



Food Law and Policy Clinic, a Division of the Center for Health Law and Policy Innovation of Harvard Law School

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United States Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460
Docket No. EPA-HQ-OA-2022-0859

Sent via electronic submissions on the Federal eRulemaking Portal: www.regulations.gov

Re: Comments on the Climate Pollution Reduction Grants

To Whom It May Concern,

These comments are submitted on behalf of the Harvard Law School Food Law and Policy Clinic (FLPC) in response to the Environmental Protection Agency's (EPA) request for information (RFI) and comment on the Climate Pollution Reduction Grants program design and implementation.

FLPC is an educational program at Harvard Law School that serves partner organizations and communities by providing guidance on food system issues and advocating for food systems change, while engaging law students in the practice of food law and policy. FLPC focuses on increasing access to healthy foods, supporting sustainable and equitable production, promoting community-led food system change, and reducing waste of healthy, wholesome food.

Food Waste is a Climate Problem

Decomposing food waste in landfills is a primary source of methane emissions in the United States. Municipal Solid Waste (MSW) landfills account for 15% of all methane emissions in the United States and are the third largest emissions source after livestock management and natural gas and petroleum systems.¹ The primary source of MSW landfill methane emissions is decomposing food and other organic matter.² Food is wasted at every point along the supply chain, leading to economic, social, and environmental harms. Every year, 80 million tons of surplus food is left unconsumed, 54.2 of which goes to landfill, incineration, or is left to decompose in fields.³ Actors along the food supply chain spend \$408 billion every year to grow, process, transport, and dispose of this unconsumed food.⁴ Implementing food waste solutions could avoid 75 million tons of greenhouse gas emissions every year.⁵ Landfills are

¹ *Climate and Resources*, ReFED, <https://refed.org/food-waste/climate-and-resources/> [https://perma.cc/CK2V-DB66].

² *Climate and Resources*, ReFED, <https://refed.org/food-waste/climate-and-resources/> [https://perma.cc/CK2V-DB66].

³ *ReFED Insights Engine: Food Waste Monitor*, ReFED, https://insights-engine.ReFED.org/food-waste-monitor?break_by=sector&indicator=tons-surplus&view=detail&year=2019 [https://perma.cc/3XJ2-X9E4].

⁴ *New Data from ReFED Reveals Amount of Food Waste Has Leveled Off after Increasing 11.9% Since 2010*, ReFED (Feb. 2, 2021), <https://ReFED.com/articles/new-data-from-ReFED-reveals-amount-of-food-waste-has-leveled-off-after-increasing-11-9-since-2010/> [https://perma.cc/42Y9-NAMJ].

⁵ *New Data from ReFED Reveals Amount of Food Waste Has Leveled Off after Increasing 11.9% Since 2010*, ReFED (Feb. 2, 2021), <https://ReFED.com/articles/new-data-from-ReFED-reveals-amount-of-food-waste-has-leveled-off-after-increasing-11-9-since-2010/> [https://perma.cc/42Y9-NAMJ].

overburdened by food waste and states and cities are running out of space to store their organic waste.⁶ In fact, food waste accounts for 24% of landfilled municipal solid waste, with around 35 million tons of landfilled food waste per year.⁷

Food Waste Solutions Support Climate Goals

The most effective solution at reducing the greenhouse gas emissions associated with food waste is reducing the amount of food left to decompose in landfills. The EPA should prioritize funding projects that prevent food from ending up in landfills, particularly those projects that keep food at the top of the EPA Food Recovery Hierarchy. The hierarchy encourages reducing food waste at the outset, followed by recovering food to feed people. After that, the hierarchy suggests that other surplus food should be recovered to feed animals or else diverted to anaerobic digestion or compost rather than landfill.

