



## Economic Instruments for Methane Reduction & Improved Food Security

# Policy Opportunities in Ecuador

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 Ecuador. 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 Ecuador’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 can not only 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 Ecuador 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](https://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.

### **Zero Carbon Program (Programa Ecuador Carbono Cero, (PECC)) & Potential Carbon Markets**

*When the Ministry of Environment, Water, and Ecological Transition (Ministra del Ambiente, Agua y Transición Ecológica, (MAATE)) provides technical guidance to implement the Zero Carbon Program for waste management activities, it could:*

- **Ensure food recovery organizations can participate with projects that prevent food from entering the landfill and emitting methane.**

Technical guidance for waste management projects should be written in a way that focuses on the core requirements for documenting emissions reductions and that avoids limiting the types of projects that can accomplish those reductions. A broader approach to the guidance that focuses on ensuring the integrity of the underlying project rather than specific types of eligible projects, would allow food banks—which may not typically be associated with waste management activities—to benefit from the program financially while providing an opportunity for other entities to offset their own emissions.



- **Provide guidance on how food recovery projects can meet the additionality element required by the PECC, considering the organic waste ban that's currently being implemented under Ecuador's Food Loss and Waste Law** (*Ley para Prevenir y Reducir la Pérdida y el Desperdicio de Alimentos y Mitigar el Hambre de las Personas en Situación de Vulnerabilidad Alimentaria*). Both carbon markets and the PECC's carbon neutrality component require additionality. Project activities must result in additional emissions reductions compared to what would have been possible under business as usual, absent the additional funding that would come from the Emission Compensation Unit or offset. Guidance on how to demonstrate additionality in food recovery projects — when the business-as-usual scenario under the Food Loss and Waste Law effectively requires emissions reductions by banning food disposal in landfills but does not mandate food donation as the only alternative use—would help food recovery organizations determine the extent to which they can participate in the PECC or another offset framework like a carbon market. Such guidance could also help to ensure support for donation, which provides more benefits compared to some of the other alternative uses for food, such as composting and alternative energy generation.

*To reduce methane emissions and promote food recovery projects in the PECC and any potential carbon market, policymakers could:*

- **Provide assistance to support food recovery organizations interested in participating in emissions offset programs like the PECC.** Considering the high costs around project development, monitoring, and third-party verification, policymakers could also provide grants or other financial assistance to food banks and food rescue organizations interested in participating in emissions offset programs.
- **Ensure robust data collection.** Collecting baseline data on food loss and waste and food donations can help determine the potential effectiveness of food recovery projects in the PECC's carbon neutrality component and the impacts of any food loss and waste regulations. The data can then be used for a variety of other measures, including calculating the potential GHG emissions avoided by instituting a food donation requirement or a potential future compliance carbon market. Policymakers should authorize grants to support robust data collection related to food loss and waste and resultant emissions.

## **Carbon Tax**

*If the National Assembly were to pursue a carbon tax, policymakers could:*

- **Include support for food waste reduction activities in the legislation.** The tax law could create a fund for a portion of the carbon tax revenues to provide grants to food waste reduction projects, such as food donation or recovery infrastructure projects.





## Methane Regulation

*To strengthen commitments to methane reduction, policymakers could:*

- **Codify commitments in the Global Methane Pledge and use food donations to help meet methane emission reduction targets.** Ecuador can establish methane regulations and codify its voluntary commitment to reducing methane emissions. Further, including landfills in methane regulations could work in tandem with the Food Loss and Waste Law.

## Food Waste Deterrence

*To promote food recovery activities and deter food waste from emitting methane in landfills, policymakers could:*

- **Draft regulations to implement the Food Loss and Waste Law.** Shortly after taking office, President Daniel Noboa took steps toward implementing the law by publishing a framework with a new timeline for relevant agencies to publish their own regulations to implement the law. Maintaining the timelines will ensure the law proceeds and the resultant food waste mitigation activities can improve emissions.

## Tax Benefits for Food Donation and Recovery

*To encourage more methane mitigating food donations, policymakers could:*

- **Offer tax incentives for food donations made to food recovery organizations and other intermediaries.** Tax incentives for food donations encourage people to donate more food and help offset the costs of handling and transporting food for donation. While the Food Loss and Waste Law prohibits destroying food that's safe for human consumption, a tax incentive could encourage potential donors to choose donation over other alternatives.
- **Provide a tax incentive for associated activities related to the collection, storage, transportation, and delivery of donated food.** A tax incentive should be considered to help offset the costs of donation and encourage actors in the food supply chain to invest in infrastructure that will facilitate food recovery activities.

## Enhancing Food Recovery from Agricultural Producers

*To help offset some of the costs agricultural producers encounter when harvesting and transporting donated food, policymakers could:*

- **Provide grants or tax incentives to encourage development of robust food recovery systems that will ease implementation of the Food Loss and Waste Law.** Grants and tax incentives should be available to producers to offset costs associated with harvesting and donating food when prices are too low to be commercially viable. Funds and tax incentives should also be made available for infrastructure like cold storage and transportation to help farmers properly store and transport food to recovery organizations.
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### ABOUT

The report was written by FLPC's Gray E. Norton and Emily M. Broad Leib with contributions from GFN's Ana Catalina Suárez Peña and María Isabela Molina Maestre. 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](https://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](https://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 and FLPC alone and do not necessarily reflect the opinions of the Global Methane Hub.