Extended Producer Responsibility in Mexico: A Human Rights Perspective

Adalberto Méndez / June, 2023



About this Brief

This brief is one of a series of case studies examining Extended Producer Responsibility (EPR) Systems in various locations around the globe. Produced by the International Alliance of Waste Pickers (IAWP) and WIEGO, the series looks at how the growing adoption of EPR policies and systems worldwide can either threaten or improve living standards and conditions for workers in informal employment who collect, sort, transport, and recycle waste. Waste pickers have historically been vital players in recycling and reuse.

EPR systems come in many shapes and forms and can occasionally cover a wide range of materials. Their primary purpose is to hold producers in the value chain responsible for the environmental and economic cost of the packaging and products they put into the market. Additionally, EPR can contribute to recognizing informal workers' roles and the need to include them. Some systems are mandatory policies, while others are voluntary initiatives led by companies or consortiums.

Waste is not just an environmental issue but a high-value commodity. EPR systems can be controversial for waste pickers because they shift power and economic profit to producers or other waste sector players, often introducing new actors who compete for materials. However, in places where waste pickers are organized, EPR can be a positive disruption that has the potential to finance new or existing waste picker activities. Thus, EPR can present risks and opportunities for informal waste pickers and their organizations.

Without a clear understanding of EPR and its impacts in different contexts, it can be difficult for waste pickers and their organizations to know what to demand when an EPR system is being proposed or introduced in policy discussions or how an existing system should be changed without infringing their rights. Equally important is the pressing need to incorporate the IAWP's Principles—which are examined throughout this brief.

The case study series aims to close that knowledge gap by sharing on-the-ground, lived experiences of local waste pickers in informal employment and their organizations in places where some form of EPR exists or is about to be implemented. Each study concludes with recommendations for improving EPR systems to accommodate waste picker integration better.

Cover photos:

Above – Although waste pickers' work is essential because of its environmental, social, and economic impact, these informal workers are not recognized as such by the municipality or by the companies that benefit from

Below - Mexico Citywaste pickers, grossly miscalled "volunteers," are the first link in the city's waste management chain. They generally gather mixed waste by manually sweeping the streets and collecting waste door to door. They take charge of separating recyclables from other waste to sell them.

Backcover: At final disposal sites, waste pickers can still recover and aggregate large amounts of materials, which is convenient for big recycling and bottling companies—some of which buy materials directly from waste pickers at these sites.

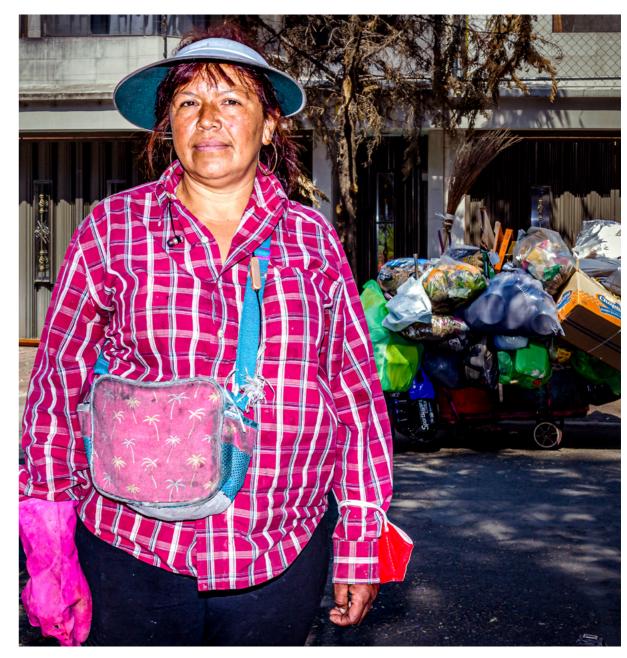
Photo credit: Angie Queupumil and Alto Sotelo.



Acknowledgments

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At least 10,000 waste pickers are estimated to work in the city but have never been counted. People call their activity waste "pre-picking" (prepepena), and the Mexico City Solid Waste Inventory has recognized that they recover thousands of tons of recyclable materials.

Photo credit: Angie Queupumil and Alto Sotelo



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Summary

Mexico City is estimated to be the second urban waste producer in the world and the first in Latin America, generating around 13,000 metric tons of waste daily. City authorities still need to guarantee labor rights and social security for approximately 10,000 informal workers participating in sanitation and waste picking.

Although the legal, regulatory framework could seem adequate to protect the rights of this vulnerable group—because it grants all levels of government (Municipalities, States, and the Federation) equal powers regarding sanitation and waste picking, especially in Mexico City—the reality shows otherwise. Not only does it fall short, but it also fails to coordinate existing efforts despite the recent adoption of the local Circular Economy Act. While the legal framework is still deficient, it contains enough elements that would enable the implementation of EPR systems, favoring their regulation with the potential of guaranteeing fair conditions for the city's waste pickers in informal employment.

Admittedly, there are different regulatory bills in Mexico with a national scope (such as the Circular Economy Act and the Corporate Responsibility and Due Diligence Act) that—if passed—would open the door to the regulation of EPR systems. This offers a unique opportunity to integrate informal waste pickers effectively. If included, waste pickers would be linked to Responsible Business Conduct and inform potential—yet necessary—joint responsibility standards for the State and the private sector. The aim is to guarantee informal waste pickers' human, labor, and social rights.

Finally, this brief helps understand convergences, benefits, barriers, and other approaches, opportunities, and challenges for regulating EPR systems in Mexico City. The Position on EPR by the International Alliance of Waste Pickers, formerly Global Rec, sheds light on this issue, on par with recent regulatory standards of International Law regarding business and human rights.







Mexico City authorities call waste pickers "volunteers" to deny the existing employment relationship stemming from their public service. Pushed by poverty and unemployment, waste pickers accept exploitation. Still, they are at the origin of a large share of the waste recycled in the city.

Photo credit: Angie Queupumil and Alto Sotelo.







Waste Collection in Mexico

Mexico's National Institute of Statistics and Geography (INEGI by its name in Spanish) estimates that 107,056 metric tons of waste are collected daily, i.e., 854 grams per person in the country (figures from 2018). The main waste generators are households, buildings, streets, avenues, yards, and parks. Nevertheless, 8 percent of the country's municipalities lack waste collection services, which pushes people to throw out litter in open dumpsites (INEGI, 2019)1.

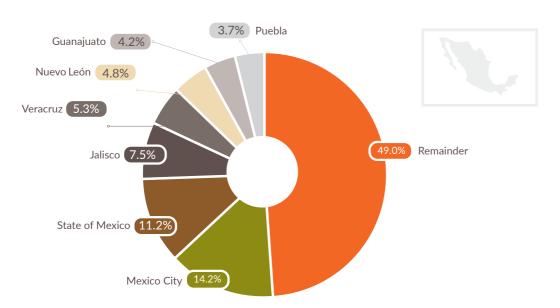


Figure 1. Main Waste Generating States in Mexico. Seven States generate over half of the country's waste

Source: INEGI. National Census of Municipal Governments and Mexico City Districts, 2019.

Mexico has waste sorting and processing sites, usually managed by municipalitiesthough not all municipalities have one—that accept all kinds of materials to sort, recycle and reuse. In Mexico City, these activities are performed mainly by informal waste pickers, but their crucial contribution is not acknowledged².

According to INEGI, the most up-to-date source available, in 2018, three materials made it to the top in the sorting list: plastics, first; iron, metal sheet, and steel, second; and paper and cardboard, third. PET and other materials, such as aluminum, copper, bronze, lead, electrical and electronic waste, and yard waste, followed in the list; and glass came last.



Given Mexico City's colossal waste production, the local government must employ more sanitation and waste collection workers. The local Secretariat of the Environment (SEDEMA) estimates that the city has one garbage collector for every 1,183 inhabitants and one waste collection truck for every 3,469 inhabitants (2019 figures). "Floating workers"—people commuting from neighboring States to work in the city—are omitted even though they comprise most of the sanitation system⁴, Unfortunately, information about waste management is scarce and unreliable (Altamirano and Quiroz 2021).

According to some estimates, Mexico City generates around 12,998 metric tons of solid waste daily, of which households generate 48 percent, businesses 26 percent, and services 14 percent. The city's Solid Waste Inventory, published annually by the SEDEMA, compiles waste production and management data, describing in detail the participation of so-called volunteers [informal waste pickers] and their importance⁵. Its 2018 edition even admits that "people without a formal contract with the government, better known as volunteers, support waste collection—they recover recyclable materials and obtain revenue by selling them" (p. 39)6.

