

Waste Management Outlook for Latin America and the Caribbean

Summary for Policy-Makers



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Key Facts

1 kg/day

of waste generated on average
by each inhabitant in the region

541,000 tons/day

of municipal waste are generated in
Latin America and the Caribbean, a
figure that will increase at least

25% by the year 2050

40 Million

people lack access to waste collection

145,000 tons/day

of waste are still disposed in
open dumpsites, including

17,000 tons/day

of plastic waste.

50%

of municipal waste is organic

90%

of waste are not utilized

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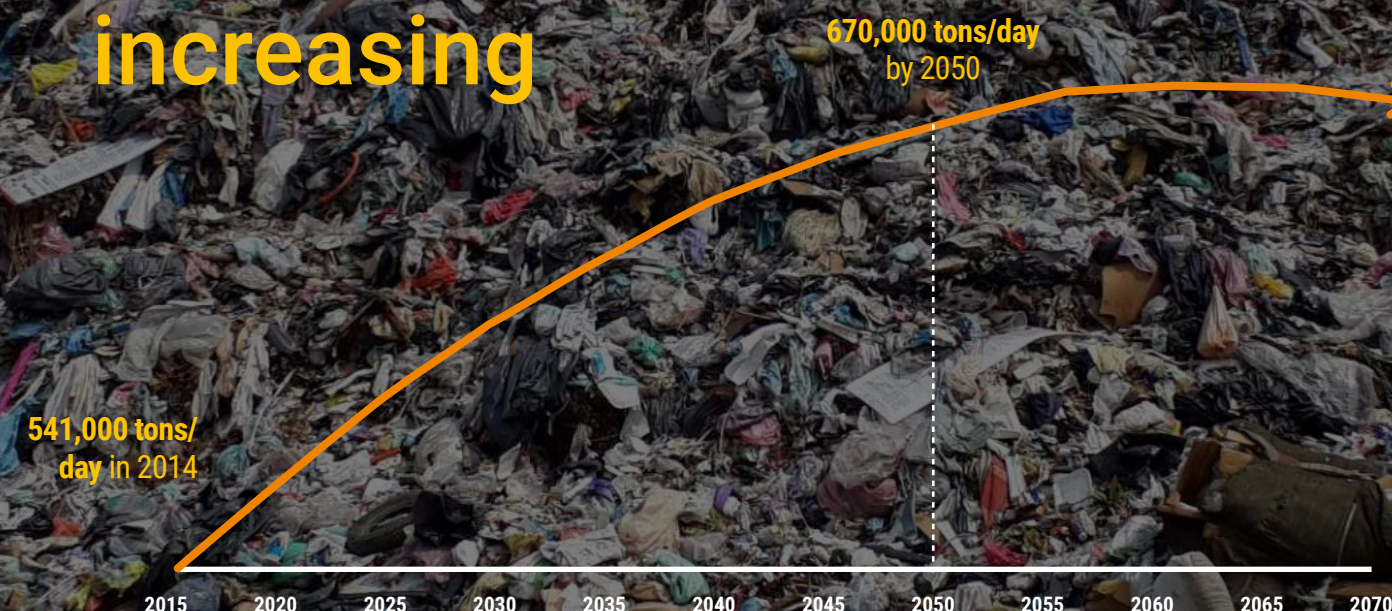
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Key Messages

Waste generation in Latin America and the Caribbean is steadily increasing



Based on the information gathered, it is estimated that in 2014 the generation of municipal waste in Latin America and the Caribbean was

541,000 tons/day.

Under the current generation rate (regional average of 1.04 Kg/inhabitant-day), by the year 2050, this figure could reach

671,000 tons/day.

Global phenomena such as population growth, the increasing trend towards urbanisation (80 % in Latin America and the Caribbean), economic growth, a significant amount of people lifting out of poverty and joining an emerging middle class,

and clearly unsustainable consumption and production patterns linked to linear economics, are some of the drivers leading to the persistent increase of waste generation in the region.



The study also reveals the direct relation between per capita income and waste generation, which suggests that increase in the latter could be possibly higher.

A regular and reliable waste collection service for the entire population is required

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Countries in the region show a quantitative and qualitative improvement in the collection of generated waste, **covering 93 % of the population**, being the municipal direct service the most common modality of service. Coverage may significantly vary between countries in the region and according to the size of cities.

Nevertheless, on a regional level, over **35,000 tons per day** remain uncollected, which has an impact on more than **40 million people (7 %)**.

This affects the population in marginal areas –usually impoverished– and some rural areas.



To overcome these deficiencies, a 100% collection rate must be reached in all generated waste streams, both in rural and urban areas.

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Open dumpsites is a practice that must be eliminated

Although proper final disposal of solid waste has significantly improved over the past decades in Latin America and the Caribbean, approximately

145,000 ton/day

end up in dumpsites, are burned or are otherwise inadequately disposed of. This is equivalent to

27%

of the regional population, or to the waste generated by

170 million people.

These practices create **serious health risks**, both for people who work at the dump sites, as well as the communities around them.

At the same time, this has resulted in **severe environmental impacts**, including water pollution, emission of toxic and greenhouse gases, as well as soil pollution, which in turn affect production activity, as well as the tourism industry.



For this reason, it is essential to progressively phase-out open dump sites, and replace them with effective management practices and final waste disposal methods.

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Organic waste: ranking first in generation, yet last in management

Organic waste represents, on average, **50%** of municipal waste in the countries of the region.

The lack of specific treatment options generates greenhouse gases and leachates, in addition to reducing the quality of recyclable products and making this process more difficult.



Therefore, source separation should be promoted, as well as separate collection systems for dry and organic wastes and their proper treatment. Simultaneously, a gradual ban of dumping biodegradable waste on sanitary landfills should be considered, while at the same time encouraging its utilization, for example, through composting.