In addition to funding projects in alignment with the food recovery hierarchy, EPA should account for the varying needs of communities by funding projects at various scales. The EPA should provide funding for small-scale projects including transportation, storage, and processing infrastructure for food banks and food recovery organizations, as well as community-scale initiatives like composting collection and processing at urban gardens, schools, farmers markets, etc. The EPA should also fund projects that provide state-wide and regional support, such as with organic processing infrastructure. Supporting efforts at a variety of scales will allow tribal, local, regional, and state agencies to implement food loss and waste reduction projects best suited to the unique needs of their constituencies. Accordingly, we urge EPA to ensure that smaller scale projects, such as community-scale decentralized infrastructure and rural-based food loss and waste projects, are eligible and competitive for grant funding. Grant funding can be used to support small-scale collectors and processors for purchasing land, transportation, resources, labor, and other operational necessities.

Food Waste Policy Planning

We urge EPA to make Climate Pollution Reduction Grants available to states, tribal nations, and local governments to support the planning or implementation of proven policies that reduce food waste in landfills and incinerators through waste prevention and organics recycling. State and local policies such as organic waste bans, waste diversion requirements, landfill taxes, pay-as-you-throw policies, and efficient permitting have been proven to expand food rescue, create new jobs, and boost food scrap recycling. Projects that support states, tribal nations, and local governments in obtaining the necessary infrastructure, technical assistance, and other critical resources to implement these policies should be eligible and competitive for the \$4.607 billion in climate implementation grant funding.

While certain policies that mandate food waste reduction or make it financially beneficial to divert rather than waste have demonstrated success at reducing food waste, the time and resources needed for planning and implementing these policies can create a costly barrier to interested states, tribal nations, and local

⁶ EPA, ADVANCING SUSTAINABLE MATERIALS MANAGEMENT: 2018 FACT SHEET-ASSESSING TRENDS IN MATERIALS GENERATION AND MANAGEMENT IN THE UNITED STATES (2020), https://www.epa.gov/sites/default/files/2021-01/documents/2018_ff_fact_sheet_dec_2020_fnl_508.pdf [<https://perma.cc/6STD-WPML>]; see James Thompson & Rob Watson, *Time is Running Out: The U.S. Landfill Capacity Crisis*, WASTEADVANTAGE MAG. (May 13, 2018), <https://wasteadvantagemag.com/time-is-running-out-the-u-s-landfill-capacity-crisis/> [<https://perma.cc/CX2D-KMTU>].

⁷ *National Overview: Facts and Figures on Materials, Wastes, and Recycling*, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (December 3, 2022), <https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/national-overview-facts-and-figures-materials#NationalPicture> [<https://perma.cc/Y38Y-Y3SD>].

governments. For example, after California set a goal to reduce organic waste disposal by 75% and increase edible food donation by 20% by 2025, it took the state agency, CalRecycle, 5 years to implement a state-wide food donation requirement (a requirement that certain listed food businesses contract with food recovery organizations to recover surplus food that might otherwise be sent to landfill) to meet that goal.⁸ Planning for and implementing these policies required staff time not only to identify target food businesses, undergo multiple rounds of public input, and draft the regulations, but also to conduct outreach and educate the community and relevant food businesses about how to comply with the regulations.

In a similar vein, planning and resources are needed in identifying the needed infrastructure projects that can bolster policies to reduce food waste. For example, food scrap recycling assessments in cities like Denver and Baltimore have been important in determining what composting infrastructure will best serve the community. The assessments have informed the cities' work plans and helped prioritize future actions. Based on their assessment, the City of Denver is exploring how to get more composting infrastructure and recently passed a new law making recycling and composting collection free but setting up monthly fees for collections of trash headed to the landfill.

Accordingly, we recommend that EPA use the \$250 million in planning grants to support projects related to assessing food waste generation and management to both develop appropriate policies that meet local conditions and needs, and to conduct planning to invest in the most needed infrastructure. Sufficient planning is critical to ensuring that any policies or proposed infrastructure project will meet the unique needs of the community it is serving over the long term.