The 2020 inventory edition estimates that approximately 12,690 workers were engaged in urban sanitation and waste collection. It classifies them as garbage collectors, helpers, supervisors, and volunteers. The city government recorded that 1.4 percent of these workers were active volunteers but warned against the figure because it came from reports provided by the districts. Only four of the city's 16 districts-Alvaro Obregón, Miguel Hidalgo, Tláhuac, and Xochimilco—reported having volunteers. Álvaro Obregón shared a rough estimate, while Miguel Hidalgo said that, though volunteers work in the district, no registry or rough estimate was available (SEDEMA 2020)⁷, The district also indicated that its authorities have not calculated exact figures for this occupationa group. Knowing exactly how many informally employed people work in the city's sanitation and waste collection services is impossible⁸.

- SEDEMA, 2018. Inventory of Solid Waste in Mexico City. Page 39. Available at: https://www.sedema.cdmx.gob.mx/storage/app/media/DGCPCA/IRS-2018.pdf
- SEDEMA, 2020. Inventory of Solid Waste in Mexico City. Pages 29 and 31. Available at: https://www.sedema.cdmx.gob.mx/storage/app/media/DGCPCA/IRS 2020 vf anexos.pdf
- We notice a significant inconsistency when comparing the voluntary workers reported in Mexico City's Solid Waste Inventories in 2018 and 2020. In 2018, there were almost 4,141 volunteers for street sweeping and waste collection, while in 2019 and 2020, the reported figures were 1,249 and 180 people, respectively. There should be an explanation for why these figures decreased or how SEDEMA obtained them. However, the three local government documents admit having no exact figure for the number of people participating in these tasks. They argue that the figures are obtained from the districts' reports but contain approximate or non-standardized figures.







INEGI. 2019. National Census of Municipal Governments and Mexico City's Districts. CONAPO. Projections on the Population of Mexico and each State, 2016-2050. Available at: https://cuentame.inegi.org.mx/territorio/ambiente/ basura.aspx?tema=T

For instance, in 2021, the district of Azcapotzalco opened a Transfer Station and Sorting Plant, the largest in Latin America, which unfortunately excluded hundreds of workers working there for years—instead, Azcapotzalco prioritized hiring staff who needed more experience. See: https://politica.expansion.mx/cdmx/2021/07/25/ sheinbaum-inaugura-planta-de-separacion-de-basura-en-azcapotzalco-cdmx

SEMARNAT, 2017. Urban Solid Waste Data. Available at: https://www.gob.mx/semarnat/acciones-v-programas/

Altamirano, Claudia, and Quiroz, Yanine. March 2021. "Volunteer waste pickers 'save' Mexico City from collapse." Periodismo de Barrio. Available at: https://periodismodebarrio.org/2021/03/los-recolectores-voluntarios-deresiduos-salvan-del-colapso-a-ciudad-de-mexico/

[&]quot;Volunteers" are informal workers engaged mainly in waste collection. They work without salary or social benefits in waste collection, segregation, sorting, and recycling with the consent of municipalities. Their livelihood is mainly the sale of collected waste, including the tips received during door-to-door waste collection.

Inconsistencies are obvious when comparing the Solid Waste Inventory with the city's Comprehensive Waste Management Program (PGIR). In its updated 2021-2025 edition, the PGIR reported 1,329 volunteers (SEDEMA 2021: 39)9. The figure represents almost 10 percent of the reported sanitation and waste collection workers. In other words, there is a difference of nearly 8.5 percentage points between one source and the other. Mexico City lacks an official register to determine the universe of waste sector "voluntary" workers.

In 2016, the Mexico City Human Rights Commission (CDHCM in Spanish) published Recommendation 07/2016, documenting various oversights in the city's urban solid waste management system, including collection, sorting, and final disposal. It also reported shortcomings in guaranteeing decent work conditions for waste sector workers. The Commission noted the existence of other worker categories within the Solid Waste Collection System: volunteers, informal recyclers, sorting workers, and scavengers [pepenadores]. These workers carry out their activities in substitution of the local government, which, by the current regulatory scheme, is required to provide people living in—or passing through—the city with such services. Sanitation services, in general, are public, but informal workers are effectively the ones who provide them. Thus, their work should not only be considered a subsistence activity (2016: 46)¹⁰. All working conditions and social protections already required by law must be extended to informal waste pickers.

Furthermore, the Commission indicated that people who work in sanitation services could but limitedly choose their occupation because of the governance and social contexts. Authorities have refused to recognize the value of their work. This couples the fact that waste collection has traditionally been a survival choice rather than a decent work alternative. However, transforming existing urban solid waste collection and management models must include blueprints that curb unemployment and formalize employment relations¹¹.

Mexican authorities—especially in Mexico City—have failed to meet people's waste collection needs extensively and efficiently. Statistics show that the existing structure is insufficient, and the current system severely violates sanitation and waste collection workers' human rights. No one could dispute that waste collection is possible thanks to so-called volunteers—informal workers—operating for decades. Mexico City's government, including the Mayor's Office, has been taking advantage of their work by under-registering informal waste pickers, denying them formal and explicit recognition and, thus, offloading the responsibility to provide compensation, social protection, and employment benefits.



The problems described above are primarily the result of a need for coordination between the different levels of government in the country. The Federation, the States, and the Municipalities have converging sanitation and waste collection powers. However, comprehensive public policies are nonexistent, inspections are scarce, and audit schemes for commodity-producing companies need to be revised, even though these are the leading waste generators in Mexico. The collection system needs to be improved with precise figures about who performs which tasks.

Article 4 of the Mexican Constitution states that every individual has the right to a healthy environment for their development and well-being. The implication is that the State and the citizenry are responsible for protecting the environment and natural resources. For the State to fulfill its constitutional duty of preserving the environment, the Constitution mandates Municipalities to provide sanitation and waste collection, transport, processing, and final disposal as public services (Article 115(III)(c)).

Protecting the environment is a constitutional duty shared by the government and the people—and enshrined as a human right¹². Thus, the Mexican Constitution lays the ground for sanitation and waste collection activities, holding municipalities accountable. This normative construct makes sense if we base our argument on the premise that environmental protection is—as we said—not exclusive to the State but shared with all private individuals. Moreover, sanitation and waste collection must be guaranteed by the level of government (Municipalities and mayors' offices) closest or most immediate to individuals so that waste collection, segregation, classification, and recycling begin with those who generate waste. This would make waste pickers' work easier if it were adequately regulated under a comprehensive and shared responsibility approach.

Federal Regulation

In line with the Constitution, the General Law on Ecological Balance and Environmental Protection (LGEEPA) stipulates that the Federation, the States, the Municipalities, and Mexico City's Districts [called demarcaciones territoriales] shall exercise their powers to preserve and recover the ecological balance and to protect the environment following other legal instruments (Article 4). Also, the LGEEPA assigns the corresponding powers among the three levels of government, noting that protection and management of the environment are obligations wherein all three converge (Articles 5, 7, and 8).

Concerning sanitation and waste collection, the LGEEPA establishes two obligations: regulatory and executive-administrative. For the earlier, the law holds States responsible for regulating the collection, transport, storage, handling, processing, and final disposal systems of low-polluting industrial and solid waste (Article 7(VI)). For the latter, the LGEEPA states that municipalities and Mexico City's districts must oversee the solid waste collection, storage, transport, shelter, reuse, processing, and final disposal systems (Article 8(IX) and Article 137).

Similarly, the General Law on Comprehensive Waste Prevention and Management (LGPGIR) guarantees everyone's right to a healthy environment by enabling sustainable development through the prevention, recovery, and comprehensive management









SEDEMA, 2021. Comprehensive Waste Management Program. Page 39. Available at: https://www.sedema.cdmx. gob.mx/storage/app/media/DGEIRA/PGIR/PGIR%202021-2025 N ago21.pdf

Recommendation 7/2016 on omissions in the collection, segregation, and final disposal system for urban solid waste in Mexico City and in creating decent work conditions for waste pickers. Page 46. Available at: https://cdhcm. org.mx/2016/07/recomendacion-72016/

¹¹ Ibidem. Page 47.

¹² Article 4 belongs to the dogmatic part of the Constitution, which covers the first 39 Articles and establishes rights and obligations. Article 115 appears in the organic component, i.e., the remaining 98 Articles, which define the organization of public powers of the State.

of urban hazardous solid waste requiring special handling. Another objective of the LGPGIR is to prevent or remedy site pollution engendered by this kind of waste. The law mandates State governments to develop, update and disseminate waste generation inventories¹³. We should note that—at the heart of the LGPGIR—responsibility is extended to producers, importers, exporters, traders, consumers, and the authorities of all levels of government, including waste management service providers (Article 1(VI)). Shared Responsibility is a guiding principle (Articles 2(XII), 25, 27, and 28).

