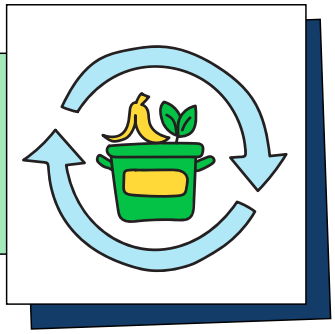
C40 SUSTAINABLE WASTE SYSTEMS ACCELERATOR



How cities are creating cleaner, equitable and climate-resilient cities through sustainable waste management

** We are pleased to share that the Pathway Towards Zero Waste Accelerator has been renamed the **C40 Sustainable Waste Systems Accelerator.** The new name recognises the Accelerator as an initiative in its own right, alongside the Towards Zero Waste Accelerator, and acknowledges different realities and opportunities faced by cities on the path to a zero-waste future. The C40 Sustainable Waste Systems Accelerator responds to the opportunity to cut short-term methane emissions from the high content of organic waste in signatory cities, while also taking inclusivity as a guiding principle.*

SIGNATORY CITIES

Accra, Amman, Buenos Aires, Curitiba, Dar es Salaam, Dhaka South, Durban/Ethekwini, Ekurhuleni, Fortaleza, Freetown, Nairobi, Quito, Rio de Janeiro and Tshwane

COMMITMENTS

1. **Provide citywide waste collection services**
2. **Treat at least 30% of organic waste**
3. **Reduce waste disposal emissions by at least 30%**

SUMMARY

Sustainable waste management accounts for up to 35% of overall municipal emissions in some cities, driven primarily by methane from organic waste, which is mostly disposed of at dumpsites and landfills. Targeting food waste and improving disposal practices, with action such as closing dumpsites, capturing landfill gas, and developing sanitary landfills, is critical for cities to achieve meaningful and lasting climate progress. Achieving universal waste collection is foundational, as no waste can be properly managed if it is not first collected. Expanding collection enables treatment and safe disposal. It also reduces illegal dumping, improves air quality, and makes cities cleaner and healthier for residents.

The C40 Sustainable Waste Systems Accelerator was launched in October 2022, with now **14 global signatory cities** in three regions – Latin America, Africa, and South and West Asia. The city of Fortaleza has recently signed up. It is designed to help cities improve waste management practices and reduce methane emissions. If delivered, the commitments could prevent the annual generation of one million tonnes of methane collectively.

Waste is a pressing issue in these regions, with waste volume forecasted to double by 2050. Yet these cities are united in their ambition to tackle the most harmful impacts of the waste sector and to build systems that are cleaner, more equitable, and climate-resilient.

Most cities are now reporting for the second time since the launch of the Accelerator in 2022. Progress is visible with waste collection coverage expanded, and most cities now reach 80–90% of coverage. Success has been greatest where cities adopted inclusive approaches, working with cooperatives, the informal sector, and residents in informal settlements.

Cities including **Dhaka South** and **Amman** are introducing their first organic treatment infrastructure. Composting pilots are underway in nearly all cities, large-scale infrastructure is being commissioned in some, and biodigesters are starting to be assessed in a range of cities currently. **Buenos Aires** stands out with infrastructure that is capable of treating more than the target of 30% of the city's organic waste.

Innovative solutions are also taking root, from briquette production in **Freetown** to the use of black soldier fly larvae for organic waste treatment in **Dar es Salaam**.

Signatory cities are prioritising larger waste generators such as schools, businesses, and markets, where organic waste streams are more homogeneous and collected in bulk, reducing costs and logistical barriers for treatment. These sites are becoming testing grounds to understand where facilities can be located, how responsibilities can be shared between generators and municipalities, and what role the private sector can play in treatment. In cities including **Curitiba** and **Tshwane**, small and large public markets are emerging as common entry points. Increasing the treatment of organic waste is proving critical to ease pressure on landfills, many of which are nearing capacity or lack adequate technology. Cities are introducing soil covering, improving disposal practices, and capturing landfill gas. As these projects scale, they are expected to deliver substantial emissions reductions in the coming years.

Overall, cities have reported 134 actions across the three commitments. The first two commitments around collection and organic treatment account for the majority of these actions, while those on the third commitment, reducing emissions from waste disposal, often involve large-scale projects such as the decommissioning of dumpsites. The actions cities are taking on the C40 Sustainable Waste Systems Accelerator are improving daily life by creating cleaner neighbourhoods, reducing air pollution and flooding, and making communities more liveable. They are also creating new employment opportunities, better working conditions for informal workers, and more inclusive access to services, alongside environmental improvemen ts that benefit the most vulnerable communities. For example, **Accra** is implementing a women-led source separation and compost project in partnership with People's Dialogue. Market vendors and women in low income communities and informal settlements are trained in source separation and composting. Together, these steps are laying the foundation for cleaner, healthier, and more resilient cities.