Some states have already dedicated a significant portion of time and money towards planning for, introducing, and implementing food waste reduction policies. Other states have yet to incorporate comprehensive food waste policies and laws. The EPA should ensure that funding provided through the Climate Pollution Reduction Grants is flexible enough to meet states where they are in terms of planning and implementing food system policies. For states with existing food recovery infrastructure, the EPA should dedicate funding to support pilots for innovative food recovery solutions, such as infrastructure to support upcycling food previously considered waste. For states with minimal existing infrastructure, the EPA should provide more funding towards canvassing the state's food recovery and food waste needs and planning for long-term policy solutions to address those needs.

For all states, the EPA should ensure that any state-wide comprehensive greenhouse gas planning includes food waste planning. Food waste policy solutions, canvassing of food system inefficiencies, and planning to address those inefficiencies are often missing from climate action plans. For example, some states fail to consider food waste in their state-wide climate action plans⁹ and even the United States federal government failed to include food waste and recovery planning in the 2021 Nationally Determined Contribution under the Paris Agreement.¹⁰ By requiring any state-wide climate planning to include food waste and recovery planning, the EPA would incentivize more comprehensive climate planning and solutions across the United States.

⁸ SB 1383, which established the waste reduction goal passed in 2016, and the organic waste ban and food donation requirement regulations went into effect in January 2022. See *California's Short-Lived Climate Pollutant Reduction Strategy*, CALRECYCLE, <https://calrecycle.ca.gov/organics/slcp/> (last visited Jan. 18, 2022).

⁹ See generally, *State-Based Food Waste Policy Gap Analysis and Inventory Reports*, NRDC (Jan. 5, 2023), <https://www.nrdc.org/resources/food-waste-policy-gap-analysis-and-inventory-midatlantic-southeast-and-great-lakes-regions> (ranking numerous states with a "moderate" or "weak" climate action goals policy for failure to include food waste climate action planning).

¹⁰ *United States of America Nationally Determined Contribution Reducing Greenhouse Gases in the United States: A 2030 Emissions Target*, UNITED NATIONS (April 2021), <https://unfccc.int/sites/default/files/NDC/2022-06/United%20States%20NDC%20April%202021%20Final.pdf>.

Food Waste Prevention and Recovery

EPA can reduce GHG emissions associated with food waste, by prioritizing projects that create food waste prevention and recovery infrastructure and thus ensure food stays high in the food recovery hierarchy. EPA can do so by providing funding to food recovery organizations. Scaling food recovery infrastructure is costly. Targeted investments, such as investments to increase food storage capacity and refrigeration, including refrigerated transportation, can help organizations to capture excess edible food that would otherwise be sent to landfill to instead be consumed by people. Funding can also go to processing infrastructure to process surplus food into products that can be preserved and used longer. For example, infrastructure needs include flash freezing or canning for food recovery organizations to store surplus crops in summer that can be distributed after harvest season.

Funding can also be used to support infrastructure for upcycling of human foods, a food waste prevention solution. Upcycled food is a growing sector of the economy that looks to find new, environmentally beneficial uses for food products previously considered waste. This can build a market for new uses for surplus or unmarketable products, and in some cases even for inedible byproducts of food that become edible through upcycling. The EPA should provide funding to the infrastructure needs of upcycling businesses, such as facilities and processing infrastructure, as well as other infrastructure costs identified by upcycling businesses.

The EPA can also provide funding for and prioritize projects that support waste-to-feed food waste solutions, which is the third element on the food recovery hierarchy. Funding in this category could go to developing animal feed facilities that take animal-based and/or non-animal-based food scraps, heat treat them if needed (as is required for animal-based food scraps), and sell them as animal feed.¹¹

Food Waste Processing Infrastructure

The EPA should also support projects that will develop composting and anaerobic digestion processing infrastructure. In addition to the greenhouse gas reduction benefits associated with reducing the amount of food in landfills, both compost and anaerobic digestion infrastructure can support carbon sequestration in soils. Both of these facilities result in productive soil amendments that when applied to soil, contribute nutrients and carbon to depleted soils.¹² Initial findings from the University of California-Berkeley's Silver Lab demonstrate that soil amendments derived from food scraps show greater climate mitigation potential than manure or plant waste derived soil amendments.¹³ Studies and literature reviews by the Marin Carbon Project found that a one-time application of a quarter inch of compost can double the soil's carbon sequestration potential to approximately one ton of carbon per hectare.¹⁴

¹¹ ReFED, *A Roadmap to Reduce U.S. Food Waste by 20 Percent* 66 (2016), https://refed.org/downloads/ReFED_Report_2016.pdf [https://perma.cc/7643-HCA7].