The LGPGIR grants all Mexican States the powers to formulate, conduct, and assess waste management policies at their level and, together with the federal government, develop management programs for special-handling waste. Policies and plans must be consistent with three national programs regarding (a) Comprehensive Waste Prevention and Management, (b) Comprehensive Special-Handling Waste Prevention and Management, and (c) Polluted-Site Remediation (Article 9(I-II)). The LGPGIR authorizes Municipalities to design comprehensive programs to prevent and manage urban solid waste. They can do so on their own or with the participation of representatives from different social sectors. (The law, however, does not indicate which sectors.) Municipalities must observe the corresponding state-level waste prevention and management program (Article 10(I) and Article 11).

Besides setting the limits for the convergence of powers for all three levels of government to manage solid waste, the LGPGIR provides for joint responsibility of the government and private individuals in that respect. For the law, shared responsibility is a guiding principle recognizing that activities seeking to meet social needs through value chains (including product manufacturing, processing, packaging, distribution, and consumption) generate urban solid and special-handling waste. Integrated waste management, therefore, requires a joint social responsibility and demands a coordinated, combined, and differentiated participation of producers, retailers, byproduct users, and all three levels of government—as appropriate—within a framework of market feasibility and environmental, technological, economic, and social efficiency (Article 5(XXXIV)).

Mexico City Regulation

In line with federal legislation, Mexico City's Constitution protects everyone's right to a healthy environment for their development and well-being (Article 13-A). Throughout the legal text, all related measures aim to meet environmental needs with a view to the development of current and future generations. Additionally, the local Constitution bestows upon the city's sixteen districts exclusive powers to provide certain public services, including sanitation and waste collection, in compliance with applicable regulations (Article 53(B)(3)(a)(XIX)).

This authority is the basis for the existence of two local norms: the Mexico City [formerly Federal District] Laws on (a) Environmental Land Protection and (b) Solid Waste. The latter prompted the introduction of a specific regulation.

The Environmental Land Protection Law provides generic policy considerations, for which it defines guiding principles regarding environmental policy making, implementation, and evaluation. It also outlines instruments and procedures to protect the environment (Article 1(I)). Furthermore, it shields and restores ecological balance and prevents environmental damage. According to the law, economic profit and social activities must be generated under a sustainable development framework (Article 1(III)).

The Solid Waste Law and Regulation further control the city's obligations for comprehensive non-hazardous waste management and the provision of sanitation services. Accordingly, the Mayor's Office can deliver these services through the agencies specified in Article 5(I), including through the Public Works and Services Secretariat.

Similarly, this regulation dictates that district authorities (alcaldías, formerly delegaciones) must design, implement, supervise, and evaluate sanitation programs based on the Comprehensive Solid Waste Management Program guidelines (Article 10(I)). As part of their sanitation responsibilities, the alcaldías must provide certain public services such as cleaning common areas and low-speed streets, collecting solid waste, and transporting waste to sorting sites, selection and processing plants, and final disposal sites, observing environmental rules and guidelines (Article 10(II)).

The SEDEMA has thus established special norms in Mexico City. Known as Environmental Standards, they set additional requirements for specific issues that—because of their nature—cause a high environmental impact (see Articles 40-41 in the Environmental Land Protection Law; and Article 6(VIII)(IX) in the Solid Waste Law, mentioned above). Specifically, Norm NADF-024-AMBT-2013 on Waste Sorting, Classification, Selective Collection, and Storage, which entered into force in July 2017, requires all individuals to separate the waste they produce and the alcaldías to publicize waste collection timetables depending on the type of waste: organic, potentially recyclable and inorganic, non-recyclable and inorganic, special-handling, and bulky.

Local regulation confirms that the government and private individuals must jointly handle and manage waste. However, unlike federal law, shared responsibility is mainly skewed toward consumers, not producers. This is not to say that producers are free from duty, but new actors—consumers—enter the stage of joint responsibility.

Furthermore, local criminal law regulations can severely threaten informal workers who collect, sort, and recycle waste because some regulations can, in practice, criminalize their work. For instance, Mexico City's Penal Code makes it an offense to generate, handle, or dispose of non-hazardous industrial or solid waste as per applicable legal provisions of the city. It stipulates a criminal sanction of two to six years (Article 346(VI)). The vague definition in the penal code gives authorities a free ride to accuse and prosecute anyone regardless of their occupation—waste picking or not.

In 2017, Mexico's Supreme Court settled a case on this matter. A group of informal waste pickers was driving a cart carrying sacks and bags of waste when police officers asked them to prove they were allowed to handle the waste. Unable to do so, the waste pickers were arrested and handed over to prosecution authorities on the argument that they committed a felony—unauthorized waste handling. After the arrest, the Public Prosecution Service [Ministerio Público] brought charges, accusing them of crimes against the environment. The first-instance judge found them guilty as charged and issued a formal imprisonment conviction, later upheld by a higher instance. The defendants appealed to the Supreme Court for protection through a writ of amparo. The Supreme Court later acquitted them of crimes against the environment (SCJN, 2019)14.





¹³ The LGPGIR defines 'Waste Inventory' as a database to record the quantities of different types of generated waste by rank and classification (Article 5(XIV)). The information comes from the corresponding forms that waste generators fill out.

¹⁴ Writ of Direct Amparo 49/2017, First Chamber of the Supreme Court of Mexico (SCJN). Justice Luis-María Aguilar, 30 January 2019. Available at: https://www.scin.gob.mx/sites/default/files/listas/documento_dos/2019-01/AD-49-2017-190123.pdf

The criteria on which the first-instance judge found these waste pickers guilty as charged included the following: (i) the existence of solid waste was confirmed¹⁵; (ii) waste was not hazardous according to Mexico City's applicable framework; (iii) the defendants were handling non-hazardous solid waste; (iv) their waste handling harmed one ecosystem element (city air); and (v) applicable regulations made it unlawful to handle non-hazardous solid waste¹⁶.

While the country's highest Court has contested the legal definition mentioned above, the ruling was an isolated case because the Court entered its judgment before the 2021 justice reform, which incorporated legal precedent in Mexico's justice system¹⁷ Consequently, the judgment was not legally binding at the national level but a case-bycase guidepost. Thus, it is quite likely that such arrests still occur, further harming waste pickers in Mexico City or the States where a similar definition in criminal law prevails.

In February 2023, the city adopted the Circular Economy Act, the first of its kind in the country¹⁸. The Act promotes a circular economy as part of a systemic approach: community development that should be restorative, regenerative, sustainable, and inclusive while capable of producing service models, as well as environmentally sustainable and socially responsible work outputs (Article 2(I)).

While the law did not include the concept of EPR, using the term 'shared responsibility' instead¹⁹, it contains provisions enabling EPR system implementation and informal waste pickers' inclusion. For instance, the law prioritizes green jobs (Article 1(X)). It mandates the local Employment Secretariat to design policies, guidelines, projects, and programs for groups and workers requiring special attention-because of their vulnerability—to be trained in labor inclusion and the circular economy. In cooperation with the local Economic Development Secretariat, the law also allows for collaborative economy community practices and circular economy enterprises that encourage the Social and Solidarity Economy (Article 13(VIII)(IX)).

Nonetheless, the Act fails to mention informal waste pickers. It contains only general references to green jobs, groups with priority needs, and vulnerable workers, which makes informal waste pickers' work invisible when setting up circular economy schemes. Equally, while there is a marked improvement in the regulatory framework compared to the country's draft General Law on Circular Economy, the local Act focuses only on waste collection-not on the value chain needed to collect waste. The focus is shifted away from the human dimension and placed only on recycling rather than the workers making it possible.

New Regulation

Two bills, amending the LGPGIR and proposing a General Law on Circular Economy (2002), are currently under discussion in the country's House of Representatives²⁰. They are especially relevant because they aim to promote the efficient use of products, services, materials, secondary raw materials, and by-products nationally through reuse, recycling, redesign, or any other circular economy component. Broadly, they seek to achieve several goals: promoting waste-to-energy to meet zero-waste policy goals²¹. facilitating technological advances for recycling; encouraging circular economy outputs; encouraging the integration of chain values; and disseminating the concept of joint environmental responsibility to achieve responsible consumption patterns among citizens.

The proposed General Law on Circular Economy identifies waste pickers as "Informal Groups of Collectors or Aggregators" (acopiadores) and "Recyclers" (Article 3(IX)(XIX)). However, a potentially problematic difference surfaces in how the proposal identifies waste pickers. It is as if the bill uses the term "recycler" only for those who work independently or collectively but are organized. Although the meaning of the law seeks to differentiate those who recycle as part of their entrepreneurial activities and those whose livelihood depends on recycling, the text could be discriminatory. The ambiguity in the term "organized" and the failure to recognize that recycling is part of waste aggregators' activities could be problematic. Those who do not enjoy an organizing capacity or condition might not be recognized as 'collectors' despite being engaged in waste picking.

