



Articulating social and environmental policy for the post-COVID-19 recovery.

# Waste management as an essential service in Latin America and the Caribbean

## POLICY BRIEF

### Providing a sound environmental response to the emergency

Governments need to consider waste management as an urgent and essential public service to respond to emergencies such as the COVID-19 outbreak, in order to minimize possible secondary impacts upon health and the environment. Response measures need to consider all types of waste, including healthcare and household waste.

During such an outbreak, many types of additional healthcare and hazardous waste are generated, including infected masks, gloves and other protective equipment. Unsound management of this waste could cause unforeseen “knock-on” effects on human health and the environment. The safe handling and final disposal of this waste is therefore a vital element in an effective emergency response.

### Waste management as a key sector to “build back better”

During the COVID-19 outbreak the waste sector has proved to be an essential service to respond to the emergency and avoid secondary impacts on health and environment. However, significant weaknesses in waste treatment facilities and emergency preparedness have also been evidenced in the region of Latin America and the Caribbean (LAC). By addressing these gaps, the waste sector can contribute in different forms to the recovery phase, including:

-  • Increase resilience and preparedness to future emergencies
-  • Reduce risks on health and environment
-  • Contribute to economic growth and green employment
-  • Increase efficiency in the use of limited resources



Waste management is a recognized priority of action by the Forum of Ministers of Environment of Latin America and the Caribbean. This brief describes **five key areas of action** in relation to waste management that can be considered by LAC countries to “build back better” during the recovery phase.

## 1 Phase-out dumpsites

The progressive closure of dumpsites is an imperative in the Latin American and Caribbean region, where about 145,000 tons of municipal waste (30% of total generation) end up in dumpsites, are burned or are otherwise inadequately disposed of.<sup>1</sup> These practices create serious health risks, both for people who work informally at the dumpsites as well as the communities around them. At the same time, this results in severe environmental impacts, including water pollution, emission of toxic and greenhouse pollutants, as well as soil pollution. This can be worsened by the co-disposal and burning of common waste with hazardous and infectious waste, which is likely to happen in times of crises and sudden increase of generated waste. Air pollution from open burning of waste and fires at dumpsites aggravates the health condition of the population and makes them more vulnerable to viruses such as the SARS-CoV-2.

For these reasons, **it is essential to accelerate the phase-out of dumpsites and replace them with**

**effective management practices and sound waste disposal methods.** The cost of inaction in terms of health, environmental impact and development can be up to five to ten times higher than the cost of sound waste management. Large interventions to close dumpsites are already taking place in the region, like the closure of the Estrutural dumpsite in Brasilia, the second largest in the world.

## 2 Increase the capacity of healthcare waste treatment

In many countries of Latin America and the Caribbean there is a lack of facilities to ensure the sound management of healthcare waste. The investment in core infrastructure to deal with wastes produced by outbreaks such as COVID-19 has been low on the development agenda for many years. The resultant lack of access to state-of-the-art technology to effectively treat medical waste is posing significant challenges to many countries. The current outbreak should be seen as a warning that **more basic capacity and understanding of best practices to deal with healthcare waste such as COVID-19 contaminated materials or future similar disease outbreaks is urgently needed.** While specific legislation exists in several countries, this is not properly enforced. In some countries, early regulatory developments in the 90s, allowed the progressive installation of medical waste treatment capacity, like in Mexico, which is proving now critical to

1. UNEP (2018) Waste Management Outlook for Latin America and the Caribbean.

respond to the increased amount of waste. Initial efforts need to consider inventorying and characterization of healthcare waste generation, and assessment of current treatment capacity and management practices, followed by mobilization of financial resources to develop new infrastructure and provision of technical assistance.

### 3 Strengthen the resilience and preparedness of the waste sector

During the COVID-19 outbreak, the weaknesses of the waste systems have been evidenced in many countries, as well as the lack of preparedness to deal with increased volumes of medical waste and to face unforeseen challenges to maintain operations while protecting the health of workers. At the same time, the role of waste management and its personnel as an essential service during the emergency has been widely recognized by citizens and authorities. **It is important that such recognition translates into a strengthened waste management system, with corresponding investments and financial sustainability measures.**

A more efficient waste management system is needed, with optimized collection routes, equipment adapted to the different urban fabrics, ensuring that 100% of the population has regular access to the basic collection service (in the LAC region this affects to more than 40 million people, particularly in marginal and rural areas). The response capacity of the system, including for collection, transfer, recovery and disposal of waste, should foresee disruptive scenarios with sudden increases of waste amounts or variations on waste composition and sources, such as during emergency situations. Also, the segregation, collection, treatment and final disposal circuits need to be clearly differentiated between hazardous or infectious waste from household or similar waste. Waste workers must have adequate personnel protection equipment, ensuring appropriate training and sufficient stocks.