Any strategy should firstly consider the options to **reducing the amount of food waste** that is currently being generated.

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It is necessary to accelerate the transition towards a circular economy

Recycling rates in Latin America and the Caribbean are still low (between 1-20%), which means that approximately

90% of municipal waste ends up in landfills.



This situation contrasts with the widely accepted waste management hierarchy, which places prevention and recovery as top priorities.

Bridging the traditional “use and toss” scheme, inherited from linear economic systems, requires a paradigm shift towards a circular economy, based on replicating nature’s biological mechanisms by introducing the idea of an industrial metabolism.

This must be based on thinking and designing products so that after one use they can be reused or become a secondary raw material for a new industrial process or a source of alternative energy, thus displacing fossil fuels.



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Special waste streams are not managed adequately

Some **waste streams** –particularly hazardous wastes, hospital waste, construction and demolition waste, food waste and electrical and electronic equipment waste– are not properly treated. In some cases, they are not even duly inventoried and characterized.

Some progress has been made in adopting specific legislation for these types of waste, but due to lack of control or absence of treatment plants, an undetermined fraction is not properly managed, which frequently ends up in dumpsites, with risky and improper handling processes.



It is therefore necessary to strengthen and ensure the enforcement of the legal framework, to establish specific programmes for these streams, and to encourage the installation of adequate treatment plants.

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Coherent and effective governance models are required to ensure integrated waste management

Waste management governance implies having a system that aims at the **best possible management** for a given context. The system should also determine its rules or principles and the tools needed to achieve set objectives.



The countries in the region are known for their weak institutional operation, partly due to overlapping regulations that grant concurrent jurisdiction to different sections within the government and make environmental regulations hard to apply.

From a legislative perspective, an important step would be to clarify the concept of **circular economy** as the backbone of legal systems.

The same criteria would include the **extended producer responsibility principle**, essential to the transition process into the new paradigm. This principle can already be observed in about one third of the countries in the region, yet much work is still to be done in order to effectively consolidate it in regulations and in its practical application.

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Progress is needed in the formalization and recognition of informal recycling



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The substantial presence of informal **waste pickers** across Latin America and the Caribbean region is worth noticing. Although official data is not available, it is acknowledged that the work of waste pickers increases recycling rates in the region significantly.



Despite having been recognized by the legal system in several countries in the region, professionalization and formalization of the informal sector is yet to take place. This would contribute to productivity, and especially, it would promote the protection of health and children, as well as the access to dignified employment.

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Encourage effective communication and participation of individuals at all levels of society is a priority

Access to information and citizen participation in decision-making processes is still limited in the region, despite its increased legal recognition. Additionally, communication efforts have been generally isolated and are not backed by a robust information system.



Ensuring the success of waste management systems requires the engagement of different stakeholders, as well education and communication efforts that will encourage behavioral changes.

Therefore, it is necessary to ensure the participation of all stakeholders through public enquiries at national and local levels, to establish partnerships with strategic actors such as producers and service providers, to carry out efficient and sustained dissemination campaigns, and to articulate environmental education with waste management policies, among other measures.

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Promoting investment and economic sustainability in the sector is essential

Financing is vital for the sustainability of waste management schemes. This is one of the weaknesses that needs to be overcome, as municipalities in the region tend to ignore **direct and indirect management costs**, investment is insufficient and service charging systems are flawed.



Also, budget allocation for management must compete with other resource-consuming priorities (health, poverty alleviation, drinking water supply, infrastructure, etc.).

Furthermore, for an adequate economic balance, the cost of inaction in terms of health, environmental impact and development must also be considered, as it may range from five to ten times higher than the cost of sound waste management.

It is advisable to consider a set of tools and strategies, such as **regionalisation** in the provision of services, in order to create economies of scale, to establish **rates or fees** in accordance with the population's ability to pay, or to promote the establishment of **public-private partnerships**.

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Generating data and information to understand and improve waste management systems



The lack of information in most countries in the region is of key importance.

Creating **systematic collection, processing and analysis of data** is crucial for supporting decision-



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making processes, as well as evaluation, control and improvement of waste management systems.

Information on generation and collection of municipal solid waste is generally available, but there are difficulties to integrate data between national and local levels, as well as between countries; this is due to the lack of harmonization of waste generation and management indicators.

This is particularly urgent in waste streams such as hazardous wastes, hospital waste, and construction and demolition waste, among others.

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The sound management of waste remains as one of the main sustainability challenges in Latin America and the Caribbean

Waste management policies and systems must answer to a complex reality, taking into account the urgent need to prevent impacts associated with poor management practices which dominate the region, while maximizing the benefits on health and the environment which result from a sound waste management model and the efficient use of resources.



To this end, it is necessary that governments in Latin America and the Caribbean give adequate political priority to this issue.

This political decision implies the design and implementation of sound public policies and strategies, the creation of institutional support with proper legal frameworks, the use of duly financed available technologies with social inclusion and participation, and the use of management indicators and education and dissemination plans which contribute to its integration and sustainability.

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Waste Management Outlook for Latin America and the Caribbean

The Waste Management Outlook for Latin America and the Caribbean provides a regional overview of the main trends and challenges relating to waste management, thus serving as a guide for the design and implementation of policies and programs in the countries of the region. The document, which answers to the mandate of the Forum of Ministers of Environment of Latin America and the Caribbean, as well as the United Nations Environment Assembly, gathers the necessary elements to understand the current situation in the region, while also analyzing the models and trends in the governance and financing of waste management. To this end, information provided by the countries of the region was compiled and analyzed, including a set of case studies. This document summarizes the main findings and key messages of the report, for consideration of decision-makers.



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