IMPACT

100%

of signatory cities that reported are on track to meet their commitments

7 cities

have already achieved the target of universal collection, while 3 have advanced towards the target since signing in 2022

134 actions

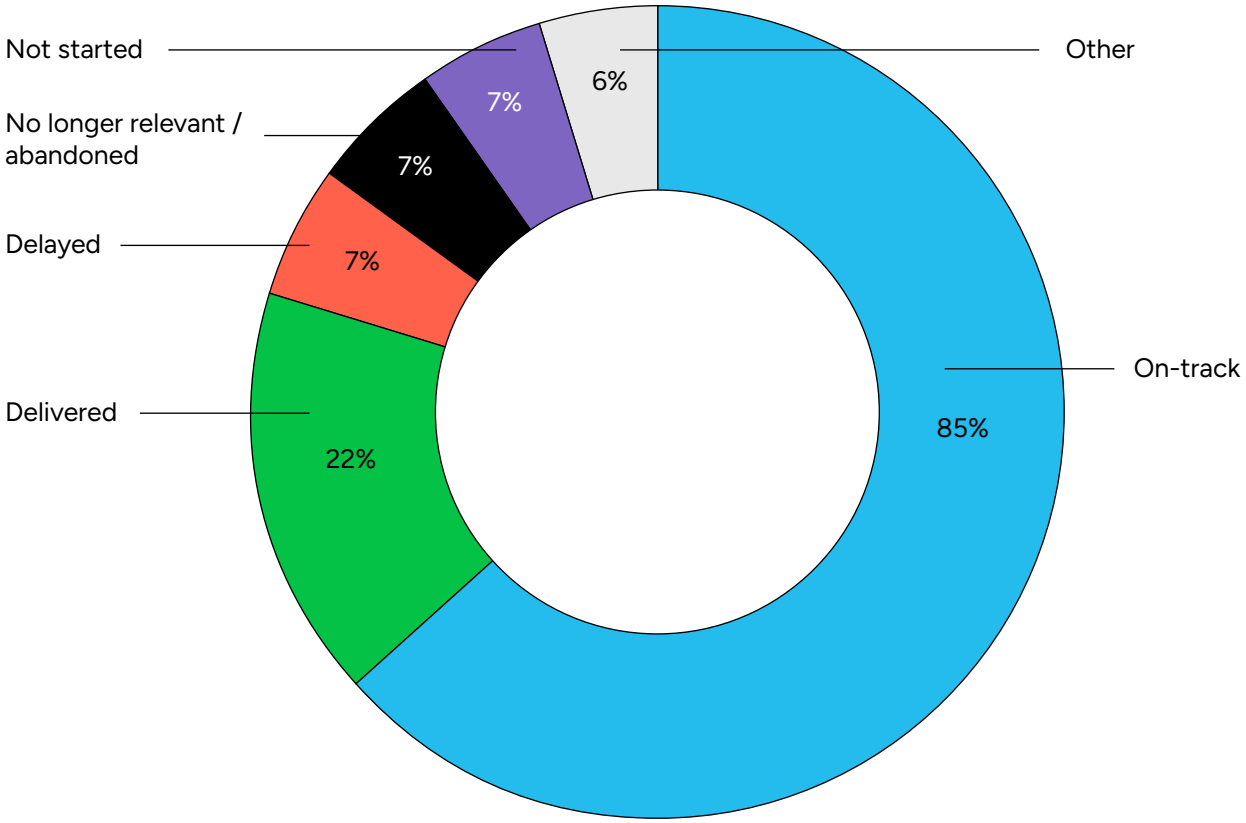
have been developed by cities since signing, of which 107 are on track or delivered

Buenos Aires

as the first out of 13 reporting cities has already surpassed 30% of organics treatment ahead of the target date of 2030

ACTIONS PER COMMITMENT

CITY ACTIONS BY STATUS



TURNING COMMITMENT INTO ACTION

Commitment 1: Provide timely city-wide waste collection services

Freetown has restructured its entire waste system by dividing the city into eight collection blocks managed by licensed private companies, supported by new by-laws requiring household registration and digital payment systems. Upgraded transfer stations are being developed as hubs for sorting, composting, and recycling, creating jobs and improving service reliability.

Quito has achieved near-universal municipal waste collection, reaching 98.5% coverage through a wide range of services. To close the remaining gap in rural and hard-to-access areas, the city is rolling out a new management model that decentralises services, upgrades equipment, strengthens infrastructure, and fosters innovation through strategic partnerships.

Commitment 2: Treat at least 30% of organic waste

Buenos Aires is installing a composting plant with a capacity of 78,000 tons per year, to process the waste produced by all large generators located within the city limits. Installation is expected by 2030. A pre-feasibility study was conducted in early 2025, and work will begin on a feasibility study by the end of 2025, which will be financed by the Interamerican Development Bank.

Curitiba has launched its Household Composting Programme (PMUC), implemented through Ecopoints strategically located throughout the city, facilitating residents' access to organic waste drop-off. The programme is also expanding composting sites, providing additional infrastructure to support organic waste treatment and segregation.

Commitment 3: Reduce waste disposal emissions by at least 30%

Rio de Janeiro is already converting over 75% of landfill biogas into clean energy and biomethane, which fuels vehicles and industry, while excess gas is flared to reduce methane emissions. To further decarbonise, the city is introducing biomethane- and natural gas-powered waste collection trucks in 2025 and monitoring methane emissions via satellite imaging with the Netherlands Institute for Space Research.

