March 22, 2023

Senator Stacy Brenner, Chair
Representative Ralph Tucker, Chair
Joint Standing Committee on Environment and Natural Resources
Maine Legislature
100 State House Station
Augusta, Maine 04333

RE: L.D. – An Act Regarding the Reduction and Recycling of Food Waste

Dear Senator Brenner, Representative Tucker, and Members of the Joint Standing Committee on Environment and Natural Resources:

Thank you for the opportunity to provide testimony on L.D. 1009, An Act Regarding the Reduction and Recycling of Food Waste. **Just Zero strongly supports this bill**.

Just Zero is a national environmental non-profit advocacy organization that works alongside communities, policy makers, scientists, educators, organizers, and others to implement just and equitable solutions to climate-damaging and toxic production, consumption, and waste disposal practices. We believe that all people deserve Zero Waste solutions with zero climate-damaging emissions and zero toxic exposures.

Over three decades ago, Maine set the goal of recycling or composting 50% of the municipal solid waste generated in the state.[1] Unfortunately, not only has the state never achieved this goal, but we are losing ground.[2] While the first-in-the-nation Extended Producer Responsibility for Packaging Law is expected to help get Maine closer to achieving this longstanding goal, it is only half the battle.[3] In order to truly address the amount of waste Maine is generating, the state must implement a comprehensive program that addresses food waste. This is exactly what L.D. 1009 does. If enacted, this bill will reduce food waste, address food insecurity, all while also developing and expanding Maine's food waste recycling infrastructure.

I. L.D. 1009 Contains All Key Elements Necessary in an Effective Food Waste Reduction and Recycling Law.

L.D. 1009 will slowly ban the disposal of food waste in Maine's landfills and incinerators. The ban will be phased in over a period of twelve years. It will start with large food waste generators,

[1] 38 M.R.S.A. § 2132(1).
[2] See, Department of Environmental Protection, *Maine Solid Waste Generation and Disposal Capacity Report for 2020 & 2021*, (Jan. 2023).
[3] 38 M.R.S.A. § 2146.

those that generate over two tons food waste per week, such as grocery stores, universities, and hospitals, before becoming more widely applicable to other businesses and institutions. Eventually, the ban will apply to individuals and households, as well. This phased-in approach will provide the time necessary to develop the hauling, processing, composting, and anerobic digestion infrastructure that is necessary to responsibly and sustainably manage this material.

Instead of disposing of food waste, the bill requires Mainers to find alternative, more sustainable avenues for managing the food waste they create. Specifically, the bill emphasizes reducing food waste at the source, donating excess edible food to hunger relief organizations like food banks and food pantries, using food waste for animal feed, and composting or anaerobically digesting the material.

L.D. 1009 also emphasizes a source separation approach to food waste recycling. For many, compliance with L.D. 1009 will mean utilizing an organic recycling program, such as a composting or anerobic digestion facility to manage the food waste they generate. With any recycling system, the earlier you separate the targeted material from all other waste, the better the system functions. This is called source separation. If not properly separated, inorganic food packaging such as containers, bags, produce stickers, and wraps may contaminate the compost or digestate. This creates operational problems for organic recycling facilities and leads to contamination in the final compost or digestate, which poses a risk to human health and the environment when it is used as a soil amendment or fertilizer on farmland. To address contamination concerns, the bill requires all food waste generators to separate all food waste from all other forms of inorganic solid waste, including packaging, at the point of generation, when utilizing a composting or anerobic digestion service or composting at home.

However, the bill also correctly understands that there is needed flexibility in Maine's food waste recycling system. This is especially true when it comes to large food waste generators who are responsible for managing packaged food waste. While convenient, there are significant concerns about the quality of material produced by depackaging systems and the role they have in increasing contamination in compost and soil amendments. To balance concerns over contamination and the impact of heavily packaged food waste that cannot be source separated on-site, the bill allows for large volumes of heavily packaged organics to be mechanically separated prior to recycling through depackaging.

Additional flexibility is provided by the waiver process. The law allows for regulated food waste generators to petition the Department of Environmental Protection for a waiver from the requirements of the law if the generator is unable to find an intermediary facility or organics recycler to manage its food waste. Additionally, the law empowers the Department to develop additional factors for determining whether a generator may be grated a waiver from the requirements of the law through rulemaking.