Hence, while the extended responsibility principle is included in the bill (Article 5(XLIX)). which would officially introduce this concept into the national regulatory framework, more is needed. In other words, although EPR is a guiding criterion of environmental policy, it is not necessarily understood as an enforceable obligation. Furthermore, it excludes waste pickers in informal employment.

The LGPGIR, currently in force, already includes the principle of shared responsibility, which recognizes that activities aiming to satisfy societal needs through product manufacturing, processing, packaging, distribution, and consumption generate urban solid and special-handling waste (Article 5(XXXIV)). As mentioned before, integrated waste management implies, therefore, joint social responsibility and demands a coordinated, combined, and differentiated participation of producers, retailers, by-product users, and all three levels of government—as appropriate—within a framework of market feasibility and environmental, technological, economic, and social efficiency. As extensive as the wording is, it provides no hints as to how to enforce joint responsibility among the different chain value actors and define the converging obligations for each of the three levels of government.

Local and federal laws and the mentioned bill on the House of Representatives floor establish shared responsibility schemes. However, current regulation needs an indepth revision from a circular economy standpoint. Existing laws and regulations lack specific corporate and government duties toward waste pickers, whose sanitation and









¹⁵ This decision considered, among other factors, Environmental Standards NADF-007-RNAT-20013 and NADF-024-

¹⁶ The defendants' declarations, the statement of facts regarding the tricycle and the solid waste, the chain of custody record, and the environmental impact report and its ratification stated that the defendants were indeed handling this type of waste. They confirmed that the waste they were moving harmed an element of the ecosystem—the air. See Page 4 of the Writ of Direct Amparo 49/2017, issued by the First Chamber of the SCJN.

¹⁷ After this reform, SCJN rulings approved by a majority of eight Justices in the Plenary and by a majority of four votes in the Chambers are binding for all courts in the country, thus moving to a system of legal precedents and eliminating—for the Court—the previous system of jurisprudence by reiteration or contradiction.

The Act was published in the local Official Gazette on 28 February 2023. Available at: https://data.consejeria.cdmx. gob.mx/portal old/uploads/gacetas/eff885ae4de05e2cae8ff80377f5205b.pdf

¹⁹ "Shared responsibility: The principle recognizing that municipal solid waste and special-handling waste are generated by activities that seek to satisfy the needs of society. Waste is generated through value chains such as product manufacturing, processing, packaging, distribution, and consumption. Consequently, integrated waste management is a joint social responsibility. It requires the joint, coordinated, and differentiated participation of producers, retailers, consumers, by-product users, and the three levels of government—as appropriate—within a framework of market feasibility and environmental, technological, economic, and social efficiency." (Article 4(A)(VII)).

House of Representatives, LXV Legislation, "United Commissions Hold Fourth Public Hearing on Circular Economy and Plastics Regulation." Journal n°2378, 23 August 2002. Available at: https://comunicacionsocial.diputados.gob.mx/index.php/boletines/comisiones-unidas-realizan-cuarta-audienciapublica-sobre-economia-circular-y-regulacion-de-plasticos

²¹ Considering waste-to-energy as the leading choice for waste circularity is particularly dangerous because it is highly polluting. Other options should come before: (i) waste reduction, (ii) waste reuse, (iii) recycling, (iv) waste-to-energy, and (v) final disposal in landfills, controlled landfills, and uncontrolled landfills or open dumps—as appropriate.

waste collection work allows Mexico City and other States to function²². It also enables companies—especially those engaged in recycling—to make huge savings because waste pickers work without a fixed wage or social benefits. As a result, waste pickers live in extreme marginalization and vulnerability.

Against this backdrop, another bill-pending discussion in the Mexican Senatecould be extremely useful in securing recognition of waste pickers' labor rights and social security. Known as the draft General Law on Corporate Responsibility and Due Diligence (LGRE in Spanish), it was introduced in October 2020²³. This is the first legislative initiative ever to include the standard of joint responsibility for both the State and companies regarding human rights—just as the United Nations Guiding Principles on Business and Human Rights suggested in 2011 (UN 2011)²⁴.

According to the bill mending the LGRE, companies are responsible for respecting human rights, and the State must regulate and sanction and is liable for oversights. Companies are also responsible for their actions and omissions amounting to human rights abuses. Subject to International Human Rights Law, corporate responsibility to respect human rights applies in three instances: (i) when the activities of a company cause or have caused an impact directly; (ii) when a company fails to avoid activities that knowingly contribute or may further adverse impacts, even indirectly; and (iii) when the activities of any entity with which a company has a business relationship have an adverse impact, and these are directly linked to the operations, products or services of the company itself (Article 6).

While adopting the LGRE bill will not happen soon, corporate responsibility to respect human rights could be the missing legislative link to regulate EPR effectively—in a way that secures waste pickers' labor rights and social security in Mexico. Businesses and the government would acknowledge their joint responsibility toward waste pickers and their sanitation and waste collection activities. After all, they benefit from waste pickers' services, which constitute a relevant public service. Under International Human Rights Law, the State is the primary guarantor of waste pickers' rights. And companies, subject to due diligence, must be accountable for the impacts caused by their trade²⁵, the colossal quantities of their polluting waste, and their need to reintroduce materials to value chains—without exclusion.

Recycling: Lights and Shadows of a Growing Business in Mexico

The waste trade has attracted several companies and dealers, who buy waste batches at processing centers and landfills for less than 600 Mexican pesos (around USD 30). From these batches, they regain most of what is sold at the street and flea markets. Also, large companies—particularly soda and foodstuffs makers—retrieve materials from waste (such as PET) to introduce them back into packaging and bottling processes. They generate massive revenues because recycling these highly polluting materials is considerably less costly than buying them.

According to an Ellen MacArthur Foundation Report, The New Plastics Economy, companies can recover USD 80-120 billion annually through recycling instead of discarding the plastic they produce (2018 data)²⁶. In Mexico, the National Plastic Industry Association has estimated that recycling represents a business opportunity worth approximately USD 3 billion. The reason is that low-value waste undergoes treatment to capture a higher value. For instance, while one kilogram of glass is worth no more than 0.025 cents of a US dollar (MEX 0.50), jewelry made from recycled glass can sell around USD 10 (MEX 200) for one item.

Currently, sanitation and waste picking services in Mexico City cost the government over MEX 617 million (USD 37.85 million), including waste transport logistics and final disposal fees, even though only a few metric tons of waste get recycled adequately. Mexico City does count on some infrastructure to process and recycle waste, as the figure below shows:

Figure 2. Waste Processing and Recycling Infrastructure in Mexico City. Experts consider it insufficient.



Source: Mexico City Solid Waste Inventory, 2020 (SEDEMA)

Even so, several experts agree that waste processing and recycling infrastructure is either insufficient or obsolete—something the City's Human Rights Commission already cautioned in 2016. The CDHCM stated that the alcaldías and the City Government failed to meet their obligation to maintain the infrastructure needed by sanitation services, thus undermining the human right to a decent living standard for the people who live in or pass through the city's districts (CDHCM 2016: 38)²⁷.







²² Mexico City residents generate around 1.7 kilograms of waste daily per person, well above the national average of 1.3 kg. The city's main problem is not whether sorting and recycling activities are insufficient, but rather the excessive waste generation. See https://www.animalpolitico.com/2018/08/cdmx-colapso-generacion-excesiva-

The bill to adopt a General Law on Corporate Responsibility and Due Diligence was introduced to the Senate floor on 6 October 2020. Available at: https://www.senado.gob.mx/65/gaceta_del_senado/documento/112449

The Special Representative annexed the Guiding Principles to his final report to the UN Human Rights Council (A/ HRC/17/31), including an introduction to the Guiding Principles and a summary of the process leading to their preparation. The Human Rights Council endorsed the Guiding Principles in Resolution 17/4 on 16 June 2011. Available at: Guiding Principles on Business and Human Rights

²⁵ Human Rights Due Diligence is a way for the enterprise to proactively manage the potential and actual risks of adverse impacts on the rights and dignity of people. It involves a bundle of interrelated processes, which should include the following four core components: (a) identifying and assessing actual or potential adverse human rights impacts that the business enterprise may cause or contribute to through its activities or which may be directly linked to its operations, products, or services by its business relationships; (b) integrating findings from impact assessments across relevant functions and company processes and taking appropriate action according to its involvement in the impact; (c) tracking the effectiveness of measures and processes to address adverse human rights impacts to know if they are working; and (d) communicating on how impacts are being addressed and showing stakeholders—particularly affected stakeholders—that there are adequate policies and processes in place to implement respect for human rights in practice. See the report of the Working Group on the issue of human rights and transnational corporations and other business enterprises, presented to the Un General Assembly on 16 July 2018 (A/73/163). Available at: https://ap.ohchr.org/documents/dpage_e.aspx?si=A/73/163