¹² *Composting At Home*, EPA, <https://www.epa.gov/recycle/composting-home> (last visited Feb 10., 2022) [https://perma.cc/M7KRKC44].

¹³ See HANNAH MARSH, *FOOD WASTE COMPOST APPLICATION TO GRASSLANDS THE CLIMATE CHANGE MITIGATION POTENTIAL OF FOOD WASTE COMPOST APPLICATION TO GRASSLAND SOILS* (2019), https://nature.berkeley.edu/classes/es196/projects/2019final/MarshH_2019.pdf [https://perma.cc/MPJ8-QF83].

¹⁴ See *Science*, MARIN CARBON PROJECT, <https://www.marincarbonproject.org/marin-carbon-project-science> (last visited Mar. 4, 2022) [https://perma.cc/FSS7-N4AT]; see Rebecca Ryals et. al., *Long-term climate change mitigation potential with organic matter management on grasslands*, 25 *ECOLOGICAL APPS.* 531 (Mar. 2015); see Rebecca Ryals & Whendee L. Silver, *Effects of organic matter amendments on net primary productivity and greenhouse gas emissions in annual grasslands*, 23 *ECOLOGICAL APPS.* 46 (Jan. 2013).

Investment into composting and anaerobic digestion infrastructure is necessary because constructing these facilities involves high up-front costs. An anaerobic digestion facility costs around \$20 million to construct; a full-service composting facility costs around \$5-9 million.¹⁵ However, once built, these facilities can process between 5,000 – 100,000 tons of organic waste every year, depending on the facility size.¹⁶ The Climate Pollution Reduction Grants should support existing composting and anaerobic digestion facilities that do not currently process food scraps to update their infrastructure to be able to process food scraps. Project funding should also support the development of new processing facilities.

Investing in composting and anaerobic digestion infrastructure enables communities and policymakers to use the infrastructure to support other food waste reduction policies. For example, a growing number of states and localities have enacted organic waste bans, which are laws or regulations that restrict food businesses and/or individuals from throwing organic waste into landfill. However, to make these policies successful, states and localities need to ensure there is sufficient organics processing infrastructure to divert food from landfills. Having the financial support for this infrastructure can help encourage more governments to utilize these proven policies to reduce food in landfills.

Food Waste Solutions Support Equity Goals

Pollution in our air, water, and land disproportionately affects communities where the majority of residents are Black, Indigenous, or other people of color.¹⁷ Food waste reduction projects can help address equity and environmental justice concerns while reducing greenhouse gas emissions. Landfills and incinerators are often sited in low-income communities of color.¹⁸ Food is the largest component of landfills nationwide – contributing over 35 million tons to landfills each year and accounting for 24% of landfilled municipal solid waste.¹⁹ Though they are often not at the top of the list, food and waste systems are essential in climate planning. In order to reach zero waste and climate goals at the municipal, state, and federal levels, food scraps (along with other organics) need to be managed separately from the other materials in the municipal solid waste stream. Keeping food scraps out of landfills and incinerators also helps reduce the pollution emitting from them and affecting surrounding communities. By making food waste reduction projects eligible for grant funding and prioritizing communities affected by pollution, EPA can support this critical work.

Moreover, these communities face more barriers to accessing funding that would help address pollution issues. As mentioned above, organic processing infrastructure has high up-front costs, but once built is

¹⁵ REFED, A ROADMAP TO REDUCE U.S. FOOD WASTE BY 20 PERCENT 62 (2016), https://refed.org/downloads/ReFED_Report_2016.pdf [<https://perma.cc/7643-HCA7>].

