenda to achieve sustainable urban development.

The Separation@Source programme: transitioning to a recycling economy

Region	Sub-Saharan Africa
Award Scheme	Shanghai Manual
Themes	Waste Management
Sustainable Development Goals	Goal 10 - Reduce inequality within and among countries Goal 11 - Make cities and human settlements inclusive, safe, resilient and sustainable Goal 12 - Ensure sustainable consumption and production patterns Goal 13 - Take urgent action to combat climate change and its impacts

Summary

Johannesburg, the economic powerhouse of Africa, is experiencing rapid population growth, with projections estimating around seven million residents by 2040.

Background and Objective

Johannesburg's waste crisis is driven by rapid urbanization and the depletion of landfill space, necessitating an urgent shift toward sustainable waste management practices. The Separation@Source programme was designed to minimize waste disposal through reuse, recycling, and recovery, shifting the city away from a traditional waste management system toward a resource-efficient circular economy. The initiative aligns with Johannesburg's waste minimization strategy, which seeks to divert 93% of urban waste from landfills by 2040. Additionally, the programme aims to create new employment opportunities in the green economy, integrating informal waste workers into a structured system that provides both economic empowerment and environmental benefits. A key focus is also placed on youth education, embedding recycling practices in daily life to cultivate long-term behavioural change.

Actions and Implementation

The roll-out of Separation@Source was driven by a multi-stakeholder approach involving municipal authorities, private sector actors, and local communities. The programme operates through two primary mechanisms: kerbside collection and drop-off site recycling. Households are provided with specialized recycling bags, and a dedicated waste collection system ensures recyclables are transported separately. Additionally, waste drop-off facilities have been established across the city, enabling residents to deposit dry recyclables in a convenient and accessible manner. To address construction waste, Pikitup introduced designated disposal sites for clean rubble at Marie Louise and Robinson Deep Landfills, helping curb illegal dumping and repurposing rubble for landfill cover material. Buy-back centres were also developed



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as a key economic driver, allowing waste reclaimers to sell sorted materials for profit, fostering employment and entrepreneurship in the recycling sector. Furthermore, the programme includes an educational component, with the Eco-Rangers initiative engaging schoolchildren through interactive characters that promote responsible waste management, ensuring that recycling behaviours become ingrained from an early age.

Outcomes and Impacts

infrastructure, diverted waste from landfills, and generated employment opportunities within Johannesburg's green economy. The initiative has empowered over 4,500 workers, supported 37 cooperatives, and enhanced waste collection efficiency through a fleet of more than 200 trucks. Additionally, the initiative has played a pivotal role in reducing illegal dumping by providing dedicated disposal sites for construction debris. Educational efforts have also yielded significant results, with the Eco-Rangers programme reaching hundreds of schools across Johannesburg, instilling a culture of environmental responsibility among young learners. By integrating both formal and informal waste collectors into structured economic opportunities, the initiative has helped bridge gaps in employment, particularly benefiting disadvantaged communities.

Sustainability and Scalability

The programme's success is built on sustained collaboration between municipal authorities, the private sector, and local communities. To ensure long-term sustainability, Johannesburg continues to invest in infrastructure, expand community engagement efforts, and strengthen policy frameworks. The programme has the potential to be scaled across South Africa and other cities facing similar waste management challenges, particularly in urban areas struggling with landfill limitations and inefficient recycling systems. Institutionalizing the initiative through municipal legislation and corporate partnerships will be crucial in driving its long-term viability and replication.

Gender and Social Inclusivity

The programme actively promotes inclusive economic development, particularly by creating opportunities for marginalized groups. Waste reclaimers, many of whom belong to disadvantaged communities, are integrated into the formal recycling economy, ensuring access to stable income and improved working conditions. Additionally, the initiative's accessibility measures, such as inclusive waste drop-off facilities, ensure that recycling is available to all residents, including children, women, and persons with disabilities. By fostering a participatory approach, the programme empowers diverse stakeholders to contribute to environmental sustainability while achieving social and economic benefits.



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Innovative Initiative

The Separation@Source programme exemplifies innovation in urban waste management by shifting from a linear “collect-and-dispose” model to a circular economy approach. The introduction of buy-back centres, the integration of informal waste workers, and the development of interactive educational tools such as the Eco-Rangers initiative are all key innovations that contribute to its success. Additionally, the dual collection model, which includes both community-based cooperatives and private service providers, ensures flexibility and efficiency in waste separation. These elements set a benchmark for cities looking to transition toward sustainable waste management systems.

Resources devoted to delivery

Johannesburg has allocated significant resources to support the successful implementation of the programme. Pikitup, as the city’s primary waste management entity, manages a fleet of over 200 trucks, supports 37 waste cooperatives, and operates 44 organic waste disposal sites. Partnerships with private sector stakeholders have also been instrumental, providing financial backing, technical expertise, and infrastructure development to facilitate the programme’s expansion. Moreover, community awareness campaigns and school engagement initiatives ensure widespread participation and adherence to recycling practices.

Conclusion

The Separation@Source programme is a transformative model for waste management, demonstrating how cities can leverage community participation, public-private collaboration, and educational outreach to achieve sustainable urban development goals. By successfully integrating circular economy principles, the initiative has enhanced waste diversion, created employment opportunities, and cultivated a recycling culture across Johannesburg. As the city moves toward its ambitious goal of diverting 93% of waste from landfills by 2040, the programme serves as a scalable and replicable blueprint for cities worldwide seeking to transition toward sustainable and inclusive waste management solutions.