II. Food Waste Reduction and Recycling Laws Are Common and Effective.

This is not a new concept. L.D. reflects a proven and effective policy that has been implemented in several states. Currently nine states – Connecticut, Massachusetts, New Jersey, New York, Oregon, Rhode Island, Vermont, and Washington – have passed some form of a Food Waste Reduction and Recycling Laws.[4] These laws have been incredible successful at reducing food waste, addressing food insecurity, and developing and expanding organic recycling businesses and programs.

For instance, Vermont's law – which is nearly identical to L.D. 1009, has increased food donations and reduced the amount of food that is landfilled. In 2012, Vermont enacted the Universal Recycling Law which implemented a phased-in food waste disposal ban. The law was phased in over a period of eight years and became applicable to all Vermonters in July 2020. Since the law was enacted, food donations have increased year-over-year. In 2015, donations increased by 30%.[5] This rose to 40% in 2016.[6] The Vermont Food Bank noted that the law helped provide roughly 40,000 meals in 2016.[7] A significant portions of these new donations are fresh produce and other perishables which were otherwise being landfilled.[8] The law has also significantly reduced the amount of food being landfilled. A recent report from the University of Vermont found that 71% of all food waste generated in Vermont is being diverted from disposal.[9]

Similarly, in 2021, the Maryland Legislature passed a Food Waste Reduction and Recycling Law. Currently, the law prohibits anyone who generates at least 2 tons of food waste per week from disposing the material in a landfill or incinerators. Beginning in 2024, the prohibition will apply to those who generate at least 1 ton of food waste per week. Even though this law is still in its infancy, it has helped spur economic investment into Maryland's existing food waste recycling services. Compost Crew, a Maryland-Based composting and food waste hauling company doubled its capacity in 2022 to accommodate businesses and institutions that are required to comply with the law.[10] The company noted that the law has added significant momentum to composting efforts and the regulatory certainty allowed the company to scale quicker than expected.[11] These are just two examples of how effective these laws have been and what we can expect if L.D. 1009 is enacted into law.

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[4] U.S. Composting Council, Organics Bans & Mandates.
[5] Vermont Agency of Natural Resources, Universal Recycling Law Boosts Fresh Food Donations.
[6] *Id.*
[7] *Id.*
[8] *Id.*
[9] Jenn Jarecki, Research Shows Promising Returns for State Compost and Recycling Rules, With Caveats, Vermont Public. (Feb. 15, 2023).
[10] Cole Rosengren, Compost Crew, Leading Mid-Atlantic Organics Recycler Sees Record Growth in 2022, Waste Dive. (Feb. 28, 2023).
[11] *Id.*

III. Disposing of Food Waste in Landfills and Incinerators Has Significant Environmental, Public Health, and Economic Impacts.

Not only are these laws effective, but they are also incredibly important. The amount of food wasted in Maine has significant environmental, public health, and economic impacts. This is unsurprising given the amount of food we waste in this country. Approximately 40% of food in the United States does uneaten.[12] In fact, food waste is the largest individual component of the municipal solid waste stream.[13] The overwhelming majority of food waste is landfilled. When food is landfilled, we lose both the ability to feed those in need, as well as the significant economic and environmental resources that went into growing, harvesting, processing, and transporting the food. Estimates indicate that the value lost through surplus and uneaten food accounts for $408 billion dollars annually.[14]

A. Food Waste Reduction and Recycling Laws Help Fight Climate Change

Additionally, all of this wasted food has significant environmental impacts when it is disposed of rather than donated or recycled. This is especially true when it comes to climate change. When organic material – such as food waste – is landfilled it breaks down and produces methane, a powerful and potent greenhouse gas that traps 80 times more heat in the atmosphere than carbon dioxide.[15] The methane emissions associated with landfilling food waste is one of the leading reasons that landfills are the third largest source of greenhouse gas emissions in the country.[16] In California, 20% of the state's methane emissions are directly attributed to organic waste in landfills.[17]

Food Waste Reduction and Recycling Laws like L.D. 1009 significantly reduce methane emissions by ensuring that this material is kept out of landfills. Moreover, these laws provide additional climate benefits by increasing the amount of food waste that is composted. When compost is applied to soils and farmland it helps improve carbons sequestration thereby reducing the amount of greenhouse gasses in the atmosphere.[18] In addition to these direct benefits, compost also improves water retention in soil, promotes healthier plant growth, reduces the need or industrial and fossil-fuel based fertilizers.[19] Finally, composting can even help remediate

