



Economic Instruments for Methane Reduction & Improved Food Security

Policy Opportunities in Mexico

To explore the role of food recovery in mitigating climate change and increasing community resilience, The Global FoodBanking Network (GFN) and the Harvard Law School Food Law and Policy Clinic (FLPC), with funding from the Global Methane Hub (GMH), examined a set of key laws and policies that can promote food recovery in Mexico. While a broad constellation of policies can impact food donation and recovery, the research focused on a selection of policies that use economic instruments — specifically incentives or penalties. These include carbon taxes, carbon offsets, tax incentives, and food waste deterrence laws (e.g., organic waste bans or food donation requirements). From this research came a report on Mexico’s approach to relevant greenhouse gas (GHG) emissions reduction policies along with the potential role for food donations to help reduce methane emissions.



FOOD LIES AT THE NEXUS OF CLIMATE CHANGE MITIGATION AND RESILIENCE

Therefore, climate strategies must include the food system to be effective.

Policies that support food recovery and redistribution not only help address social concerns such as poverty and high rates of food insecurity, but also mitigate methane emissions by reducing the amount of organic waste decomposing in landfills.

The goal of the report is to provide individuals, policymakers, and organizations interested in mitigating greenhouse gas emissions through food recovery with information about the relevant policies in Mexico that can help further their goals. Critically, it includes a series of action opportunities that policymakers can take to reduce emissions by supporting food donation and food waste reduction.

A top-line summary of those opportunities follows on the next page.

For a more detailed explanation of the policy opportunities—along with additional background on methane emissions, food loss and waste, and food recovery—reference the full paper at foodbanking.org/frame-methane-methodology.

ACTION OPPORTUNITIES FOR POLICYMAKERS

The action opportunities summarized below provide a starting point for policymakers to build on and strengthen existing methane emissions policies by incorporating an increased focus on facilitating food donation. Across all opportunities, it's essential to include food recovery organizations (i.e., food banks and other organizations with the mission to reduce food loss and waste and increase donation) in the policy conversation from the start; this is key to ensuring effective policy implementation and increasing food donations, thereby maximizing methane emissions reductions. In addition to the opportunities identified below, policymakers should also consider other opportunities to advance food donation, reduce methane emissions from food waste, and include voices from both food recovery organizations and food donors.

Carbon Tax

To improve the carbon tax framework and methane reductions, policymakers could:

- **Revise the Law on the Special Tax on Production and Services** to require the executive branch to use carbon tax revenue for environmental purposes and climate adaptation projects rather than collecting them in the general fund.
- **Add language in federal and state carbon tax policies to direct a certain percentage of revenue toward food waste deterrence projects** that holistically address the social, environmental, and economic impacts of food loss and waste. Ensuring this revenue funds food waste reduction projects is one way additional funding could be directed to food banks to bolster their infrastructure and support their methane reducing activities.



- **Replicate strong state-level carbon tax policies.** For example, Queretaro has implemented a high carbon price with the ability to reduce tax liability with carbon offsets (such as purchasing carbon credits from food banks).

Carbon Markets

To support food banks' participation in carbon markets, policymakers could:

- **Provide grants and other financial support to reduce the financial and administrative burdens of entering the carbon market.** Considering the high costs around project development, data collection, monitoring, and third-party verification, policymakers could provide grants or other financial assistance to food banks and other food rescue organizations interested in participating in carbon markets.
- **Include food banks in stakeholder outreach when developing regulations for compliance markets.** Food banks have invaluable experience and insight on how to manage food recovery strategies. As Mexico further develops its carbon market policies to meet its emissions reduction goals, policymakers should engage food banks in stakeholder outreach to learn how to use food donation as an emissions reduction tool.

Food Waste Deterrence

To promote food recovery activities and deter food waste, policymakers could:

- **Reform the General Law for the Prevention and Comprehensive Management of Waste to prohibit food waste generators from disposing food waste in landfills** (whether edible or inedible). Prohibiting food waste in landfills or increasing disposal costs encourages generators to divert food to its most beneficial use—feeding people.
- **Support municipalities in calculating appropriate surcharges and taxes to impose on businesses for organic waste disposal** (in addition to landfill tipping fees). Ensuring waste disposers pay the full cost of disposal eases pressure on waste management systems while providing a source of funding to improve or expand food recovery or organic waste separation, collection, or recycling infrastructure.
- **Issue regulations on the General Law on Adequate and Sustainable Food that address compliance and enforcement.** The law prohibits commercial establishments from discarding edible food but says little about compliance or enforcement. Compliance can be encouraged through private-sector outreach and guidance on how businesses must comply. Enforcement is critical to ensure the efficacy of policies that aim to reduce or eliminate the disposal of food in landfills.