¹⁶ REFED, A ROADMAP TO REDUCE U.S. FOOD WASTE BY 20 PERCENT 62 (2016), https://refed.org/downloads/ReFED_Report_2016.pdf [<https://perma.cc/7643-HCA7>]; *Food Waste Composting Infrastructure in the U.S.*, BIOCYCLE (Jan. 4, 2019), <https://www.biocycle.net/food-waste-compostinginfrastructure-u-s/> [<https://perma.cc/7Y98-CQV9>].

¹⁷ *Racial, ethnic minorities and low-income groups in U.S. exposed to higher levels of air pollution*, Harvard T. H. Chan School of Public Health, <https://www.hsph.harvard.edu/news/press-releases/racial-ethnic-minorities-low-income-groups-u-s-air-pollution/> (last visited Jan. 12, 2023)

¹⁸ A thorough study conducted in 1995 demonstrated communities living near waste facilities, which are often composed of racial minorities and low-income persons, are disproportionately exposed to pollutants and disproportionately experience health defects as a result. Unfortunately, the US government has not updated this study since 1995. *Hazardous and Nonhazardous Waste Demographics of People Living Near Waste Facilities*, UNITED STATES GENERAL ACCOUNTING OFFICE (June 1995), <https://www.gao.gov/assets/rced-95-84.pdf> [<https://perma.cc/TX9H-KDAY>].

¹⁹ *National Overview: Facts and Figures on Materials, Wastes, and Recycling*, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (December 3, 2022), <https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/national-overview-facts-and-figures-materials#NationalPicture> [<https://perma.cc/Y38Y-Y3SD>].

able to process a significant amount of organic waste for the region. However, the high up-front costs associated with building these facilities may preclude communities, particularly low-income communities, from building them. In order to address longtime inequities, communities of color that have suffered from pollution should be prioritized in this funding. Grant proposals should also require applicants to demonstrate strong stakeholder engagement and ensure that community stakeholders are meaningfully involved in the project design and impacts.

Funding under the Climate Pollution Reduction Grants for Food Waste Solutions Fills Funding Gaps

To date, no federal grant is dedicated to planning for and implementing state-wide food waste solutions. Though a number of grants provide for regional or local food waste and organics policy planning and implementation, these funding opportunities are insufficient to scale state-wide solutions. For example, the USDA's Community Compost and Food Waste Reduction Project (CFWR) provides financial assistance to municipalities, school districts, counties, local and tribal governments to carry out food waste reduction activities. This opportunity may support a local government in planning for and starting to implement municipal food waste solutions, however because states are ineligible to receive funding, state governments are unable to use CFWR funding to plan for and implement state-wide municipal food waste reduction solutions or to scale proven solutions across a region. This is a huge, missed opportunity, as it fails to recognize the key role states are playing in adopting successful policies, such as organic waste disposal bans, food donation requirements, waste disposal surcharge fees, etc. Supporting states in the planning and implementation of these policies with proven success is key to reducing emissions from food waste. Additionally, the Solid Waste Infrastructure for Recycling Grant Program (SWIFR) provides states with funding to plan for and begin implementing solid waste management plans.²⁰ However, SWIFR primarily focuses on post-consumer material management and likely misses out on food waste reduction and recovery solutions outside the traditional waste management stream.²¹ Providing for comprehensive food waste prevention, recovery, and recycling planning and solutions implementation could compliment and build-off the SWIFR funding opportunity.

Thank you for your consideration of FLPC's comments and recommendations.

Sincerely,



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²⁰ *Grants for States and Territories*, ENVIRONMENTAL PROTECTION AGENCY (Jan. 10, 2023), <https://www.epa.gov/infrastructure/grants-states-and-territories#06>.

²¹ See *Solid Waste Infrastructure for Recycling (SWIFR) Grant Program*, ENVIRONMENTAL PROTECTION AGENCY (Dec. 2022), <https://apply07.grants.gov/apply/opportunities/instructions/PKG00278927-instructions.pdf>.