The **national emergency preparedness and response plans also need to be further developed to consider the inclusion of waste management.** Currently, disaster or emergency waste management barely features in the national policy and planning documents of environmental or disaster management authorities.



Photo: Gustavo Solorzano.





Photo: Jordi Pon · UNEP

## 4 Prioritize waste prevention and circular approaches

In accordance with the related international agreements and the waste regulatory frameworks and policies already in place in most LAC countries, the proper application of the waste hierarchy, with an emphasis on **waste prevention and recycling should be promoted during the post-COVID19 recovery phase, considering the practical socio-economic and environmental benefits of this approach.** Recycling rates in LAC countries are generally below 10%, therefore there is an enormous potential to increase the circularity and efficiency in the recovery of valuable resources. Particular attention should be given to separate collection and treatment of organic waste, which in the region represents as an average 50% of waste composition.

This represents also an opportunity to embrace and accelerate the implementation of circular economy models and redefine value of materials, which will result in a **significant reduction of waste generation** (through eco-design, designing out waste, expansion of products life span, remanufacturing, repairing,

reusing, recycling, etc.). Re-thinking how we manufacture industrial products and managing them in a correct way at the end of their life cycle, could cut industrial waste between 80 and 99 per cent in some sectors, as well as GHG emissions.<sup>2</sup> Thus, waste prevention and diversion of waste from landfills will not only increase the resource efficiency of LAC economies but will also enhance the resilience of the waste sector during emergencies, when treatment and final disposal facilities are over stretched. Also, **boosting the recycling sector provides an opportunity to create green jobs**, above final disposal operations.<sup>3</sup> It is also important to accelerate initiatives and programmes for the **recognition and integration of informal waste pickers** (up to 4 million people in the LAC region, many of them carrying out its activities at final disposal sites),<sup>4</sup> who generally subsist on a daily income from recovered materials, including many women, and are therefore highly vulnerable to restrictions on this activity in the context of the pandemic. Strategies will need to be explored to prepare the recycling sector to potential future outbreaks, both to protect workers and to secure the supply of essential secondary raw materials to the industrial sector.

2. International Resource Panel (2018) Re-thinking production to boost circular economies.

3. A life-cycle approach to waste could create 9 to 25 million additional jobs globally (McKinsey & Company, 2011).

4. BID (2017) Avances y desafíos para el reciclaje inclusivo: evaluación de 12 ciudades de América Latina y el Caribe.

## 5 Promote an enabling framework for sustainable waste management

Preparing the waste sector during the recovery phase involves also improvements to the regulatory and institutional frameworks, in order to promote integrated, coherent and effective governance models and enforcement mechanisms. Financing is also vital for the sustainability of waste management schemes. The on-going processes in several LAC countries to update waste management legislation and the fiscal stimulus packages can provide an opportunity to integrate the waste sector into a transformational and sustainable recovery process with the creation of green jobs.

It will be important to identify and promote technological solutions tailored to local conditions, by engaging national technology and research centres, and promoting public-private partnerships and regional and international cooperation. Suitable solutions and decision-making to improve the waste sector will also require the establishment of robust and accessible information systems, for the systematic collection and analysis of harmonized data for the different waste streams, including medical waste. Capacity building, education and awareness raising will be also fundamental enabling elements to be considered.

### How the UN Environment Programme can support LAC countries?

As part of the UN System, UNEP provides technical support and advice in the following:

-  • Waste emergency preparedness and response plans.
-  • Waste management and circular economy strategies and plans.
-  • Knowledge products (Waste Outlooks, technical guidelines).
-  • Capacity building and awareness-raising activities.
-  • Facilitate regional coordination and cooperation.

For more information:

 [jordi.pon@un.org](mailto:jordi.pon@un.org)



Photo: JUA KALI LTD.