Durban/eThekwini aims to enhance its landfill gas programmes by improving existing gas recovery operations at Bisasar Road and Mariannhill, capturing and converting methane into electricity. The city is also extracting and treating gas at the newer Buffelsdraai site, capping and rehabilitating closed landfills to mitigate fugitive emissions. Feasibility studies are underway to explore upgrading the captured landfill gas into biomethane for use as vehicle fuel, particularly for municipal fleets.

INSPIRATION

Accra drew inspiration from the Zero Waste Street concept piloted in communities in **Paris**, where households are mobilised to practice source separation and composting, leading to the implementation of a Zero Waste Street in Accra as well.

COLLABORATION

Ekurhuleni partners with OXFAM South Africa (SA) to advance waste minimisation, recycling, and separation at source, as well as to establish recycling centres. OXFAM SA also supports capacity-building initiatives targeting youth and corporations. Youth organisations run education and awareness campaigns, which the city supports with resources and active participation. The city also collaborates with government departments, such as the Department of Forestry, Fisheries and the Environment, and the Gauteng Department of Environment, alongside community-based enterprises, Producer Responsibility Organisations (PROs), and the private sector.

Tshwane has collaborated with the private sector to support green waste diversion at the city-owned garden sites. Previously sent to landfill, the material is now shredded and picked up for further processing as compost by the city's partners. Currently, five sites are participating in the diversion programme with plans to expand to two remaining sites.

EQUITY AND INCLUSION

Freetown City Council (FCC) has implemented a comprehensive reform of its waste management system, creating substantial employment opportunities for youth and women. Under the new system, over 1,200 youth will be employed as waste collectors through contracted waste management companies, alongside over 200 administrative and support roles across eight waste collection blocks. A new digital waste management platform, including mobile and accessible payment systems, will engage youth as digital ambassadors and mobile money agents, generating sustainable income streams. Meanwhile, six transfer stations serving as material recovery facilities and composting sites, will expand women's participation in the green economy through waste sorting, composting, and plastic recovery. These initiatives are part of FCC's broader commitment to transforming the city's waste management sector, fostering cleaner communities and a more sustainable urban environment.

Rio de Janeiro launched its first municipal food bank at Ecoparque do Caju in 2024, implemented by the city's Municipal Urban Cleaning Company (Comlurb) with support from the Secretariat of Social Assistance. The initiative addresses food and nutritional insecurity while reducing food waste, serving over 250 socially vulnerable residents in the Caju neighbourhood, one of the city's lowest healthy diet indicator (HDI) areas. Each month, more than 3,500kg of fruits and vegetables are collected and redistributed with support from the Zona Sul supermarket chain, combining social support with environmental responsibility, and fostering community resilience.

CHALLENGES

Cities in the C40 Sustainable Waste Systems Accelerator face a set of common challenges. Financial constraints limit investment in infrastructure such as composting facilities, biodigesters, and recycling plants. Access to financial markets is often difficult, and budgets rarely allow for upfront project development steps such as feasibility studies. Smaller projects face an additional barrier: markets for outputs like compost or energy usually only become viable at a larger scale, making decentralised solutions harder to sustain, even though they have a range of benefits. Even when financing is secured, finding the right financial models, for instance balancing user fees against potential revenue from biogas or energy recovery, remains a challenge. Cities also highlight gaps in technical capacity to design, operate, and monitor large-scale treatment systems. Regulatory frameworks are often outdated, failing to mandate separate collection or to clearly define the responsibilities of different actors. Difficulties in data collection or usage, or also limited citizen engagement such as waste separation, further complicate progress. Land scarcity and inadequate collection infrastructure also create operational bottlenecks.

Addressing these barriers, for example through innovative financial models that blend public, private, and community resources, or stronger citizen engagement in areas such as source separation, creates an opportunity to unlock the full potential of cities' sustainable waste strategies. By tackling these challenges head-on, cities can not only accelerate progress toward their zero waste goals, but also deliver broader co-benefits, from green job creation and local economic development to healthier, more resilient communities.

HOW CITIES ARE STEPPING UP THEIR ACTION

The priority for the next five years is to scale up their pilot schemes, while also developing markets for compost, digestate, and biogas, and strengthening partnerships with local enterprises that can put recovered materials to productive use.

To sustain momentum, cities will need targeted technical assistance, innovative financing models, and clear regulatory frameworks, for example to mandate separation and treatment. Embedding these measures into laws, budgets, and institutions will be critical to ensuring that today's pilots evolve into permanent, resilient waste management systems capable of delivering the 2030 targets.

FUTURE ACTION

Dar es Salaam's Green City Market Road Map 2025 is designed to guide efforts toward treating at least 30% of organic waste by 2030. The city has allocated budget to scale up diversion facilities in 2025–26, with preparatory steps such as identifying suitable sites already underway.

Dhaka South is aiming to capture 100–120 tons of raw waste in the new composting plant at Matuail (which will produce approximately 20 tons of compost per day). The plant infrastructure is complete, and operations are expected to begin by the end of 2025.