[12] Megan Thompson, Americans Waste Up To 40% of the Food They Produce, PBS. (Aug. 31, 2019).
[13] *Id.*
[14] Minnie Ringland, Tracking Rising Food Prices and Food Waste in 2020, ReFED. (Jan. 31, 2022).
[15] NPR, Scientists Say Landfills Release More Planet-Warming Methane Than Previously Thought. (Aug. 11, 2022)
[16] *Id.*
[17] California Department of Resource Recycling and Recovery, Analysis of Progress Toward the SB 1383 Organic Waste Reduction Goals, p. 1. (Aug. 18, 2020).
[18] U.S. Compost Council, Compost – Combatting Climate Change.
[19] *Id,*

contaminated soil.[20] This is something desperately needed given the widespread per-and polyfluoroalkyl substances ("PFAS") contamination that is impacting farms across the state.[21]

B. Reducing, Donating, and Recycling Food Waste Is Economically Preferable to Disposal.

L.D. 1009 will also provide economic benefits to the state. According to the Institute for Local Self-Reliance, on a per-ton basis, composting creates two times the number of jobs created by landfilling, and four times the number of jobs created by incineration.[22] These composting systems are highly decentralized and therefore the benefits of the job creation are widely distributed as opposed to centralized in one location. Thus, the economic benefits are spread throughout the state, which help invigorate local economies while strengthening local food systems.

Moreover, diverting food waste from landfills and incinerators also reduces the substantial economic burden associated with paying for disposal of these materials. In Maine, the cost of waste management is primarily borne by businesses and communities. Composting and anaerobic digestion are not only more environmentally beneficial but also substantially cheaper than disposal. The average municipal solid waste tipping fee for landfilling in Maine is $72.21 per ton.[23] According to the Maine Department of Environmental Protection, the tipping fee associated with composting facilities ranges between $30-$40 per ton.[24]

C. Food Waste Reduction and Recycling Laws Help Address Food Insecurity.

Finally, Food Waste Reduction and Recycling Laws also help address food insecurity by increasing the amount of excess edible food that is donated to hunger relief organizations like food banks and food pantries. In 2018, it was estimated that roughly one out of every five children in Maine are food insecure, meaning they have limited or uncertain access to adequate food.[25] The same report found that in total, over 170,000 Mainer's are food insecure.[26] The ongoing pandemic and recent economic turbulence has only increased food stress in many communities across the State. As explained above, Vermont's Universal Recycling Law, which is very similar to L.D. 1009, has vastly increased the amount of food donations thereby helping reduce hunger and food insecurity. If enacted, L.D. 1009 would provide similar benefits.

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[20] BioCycle, Environmental Remediation by Composting. (Dec. 14, 2016).
[21] Kevin Miller, More Than 50 Maine Farms Impacted by PFAS, But State Officials See Glimmer of Hope, Maine Public. (Feb. 1, 2023).
[22] Brenda Platt, Composting Makes Sense: Job Trough Composting and Compost Use, Institute for Local Self Reliance, (May 2013).
[23] Environmental Research and Education Foundation, Analysis of Municipal Solid Waste Landfill Tipping Fees for 2020. (Jan. 29, 2021)
[24] Mark A. King, Guide to Recovering and Composting Organics in Maine, Maine Department of Environmental Protection. (March 2016).
[25] Feeding American, Maine Food Insecurity Rates – 2018.
[26] *Id*

IV. Conclusion

Maine has shown tremendous leadership when it comes to developing responsible and circular waste management systems. It is clear that this is a priority for the state, it's residents, and it's environment. However, Maine is significantly behind the rest of the region and nation when it comes to addressing food waste. L.D. 1009 provides a comprehensive framework that will food waste, address food insecurity, all while developing and expanding Maine's food waste recycling infrastructure. All while also moving the state closer to meeting its waste reduction and climate mitigation goals.

Thank you for your time and consideration of this testimony. Just Zero strongly supports L.D. 1009 and urges you to recommend that the bill ought to pass. I'm happy to answer any questions you may have.

Respectfully submitted,

Peter Blair, Esq.
Policy Director
Just Zero.