- **Issue regulations on the General Law on Adequate and Sustainable Food that direct commercial establishments to prevent and reduce food waste in accordance with the food recovery hierarchy.** The food recovery hierarchy, published by the United Nations' Food and Agricultural Organization (FAO), visually demonstrates the best environmental practices for food waste reduction by prioritizing prevention and reduction of food waste, followed by redistribution of food safe for human consumption, and then repurposing and recycling of food unsafe for consumption. The regulations could explicitly require commercial establishments to donate surplus, edible food to the maximum extent before taking other actions lower in the hierarchy.
- **Enact new and strengthen existing state level food donation laws.** States can take action by enacting laws requiring the donation of edible surplus food in states that do not currently have food donation requirements or by shifting to requiring donation in states with existing laws that encourage (but don't mandate) food donation. States with mandates could strengthen compliance and enforcement through implementation.

Methane Regulation

To bolster methane regulations, policymakers could:

- **Include landfills in methane regulations.** Regulating landfill emissions can incentivize reductions in food waste disposal as food waste is a key methane emitter in landfills.
- **Codify commitments in the Global Methane Pledge** and use food donations to help meet methane emission reduction targets.

Tax Benefits for Food Donation and Recovery

To encourage more methane mitigating food donations, policymakers could:

- **Increase the existing tax deductions for food donations.** The existing deduction could be increased from 5% of the market value of food donations to 50-100%. The incentive could also be expanded to allow donors to claim deductions for activities associated with the storage, transportation, and delivery of donated food.
- **Amend federal tax law to add a tax credit for food donations made to authorized donees and other food recovery organizations.** This would particularly help smaller donors that do not have sufficient income to benefit from Mexico's tax deductions.
- **Promote food donation by offering state-level incentives in states that do not have such incentives.** States could follow Nuevo León's example, which allows food donors to deduct 50-100% of donated food's value from their state payroll tax liability.

Enhancing Food Recovery from Agricultural Producers

To enhance food recovery from agricultural producers, policymakers could:

- **Advance low-cost policies to increase agricultural food recovery and donation, such as enhanced tax incentives.** To ensure agricultural producers are sufficiently incentivized to donate crops and other products, the federal government could provide an enhanced tax deduction for expenses incurred in the activities associated with the harvest, storage, transportation, and delivery of donated food.
- **Support food recovery operations with grants and investments to scale up food recovery from the agricultural sector.** Such investments could provide additional warehouse space, cold storage, transportation, or staffing needed to coordinate with local producers.
- **Foster collaboration with food banks, government agencies, agricultural producers, and academic institutions** to develop further data about the existing levels of food loss, food recovery, and food redistribution from the agricultural sector. Robust data can lead to stronger policies targeting the recovery of fresh foods from agricultural producers.

ABOUT

This report was written by Gray E. Norton, Heather M. Latino, and Emily M. Broad Leib at the Harvard Law School Food Law and Policy Clinic with contributions from Ana Catalina Suárez Peña & María Isabela Molina Maestre at The Global FoodBanking Network. To obtain the necessary data, they reviewed high-level literature and existing FLPC materials (e.g., Global Food Donation Policy Atlas Project Ecuador Legal Guide and Policy Recommendations) to understand the scope of emissions in Ecuador, its approach to reduction policies, and the potential role of food banks in using food donations to help reduce methane emissions. They also referenced the following databases to identify emissions reduction policies: CarbonPulse, Elsevier, Science Direct, Westlaw Edge, LexisNexis, HeinOnline, Jstor, Social Science Research Network, ResearchGate, Harvard University HOLLIS Library Catalogue, Taylor Francis Online, ProQuest, and Wiley Online Library.

The research and recommendations were reviewed by Banco de Alimentos Quito but have not otherwise been fully vetted with other in-country stakeholders. They were also reviewed by the Quantifying and Growing Methane Reductions through Community-based Food Recovery and Redistribution advisory group. The findings, conclusions, and recommendations presented in this report are those of GFN and FLPC alone.

The Global FoodBanking Network

Food banking offers a solution to both chronic hunger and the climate crisis. GFN works with partners in over 50 countries to recover and redirect food to those who need it. In 2023, our Network provided food to more than 40 million people, reducing food waste and creating healthy, resilient communities. We help the food system function as it should: nourishing people and the planet together. Learn more at foodbanking.org.

Harvard Law School Food Law and Policy Clinic

Since 2010, the Harvard Law School Food Law and Policy Clinic (FLPC) has served partner organizations and communities in the U.S. and around the world by providing guidance on cutting-edge food system issues, while engaging law students in the practice of food law and policy. FLPC is committed to advancing a cross-sector, multi-disciplinary and inclusive approach to its work, building partnerships with academic institutions, government agencies, non-profit organizations, private sector actors, and civil society with expertise in public health, the environment, and the economy. FLPC's work focuses on increasing access to nutritious foods, addressing the climate-related impacts of food and agricultural systems, reducing waste of healthy, wholesome food, and promoting food system justice. For more information, visit chlpi.org/food-law-and-policy.

Global Methane Hub

The research included in this report is possible through funding by the Global Methane Hub. The findings, conclusions, and recommendations presented in this report are those of GFN & FLPC alone and do not necessarily reflect the opinions of the Global Methane Hub.