²⁶ The report titled *The New Plastics Economy: Rethinking the Future of Plastics & Catalyzing Action* was initially presented at the World Economic Forum in 2016 and updated for publication in 2018 by Ellen McArthur. Available at: https:// ellenmacarthurfoundation.org/the-new-plastics-economy-rethinking-the-future-of-plastics-and-catalysing

Recommendation 07/2016 on omissions in urban solid waste collection, sorting, and final disposal in Mexico City, as well as in creating decent work conditions for waste pickers. Page 38. Available at: https://cdhcm.org.mx/2016/07/ recomendacion-72016/

Seven composting plants receive 1,157 metric tons of organic waste daily and transform them into 6.29 metric tons of organic fertilizer, later used in green and crop areas. However, the plants operate on obsolete technology; some need urgent maintenance and staff to run at total capacity. The city's compression plants offer a similar picture. They generate around 539 metric tons of waste-derived fuel and move them to cement plants (Ramírez 2022)²⁸. This obsolescence explains why recycling has become a highly profitable business: the government fails to deliver public recycling services. As a result, abuses in the supply chain, particularly against informal waste pickers—"volunteers"—occur.

According to a report titled Study on Business Opportunities in Circular Economy Sectors in Mexico, prepared in 2019 by Water, Environment, and Business for Development (WE&B) and the European Union²⁹, approximately 40 percent of the 13,000 metric tons of waste generated daily in Mexico City-especially PET and glass-were reinserted into the production chain through the work of waste pickers. Six to ten thousand pepenadores work in sanitation and waste collection (Sánchez Espinosa 2013: 94) without a fixed wage, employment benefits, government support, or incentives³⁰, The situation allows companies and waste buyers to cut material costs and generate massive profits.

Moreover, informal waste pickers' contribution to recycling transcends economic aspects. A study by UN-Habitat found that, in 2010, the informal sector recovered about 20 percent of everything that entered the waste stream in three of the six cities of the study³¹. However, despite their environmental, social, and economic contributions, informal waste pickers are not legally recognized as workers in Mexico and lack access to decent work conditions. Whatever waste they collect and manage to sell to recyclable material buyers is their only livelihood. Buyers set purchase prices, constituting a waste monopsony and contravening the country's competition laws—as explained below.

In this context, it makes sense to recognize waste pickers and regulate joint responsibility schemes appropriately for the government and recycling businesses, which benefit significantly from recycling and generate considerable economic, social, and environmental impacts. This fact alone justifies the due regulation of EPR schemes to guarantee mechanisms through which priority product manufacturers take responsibility for organizing and financing waste management—waste generated by their product marketing. Furthermore, such regulation must improve the working conditions of those who work in waste collection and sorting.

One de facto EPR scheme has been operating in Mexico for some time, gaining notable popularity: a non-profit established in 2002 by ECOCE (Ecología y Compromiso Empresarial or Environmentally Committed Companies). While the scheme is beneficial—given the lack of EPR regulations—it is only oriented toward the needs of business consortiums. Sadly, it excludes informal waste segregation, transport, and recycling workers.

Under the pretense of recycling as a shared public interest, the initiative was conceived based on the traditional Corporate Social Responsibility approach. The resulting Producer Responsibility Organization fails to fulfill corporate obligations and comply with prevailing human rights standards³², This is not to belittle ECOCE's work, but their model should be consistent with what green jobs and the inclusion of Mexico's informal waste pickers require. Besides, ECOCE's model does not provide enough evidence to confirm the potential social impact of its recycling activities (Velázquez 2022)³³.

Three main reasons explain why that is the case. First, the model focuses on meeting the needs of businesses without necessarily incorporating a social perspective. Second, it is grounded only on recycling, not the value chain, excluding waste pickers' workwhich is indispensable to recycling. Third, because Mexico needs clear and precise EPR regulations, the model responds to the interests of large companies and the government. By displacing informal waste pickers and making them invisible, the chain of human rights responsibilities—which arise from making recycling a business activity—becomes blurry.

EPR and Responsible Business Conduct

International Human Rights Law has been shaping responsibility schemes that extend the fulfillment of human rights. It has transitioned from a traditional top-down effect, by which the State is the sole source of duties for promoting, respecting, and guaranteeing human rights, towards a horizontal effect involving private individuals. This paradigm shift has led to the development of various regulatory instruments by international bodies. The 2011 UN Guiding Principles on Business and Human Rights are the most representative example—for which a binding treaty has been under negotiations at the UN since 2014³⁴.

As a result, a new paradigm of corporate responsibility—known as Responsible Business Conduct (RBC)—has emerged. Its incidence responds to the importance that several international organizations, such as the OECD and the ILO, have assigned to the Guiding Principles. These principles constitute a state requirement for expected corporate behavior worldwide, intending to address and avoid the unfavorable consequences of business operations while contributing to the sustainable and ethical development of the countries in which companies operate³⁵.









²⁸ Ramírez, Bertha Teresa, "Plantas de composta en CDMX son obsoletas, dice experto" [Mexico City's Composting Plants are Obsolete, Says Expert]. La Jornada. 18 September 2022. Available at: https://www.jornada.com.mx/ notas/2022/09/18/capital/plantas-de-composta-en-cdmx-son-obsoletas-dice-experto/

²⁹ WE&B, April 2019. Study on Business Opportunities on Circular Economy Sectors in Mexico. Available at: https:// weandb.org/projects/study-on-business-opportunities-on-circular-economy-sectors-in-mexico-lcba-mexico/

Sánchez-Espinosa, Tania. 2013. "What Labor Rights for Informal Sanitation Workers in Mexico City? The Case of Volunteer Workers and Waste Pickers." Revista Methodos (94), citing the Sindicato Único de Trabajadores del Gobierno del Distrito Federal (Federal District Government Workers' Union), Section 1 (Sanitation and Transport), which states that there are approximately 6,000 volunteer workers, without specifying how many are in sanitation and waste collection. Available at www.sutgdf.org.mx [webpage visited on 26 April 2013].

³¹ UN-Habitat. Solid Waste Management in the World's Cities: Water and Sanitation in the World's Cities 2010. United Kingdom. Available at: https://unhabitat.org/solid-waste-management-in-the-worlds-cities-water-and-sanitationin-the-worlds-cities-2010-2

³² Producer Responsibility Organizations aim to manage EPR schemes using their resources and capturing government support. This is the case in the United States, mainly under the Maine and Oregon Bottle Bills.

³³ In November 2022, *Proceso*, a magazine from Mexico City, published the report "The Recycling Farce: Coca-Cola the Biggest Importer of Plastic Waste in Mexico," written by Kennia Velázquez of the Transborder Network 'Public Eye' [Ojo Público] and Pop Lab. For her research on recycling, she consulted ECOCE to obtain the most current figures for verification but received none. See: https://www.proceso.com.mx/reportajes/2022/11/20/la-farsa-delreciclaje-coca-cola-el-mayor-importador-de-desechos-plasticos-mexico-297286.html

[&]quot;Elaboration of an international legally binding instrument on transnational corporations and other business enterprises concerning human rights." The UN Human Rights Council adopted Resolution A/HRC/RES/26/9 on 14 July 2014. Available at: https://mneguidelines.oecd.org/RBC-LAC-scope-and-activities.pdf

³⁵ Organization for Economic Co-operation and Development (OECD). "Responsible Business Conduct in Latin America and the Caribbean." Available at: https://mneguidelines.oecd.org/RBC-LAC-scope-and-activities.pdf

The government and the private sector need to do more to address the human rights issues threatening informal waste pickers. Severe violations against this occupational group include (i) inadequate living conditions due to insufficient income and financial instability; (ii) inability to negotiate the sale price of collected recyclables; (iii) failure to recognize their work as an economic activity; (iv) social stigmatization of their work as indecent; (v) social marginalization, discrimination, and exclusion; (vi) lack of employment, health, and social security benefits; (vii) inability to be creditworthy or access financing; (viii) higher likelihood of suffering from exploitation because their work remains invisible to society; and (ix) adverse impacts on their access to health, social security, and decent work (The Shift Project 2022: 2-3)³⁶.

Mexico City's Human Rights Commission Recommendation 07/2016 alludes generically to rights violations against the city's informal waste segregation, transport, and recycling workers. The Recommendation stipulates that the State must gradually transit toward recognizing informal waste pickers and recyclers as part of adequate sanitation services in Mexico City. The Human Rights Commission indicates that such recognition must materialize as organizational and entrepreneurial promotion and appropriate compensation. This materialization would be a structural measure for informal workers to escape poverty and vulnerability (2016: 68-69)³⁷.

The Commission's position shows the need to set requirements for waste recovery and reclamation in a way that makes it possible for informal waste pickers to participate effectively in the sector. Similarly, it calls for shifting paradigms regarding the informal recycling sector's recognition, which would be a genuine and concrete change in public goods and services. It also demands that authorities realize how waste pickers are essential to the recycling companies' value chain. When EPR schemes are implemented in Mexico, informal waste pickers must be recognized as part and parcel of solutions within waste management systems that favor waste reclamation over waste production, transport, and processing. At the same time, these systems must establish a joint responsibility system for the State and companies concerning labor and social security to achieve Responsible Business Conduct.

On 18 October 2021, the then Global Alliance of Waste Pickers (GlobalRec, now IAWP) published its "Position on Extended Producer Responsibility"38. The position paper sets out several principles and declarations concerning the development of EPR systems worldwide. The paper corresponds with RBC postulates when it asserts that EPR must be regulated, implemented, monitored, and enforced by government bodies. Also, when it recommends that governments recover costs from producers toward municipal recycling and waste management programs rooted in social inclusion. While the document does not reference RBC, recommendations like these resemble joint responsibility schemes for businesses and the government—in line with RBC³⁹.

For instance, GlobalRec's position on Mandate Integration is that EPR should recognize waste pickers' essential role, maintain and expand existing infrastructure and integrate existing actors from informal waste value chains. This position is consistent with the UN Guiding Principles, which consider that the responsibility to respect human rights requires that business enterprises seek to prevent or mitigate adverse human rights impacts that are directly linked to their operations, products, or services or their business relationships, even if they have not contributed to those impacts (Numeral 13(b))—an apparent reference to value and supply chains.

One big issue in Mexico is the need for a corporate and government responsibility scheme regarding informal workers' human rights. RBC can provide an answer to ensure such duty. From the perspective of the Guiding Principles, business "activities" include actions and omissions, and "business relationships" refer to business partners, entities in the value chain, and any other non-State or State body directly linked to the business operations, products, or services. Thus, the underlying relationship between EPR and RBC becomes evident. Both pursue the same objective: EPR for sanitation and waste collection workers, particularly; RBC for anyone affected by business activities.

EPR Challenges and Opportunities in Mexico

While EPR implementation proposals in Mexico shed light on opportunity areas that need special attention to be regulated appropriately and effectively, the country's legal framework already includes some legal constructs that could be pivotal to secure substantial benefits in the protection-and due and effective implementation-of informal waste pickers' rights in the country.

There are in-force concepts throughout the constitutional framework and various regulations, mainly at the federal level, though they are rarely put to work. We can even find State duties yet to be translated into procedural law. The most relevant notions are described below.

Social Responsibility as a Constitutional Duty

Article 25 of the Mexican Constitution directs that "the public, social and private sectors shall contribute to the national economic development, with social responsibility, without detriment to other forms of economic activity that contribute to the development of the Nation" (Paragraph Four). It also declares that "social and private sector enterprises shall be supported and fostered under criteria of social equity, productivity, and sustainability, subject to the public interest and the use of the productive resources for the general good, preserving these resources and the environment" (Paragraph Seven).







The Bordo Poniente [West End] landfill, a former final destination for Mexico City waste, was closed in 2011. The city currently disposes of litter in neighboring dumps, such as the one shown in the picture, in the State of Mexico. As the image shows, different types of waste are mixed in the dump because waste is mismanaged throughout the chain. Photo credit: Angie Queupumil and Alto Sotelo.







³⁶ The Shift Project. October 2022. Principles for Corporate Engagement on Human Rights with the Informal Waste Sector. New York. Pages 2-3. Available at: https://faircircularity.org/app/uploads/2022/11/Principles-for-Corporate-Engagement-on-Human-Rights-with-the-Informal-Waste-Sector-20221116 v3.pdf

CDHCM Recommendation 07/2016 (pages 68-69). Available at: https://cdhcm.org.mx/2016/07/ recomendacion-72016/

GlobalRec [now IAWP], October 2021, Position on Extended Producer Responsibility, Available at: https://epr. globalrec.org/position-on-epr/

For instance, the OECD's Center for Responsible Business Conduct "uses RBC standards and recommendations to shape government policies and help businesses minimize the adverse impacts of their operations and supply chains while providing a venue for the resolution of alleged corporate, social, environmental, labor, or human rights abuses. Through RBC, businesses can positively contribute to economic growth and development and become a powerful driver for achieving the SDGs." Available at: http://mneguidelines.oecd.org/

Accordingly, we can identify three main characteristics of social responsibility in the country. First, Mexico's legal framework constitutionally requires all production sectors (public, social, and private) to observe social responsibility when participating in economic activities. Second, social responsibility emphasizes private and social sectors, highlighting operational criteria based on social equity, productivity, and sustainability. Third, the activities of these sectors must be directed toward the public interest and environmental protection and preservation.

The design of Mexico's constitutional framework enables the integration of EPR schemes that guarantee human rights—the constitutional text is consistent with EPR postulates. For example, GlobalRec's Principle on Improved Packaging and Management says that EPR should incentivize, fund, and establish goals for (i) the design of reuse and repair services; (ii) the phase-out of materials containing or emitting hazardous substances that may harm waste pickers or recyclers' health; and (iii) new opportunities for waste pickers and other marginalized waste sector stakeholders through changes in materials management. These and other goals are undoubtedly aligned with the public interest and protecting and preserving the environment and would fulfill Mexico's constitutional duty of social responsibility.

Although it may seem evident, the Mexican legal framework fails to provide an official definition of "social responsibility." A judiciary interpretation is absent in case law or legal precedents. The closest descriptions surface in Mexico City's Mercantile Social Responsibility Act (adopted in 2020)⁴⁰, and the already mentioned Draft General Law on Corporate Responsibility and Due Diligence (LGRE)41, introduced in the Senate in October 2020 and awaiting parliamentary discussion.

Mexico City's Mercantile Social Responsibility Law defines 'commercial social responsibility' as "a scheme that lays the foundations for renewing citizens' confidence in Public Institutions through a mechanism of incentives and administrative support, following the principle of good faith, which will allow the owner of a business to exercise their economic activity in Mexico City better" (Article 2(XIII)). The law prepares the ground for designing and implementing actions targeting small businesses to promote the observance of laws and the fulfillment of regulatory duties. In doing so, it links social responsibility to mercantile legality.

The LGRE bill defines 'social responsibility' in a way that is more consistent with constitutional obligations and EPR postulates. The main reason is that the context differed between the LGRE bill and the Mercantile Social Responsibility Law. The LGRE was drafted as procedural law for the fourth paragraph of Article 25 of the Constitution, meaning it emanates directly from a constitutional duty. The bill aims to integrate a human rights responsibility scheme for companies in Mexico and align it with the Guiding Principles and other international human rights instruments.

The bill provides three definitions of significant consequences for integrating EPR schemes in light of RBC. Article 2 reads as follows:

"XVI. Corporate Responsibility: The framework for the comprehensive fulfillment of the companies' goals, both internally and externally, considering the economic, social, and environmental expectations of all the people involved, and showing respect for people, ethical values, the community, and the environment, thus contributing to the construction

of the common good. This term includes Corporate Social Responsibility and Corporate Responsibility for Human Rights Violations.

XVII. Corporate Social Responsibility: Active and voluntary contribution to social, economic, and environmental improvement by companies to improve their competitive situation, value, and added value because of their economic activity and the impacts that they generate in society.

XVIII. Corporate Responsibility for Human Rights Violations: a commitment by companies to comply, in practice, with the following elements: (i) compliance with obligations in all matters imposed by law; (ii) assuming a corporate political commitment to human rights; (iii) establishing a human rights due diligence process; and (iv) establishing and participating in processes to redress human rights violations."

These draft definitions are consistent with EPR schemes because their foundation is respect for human beings, ethics, communities, and the environment. Seeking to contribute to the common good, they seem to align with GlobalRec's Position Paper on EPR, which states that producers and beneficiaries—not the most vulnerable actors should be responsible for the economic risk in the end markets for materials (a reference to informal waste pickers).

The bill shows two primary duties. First, the organizations responsible for implementing EPR (such as PROs or government agencies) must ensure waste pickers' compensation and labor and social benefits⁴². Second, they must draw on the principle of universality to protect and guarantee rights, whose application and governance must be monitored by all means at the government's disposal⁴³.

To protect and guarantee informal waste pickers' rights, the Position Paper on EPR includes a joint responsibility scheme between the business sector and the State on the same terms as RBC and in line with the Mexican constitutional duty of social responsibility⁴⁴. It presupposes rights at a minimum—for example, ensuring fair compensation for their work and protecting fundamental labor rights such as social security, job stability, or occupational health-just as the LGRE bill stipulates. For that purpose, Article 24 of this legislative initiative specifies how human rights protections must be observed by business enterprises, including references to labor and environmental rights.

Finally, Mexico City's Circular Economy Law contains a chapter on social responsibility (Chapter Three). While it does not define 'social responsibility,' the law is consistent with the constitutional duty. On manufacturing, it dictates that production collaborations that foster the economic growth of micro- and SMEs must be promoted on par with local economic development through circularity (Article 36(I)). The language is generic and non-binding—the text speaks of supporting, not ensuring. Still, the law would justify the inclusion of informal sanitation and waste collection workers, arguing that their inclusion would promote local economic development. Furthermore, Article 36(II)(X)









The Law was published in Mexico City's Official Gazette, no. 299-bis, on Monday, 9 March 2020. Available at: https://paot.org.mx/centro/leyes/df/pdf/2020/LEY RESPO SOCIAL MERCAN CDMX 09 03 2020.pdf

⁴¹ The bill to adopt a General Law on Corporate Responsibility and Due Diligence was introduced to the Senate floor on 6 October 2020. Available at: https://www.senado.gob.mx/65/gaceta_del_senado/documento/112449

⁴² The remuneration towards implementing organizations should include payment for all services provided, including environmental costs, as well as the costs for any training, organization, infrastructure needs, access to clean water / sanitation, innovation, administration, legal advice, visibility, outreach, compliance with labor and social protection laws, and disaster response resources for service providers. See GlobalRec [now IAWP]. October 2021. Position on Extended Producer Responsibility (3.2). Available at: https://epr.globalrec.org/position-on-epr/

Ibidem. Position 3.3.

The recently enacted Circular Economy Law of Mexico City includes a section on Social Responsibility (Chapter Three, Articles 35-36), but the scope is never set. However, the law refers to positive impacts on society resulting from circularity schemes regulated by the law, among which it mentions green job creation and the integration of economic and production chains—of which informal waste pickers could be part.

instructs the obligation to articulate value chains through coordination platforms and alliances between companies and social initiatives and not to destroy value.

The Importance of the Social and Solidarity Economy

While the social responsibility duty awaits regulation, as mentioned above, procedural laws stemming from Article 25 of the Constitution are already in force: the Social and Solidarity Economy (SSE) Law of 2012⁴⁵, which governs Paragraph Eight of Article 25, on the matter of the social sector of the economy; and the Social Solidarity Societies (SSS) Law of 1976)46.

The Social and Solidarity Economy Law establishes mechanisms to develop, strengthen, and make economic activities in the social sector of the economy visible (Article 2(I)). It also sets the rules to promote, foster and reinforce SSE as an effective system that can contribute to several goals: the country's social and economic development, the creation of decent work opportunities, the strengthening of democracy, equitable distribution of income and further creation of net social assets (Article 2(II)). In turn, the SSS Law gives legal identity status to collectives comprised of Mexican natural persons. especially shareholders of common land, joint property owners, landless peasants, small finca owners, and people with the right to work, who allocate part of their production to a social solidarity fund and undertake commercial activities (Article 1).

EPR postulates are based mainly on the principle of association of waste pickers, scrap dealers, and other workers. EPR requires informal waste picker organizations to be informed and able to influence both the adoption and the implementation of EPR systems. In this respect, the SSE Law provides that the social sector of the economy comprises diverse organized groups across social organizations intended for the production, distribution, and consumption of the goods and services that the society needs. Similarly, the SSS Law states that one of the goals of social solidarity societies is to produce, industrialize, and market necessary goods and services (Article 2(IV)).

Consequently, waste collection and processing would be covered by both laws because such activities target social needs. Informal waste picker organizations could then access social policy benefits stipulated by the National Institute of Social Economy (INAES in Spanish, created by Articles 13-15 of the SSE Law). They could also enjoy the benefits provided by the SSS Law for social solidarity societies constituted as such⁴⁷.

The social organization arrangements established in the SSE and the SSS Laws are compatible with EPR systems. They can facilitate organizing informal waste picker groups, as they allow these groups to align efficiently with EPR systems. Position 3.4 on EPR advises designating waste collection as an essential service and delivering it in all places where litter accumulates—a situation already established by Mexico's current regulatory framework.

Moreover, Position 5.1 recommends EPR finance training and inclusive engagement so all impacted stakeholders can plan, implement, and innovate within the system. As with the previous position, this is allowed and encouraged by the regulatory framework, which provides that social solidarity societies are creditworthy actors with access and priority to loans by national credit institutions (Article 37, SSS Law). The Social and Solidarity Economy Law allows organizations in the social sector of the economy to provide financial services such as insurance, credit, savings, and loans (Article 42(IV))⁴⁸. Informal waste picker organizations in Mexico may find opportunities in this legislation.

Waste and Free Competition

In Position 3.5 on EPR, GlobalRec (now IAWP) recommends that EPR include price floor mechanisms (minimum fair price) and increases based on the inflation index to shield waste pickers and their organizations from the volatility of material pricing. These price floors, says the IAWP, should be accessible to anyone selling materials. The position refers to the need for fair economic competition policies that enable informal waste pickers to freely negotiate the sale prices of collected materials.

In Mexico, Article 25 of the Constitution dictates that "the law shall encourage and protect the economic activities of private parties. It shall also generate the necessary conditions for the growth of the private sector to contribute to the national economic development while promoting competitiveness and implementing a national policy aimed at sustainable industrial development [...]." Again, the Constitution goes in the same vein as the Position Document on EPR because it states that the principle of competitiveness must govern all economic activity. It further defines this principle as all public economic policies aiming to guarantee competition and a free market among the various sectors of the economy.

Moreover, Article 28 forms the constitutional basis for the Federal Law on Economic Competition (2014)⁴⁹. This procedural law promotes, protects, and guarantees free market and economic competition. It also intends to prevent, inquire, fight against, efficiently prosecute, severely punish, and ultimately eliminate all restrictions to the efficient functioning of markets—such as economic monopolies, monopolistic practices, unlawful market concentration, free market barriers, and competition barriers.

The regulation becomes relevant when we consider that one of the main issues that informal waste pickers face is the power imbalance in their interactions with large waste-generating goods manufacturers (for example, bottling, canning, or packaging companies). There is evidence that, in some cases, companies engage in practices such as fixing or enforcing prices for the waste they buy from informal waste pickers. Several experts suggest that the companies or organizations that implement private EPR schemes may gain considerable power to lobby and influence the design of public policies on EPR and even operate like a state-sanctioned monopoly (Cass Talbott 2022)⁵⁰.







⁴⁵ The law was published in the Official Journal of the Federation on 23 May 2012. Available at: https://www. diputados.gob.mx/LeyesBiblio/pdf/LESS.pdf

The law was published in the Official Journal of the Federation on 27 May 1976. Available at: https://www. diputados.gob.mx/LeyesBiblio/pdf/71 240418.pdf

According to the SSS Law, social solidarity societies are created exclusively for the benefit of non-wage earners to guarantee social benefits for them and their families (Articles 10(V) and 14). The law also provides that society's net assets come initially from contributions donated by members, official institutions, and individuals or legal entities foreign to the society (Article 30).

⁴⁸ On this point, the SSE Law provides that the savings and loan activities mentioned in the text must strictly comply with the provisions of Article 103 of the Law on Credit Institutions.

⁴⁹ The law was published in the Official Journal of the Federation on 23 May 2014. Available at: https://www. diputados.gob.mx/LeyesBiblio/pdf/LFCE 200521.pdf

⁵⁰ See Cass Talbott, Taylor. 2021. Oregon's Bottle Bill: Opportunities and Challenges for Inclusive Waste Management. Global Alliance of Waste Pickers [now IAWP] and WIEGO. Available at: https://epr.globalrec.org/files/2021/10/ Oregon bottle-bill-opportunities-and-challenges-for-inclusive-waste-management 2021 case-study.pdf. Also, Cass Talbott, Taylor. 2022. "Extended Producer Responsibility: Opportunities and Challenges for Waste Pickers." In Alfers, L., Chen, M., and Plagerson, S. Social Contracts and Informal Workers in the Global South. Cheltenham, United Kingdom: Edward Elgar Publishing. Available at: https://www.elgaronline.com/edcollchap-oa/ book/9781839108068/book-part-9781839108068-13.xml.

Among the most common monopolistic practices is supply and demand price fixing to sell or purchase goods and services in the market. Considered an absolute monopoly, the practice consists of a single buyer substantially controlling the market as the major purchaser of goods and services, i.e., a monopsony. The Federal Law on Economic Competition states that this absolute monopolistic practice is unlawful (Article 53(I)).

Monopsonies are known to have a single buyer or a reduced number of buyers and many would-be "suppliers" or "sellers." As a result, the buyer holds the better hand to sway or enforce sale prices to their liking since there is only one "demand." Consequently, sellers—waste pickers in this case—are forced to accept the transaction to avoid being left out of a trade that is encouraged by the buyer. This often happens, for instance, in small rural areas, where a sole local company or business demands a labor force. The earlier enjoys a privileged position to negotiate work conditions with workers needed to produce because, as competition is nonexistent, there is no labor mobility. Because job opportunities are scarce in the area, the employer imposes work conditions—even if these are unfair to workers.

We can describe the structure of Mexico City's recycling industry supply chain thanks to the research conducted for this brief. (The chain has been replicated elsewhere in the country.) The first link comprises informal workers engaged in waste collection, segregation, transport, and recycling (whose work allows this industry to exist). The second link is collection centers, where waste pickers take collected materials⁵¹. These centers sell collected waste to the third link-recycling centers or companies (the big recycling industry). Finally comes the fourth chain link, called waste brokers or intermediaries in the local recycling industry.



The monopoly practice of fixing the waste purchasing price (colloquially known as coyotaje, or 'wheeling and dealing') occurs in one specific link: the collection centers. They set the lowest possible price at which they buy materials from waste pickers. As these centers then sell the materials to recycling companies, they can make considerable profits by cutting prices on waste purchasing⁵². The National Confederation of Metal Industries and Recyclers (CONIMER) has raised an alert about this issue in Mexico. In 2019, the CONIMER showed that only eleven companies control waste in half of the Mexican States, constituting a monopoly⁵³.

Nonetheless, Mexico's antitrust authority, the Federal Economic Competition Commission (COFECE), has yet to determine whether monopolistic practices occur in the country's waste markets. Such inquiries do take place in other countries. For instance, Spain set an exciting precedent when the central authority, the National Commission of Markets and Competition (CNMC), started an investigation in 2022, uncovering de facto monopolies in packaging waste management. The CNMC concluded that eliminating these monopolies could increase efficiency in meeting Spain's circular economy objectives⁵⁴.

A similar precedent would be crucial to establishing EPR schemes in Mexico. It would allow determining whether waste constitutes a relevant market, where recycling companies have the substantial market power to fix purchase prices or raise entry barriers to competitors⁵⁵.







⁵¹ In Mexico, 501 collection centers nationwide collect various materials daily. Sixty-five percent of waste comes from paper, cardboard, electrical and electronic waste, glass, and PET. Mexico City alone has 411 collection centers (including 400 collection points for batteries. The States with the highest battery collection points are the State of Mexico, Hidalgo, Quintana Roo, and Aguascalientes. Source: INEGI. 2019. National Census of Municipal Governments and Mexico City's Districts. Available at: https://bit.ly/3X2n7w8

⁵² The most infamous case is the recycled glass market, which two companies monopolize in Mexico: Vitro and Saint-Gobain. However, this is circumstantial because—without regulations to make recycling costs attractive for recyclers—extracting virgin glass from mines is cheaper than collecting and recycling it.

⁵³ See CONIMER Chairman Francisco Urióstegui-Pineda's declarations to local media in June 2019 in the State of Tabasco. Available at: https://www.xevt.com/primeraplana/concentran-11-empresas-el-monopolio-del-reciclaje-debasura-en-16-estados-acusa-conimer/65496

For more information, see the CNMC press release. Available at: https://www.cnmc.es/prensa/estudio-residuoenvases-consulta-publica-cnmc-20220222

⁵⁵ Articles 58 and 59 of the Federal Law on Economic Competition establish the criteria to identify a relevant market and whether an economic agent has significant market power. In this case, that would be waste and the companies buying it, respectively.

Conclusions and Recommendations

This brief leads to several conclusions and recommendations to launch and develop EPR schemes in Mexico, particularly in Mexico City. The aim is to include informal waste collection, segregation, transport, and recycling workers. A recommendation follows each of the conclusions below:

- The three levels of government in Mexico have converging powers relating to sanitation and waste collection and processing, which are inappropriately regulated because the scope of responsibility of each government level is not defined. As a result, informal workers engaged in waste collection, segregation, transport, and recycling face systematic human rights violations. Inappropriate regulation also enables the privatization of services to promote recycling and circularity schemes. It discharges the State from any responsibility, which results in the exclusion of waste pickers.
- De facto EPR schemes operate in Mexico, mainly in Mexico City, even if they are not sufficiently regulated. These schemes, however, exclude informal workers engaged in waste collection, segregation, transport, and recycling. Consequently, regulation must be adopted, and the inclusion of informal waste pickers must be mandatory, given that their work makes recycling possible.
- (iii) Informal workers engaged in waste collection, segregation, transport, and recycling have been historically invisible and marginalized in Mexico. The government and companies have constantly exposed them to ongoing risks and violated their human rights. Therefore, the Government of Mexico-all three levels includedmust guarantee the adequate protection of waste pickers' labor and social rights, especially within EPR schemes.
- (iv) As regulating the circular economy gains traction in Mexico, the legal framework must fully include informal workers engaged in waste collection, segregation, transport, and recycling. This inclusion requires that proposed laws regulate recycling and the chain value embedding it. The outcome would be EPR schemes that integrate and guarantee the rights of informal workers engaged in waste collection, segregation, transport, and recycling.
- Article 25 of the Mexican Constitution safeguards social responsibility to ensure that all public, private, and social production sectors operate responsibly. The recycling industry is no exception and must include and secure rights for informal workers engaged in waste collection, segregation, transport, and recycling. Only with informal waste pickers can waste management be feasible. Hence, EPR schemes must contain provisions on RBC to ensure that recycling is rooted in waste collection, transformation, and reuse and to guarantee social responsibility along the value chain—securing and integrating the human dimension.
- (vi) The most recent International Human Rights Law standards provide joint responsibility schemes to sanction companies and States that, due to action or inaction, commit acts prejudicial to third parties' human dignity. EPR schemes must be developed and regulated for that purpose, in line with such standards. The objective is that these schemes ensure that informal workers engaged in waste collection, segregation, transport, and recycling are included and their rights secured.
- (vii) Considering the constitutional duty of social responsibility in Mexico, and the growing regulation of RBC worldwide, it may be more operational to rethink EPR

- as a framework with a more extensive scope and higher accountability—Extended Value Chain Responsibility. Unlike EPR, which holds producers accountable by focusing their responsibility on what to do with the product and not on the recovery process, Extended Value Chain Responsibility would require inspecting all concerned actors for them to share responsibility. This scheme would follow RBC postulates by creating more comprehensive regulatory frameworks and enabling the visibility and inclusion of informal workers engaged in waste collection, segregation, transport, and recycling.
- (viii) Social and Solidarity Economy systems are regulated in Mexico and contain helpful tools. However, these need to be more utilized and incentivized. They must be promoted and modernized to enable informal workers engaged in waste collection, segregation, transport, and recycling to organize and make their work visible through social enterprises. These enterprises can also function as vehicles for waste pickers to access financing and social and employment benefits to become competitive economic agents in the waste purchase and sale markets of Mexico City and countrywide.
- There is enough evidence of monopolistic practices—such as monopsonies—in the waste purchase and sale markets. Collection centers employ these practices to fix prices at the expense of informal workers engaged in waste collection, segregation, transport, and recycling. However, the country's antitrust authority, the COFECE, has yet to conduct an official inquiry. Complaint mechanisms that the COFECE provides for that effect must be used so that the authority can corroborate or dismiss, as appropriate, the existence of such practices in Mexico. If monopolistic practices are proven in Mexico's waste markets, the COFECE must issue adequate measures to guarantee free competition.
- Waste is not just an environmental issue—it is a high-value commodity involving thousands of waste pickers. EPR schemes or systems can be controversial for waste pickers because they shift power and economic profit to producers or other waste sector players, often introducing new actors who compete for materials. EPR can displace or make informal workers engaged in waste collection, segregation, transport, and recycling invisible. Thus, EPR regulation must contain criteria to protect the environment while ensuring social responsibility standards, corporate and government compliance with human rights, and strong SSE and economic competition provisions.



Waste nickers at final disposal sites are exposed to hazardous work conditions, given the amounts of waste they segregate and the toxic waste there. And yet, they kind of protection, such as

Photo credit: Angie Oueupumil







