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Supporting a Circular Food System Through Policy and Law¹

A circular economy, broadly, is “restorative and regenerative by design and aims to keep products, components, and materials at their highest utility and value at all times... ultimately decoupl[ing] global economic development from finite resource consumption.”² A circular economy has the potential to promote substantial economic benefits while also resolving critical climate related issues. For example, adopting a circular approach to the biocycle sector of our economy, or the sector that “cultivates plants, animals, and fungi for food, energy, structural materials, medicines and other products to benefit humans” has unrealized potential to provide substantial economic benefits.³ The bio-economy is estimated to be worth \$12.5 trillion (17% annually of all global economic activity).⁴

Within the bio-economy, the food and beverage industry is the largest sector and has “over 1 billion people working each day to grow, process, transport, market, cook, pack, sell and deliver food.”⁵ As of now the global food industry is inefficient and generates large amounts of food waste, environmental degradation, and unhealthy outcomes. For example, approximately a third of all food produced in the world for human consumption annually is lost or wasted (1.3 billion tons), costing about \$680 billion in industrialized countries.⁶ At the same time the food industry is producing massive amounts of food waste, half of the world's population is hungry or undernourished, while another 2.1 billion people are obese or overweight.⁷

Transitioning the current industrialized food system demands a multi-pronged solution that encourages and incentivizes sourcing food grown regeneratively and locally, and designs out food waste.⁸ Regenerative agriculture aims to do more than produce commodities—it actively promotes biodiversity, ecological processes, and ecosystem management.⁹ A localized food system relies on many, small, locally-owned and operated businesses, and yields multiple benefits: research establishes a local food system is positively correlated with greater economic stability, income equity, and a more robust community infrastructure.¹⁰

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² Ellen MacArthur Foundation, 2015

³ Ellen MacArthur Foundation, 2018

⁴ Ibid.

⁵ Ibid.

⁶ FAO, 2018

⁷ Ibid

⁸ Ellen MacArthur Foundation, 2019

⁹ McBride, Fiona. “Redefining Value and Risk in Agriculture: Policy and Investment Solutions to Scale the Transition to Regenerative Agriculture.”

¹⁰ DeLind, 2002; Goldschmidt, 1978; Shuman, 2013; Tolbert, Lyson, & Irwin, 1998

Designing out food waste involves, among other things, redirecting edible food out of waste and redistributing it for human consumption.¹¹ Redirecting edible food for consumption offers additional benefits in terms of reducing food insecurity.¹² Food waste that cannot be redistributed and consumed can offer other economic benefits—if it is effectively collected as organic waste and composted it can support regenerative agriculture, closing the loop in the circular food system.¹³

Supporting a multi-pronged approach to transition a linear food system to a circular food system involves developing policy and legislation at various levels of government that tackle each stage of the food systems cycle--from production, to processing, to consumption, and waste management. We focus our discussion below narrowly on the post-consumption waste management point in the food system cycle.¹⁴

Existing Federal Legislation and Policy to Eliminate Food Waste

Designing out post-production and food waste requires redirecting edible food out of waste and moving post-consumption organic waste into composting.¹⁵ Federal, state, and local law exists to reduce food loss and waste (FLW), though existing law does not offer a comprehensive approach to eliminating FLW.¹⁶ At the federal level, legislation mostly regulates food donations, by providing reduced liability, tax incentives, and moving some food waste to animal feed.¹⁷

Commentators find federal legislation is generally less progressive and impactful than state and local laws; still, the most recent 2018 Farm Bill is the first Farm Bill to include robust FLW provisions, and the USDA has established a goal to reduce FLW by 50% by 2030.¹⁸ These congressional actions reflect the federal government's willingness to invest in FLW reduction strategies, as do several currently proposed bills.¹⁹ There are three main federal bills that govern FLW: the Bill Emerson Good Samaritan Food Donation Act, the Protecting Americans from Tax Hikes (PATH) Act, and the Farm Bill of 2018.²⁰

The Bill Emerson Good Samaritan Food Donation Act (“Emerson Act”)²¹ offers civic and criminal liability protection to food donors and nonprofit organizations that receive and distribute food donations to those in need, given donors meet the following two requirements: 1) recipient centers may not sell donated food, and 2) donated food must comply with national, state, and local

¹¹Ellen MacArthur Foundation, 2019

¹²Ibid

¹³ Ibid

¹⁴ McBride, Fiona.

¹⁵ MacArthur 2019

¹⁶ Swinburne, Mathew, and Katie Sandson. “Food Waste: Addressing Our 160 Billion Pound Public Health Challenge with Policy and Business Interventions.”

¹⁷ Ibid

¹⁸ Evans, Alexandra, and Robin Nagele. “A Lot Lot to Digest Digest: Advancing Food Waste Policy in the United States.”

¹⁹ Schultz, Jennifer. “Fighting Food Waste.”

²⁰ ReFed. “Federal Food Waste Policy.”

²¹ See The Bill Emerson Good Samaritan Food Donation Act, found at 42 U.S. Code §§ 1791 et seq.

quality and labeling standards, even if not “readily marketable due to appearance, age, freshness, grade, size, surplus, or other conditions.”²² If a donor offers food that does not fulfill all quality/labeling standards, the donor may be protected if they inform the receiving nonprofit organization of the subpar condition, and the organization agrees to recondition the items to meet necessary requirements.²³ The Emerson Act does not extend protection to non-profits that sell donated food, including food service establishments that make donations to individuals, and does not provide liability protection for donating mislabeled and past-date (but still completely safe for consumption) foods.²⁴

Protection under the Emerson Act does not shield donors from liability due to gross negligence, defined as “voluntary and conscious conduct (including a failure to act),” nor intentional misconduct, or knowledge that the donation “is harmful to the health or well-being of another person.” Protection also does not relieve donors from liability for food donated directly to needy individuals. The Emerson Act also does not override state and local health regulations. Though the Emerson Act offers donors substantial relief from liability, few potential donors appear aware of its existence, likely limiting its efficacy.²⁵

Section 113 of the Protecting Americans from Tax Hikes (PATH) Act²⁶ sets up a tax incentive, or an enhanced tax deduction up to 15% of a business’ taxable income, for all businesses — including C-corporations, S-corporations, limited liability corporations (LLCs), partnerships, and sole proprietorships — to donate food that satisfies certain quality requirements.²⁷ This enhanced tax deduction is the lesser of either twice the base value of the donated food or the food’s base value added to half of its expected profit margin. To be eligible for enhanced tax deduction, a business must donate food to a 501(c)(3) nonprofit organization that distributes the food to the needy, ill, or infants, meet all federal, state, and local quality/labeling requirements at time of donation, without compensation (though the recipient nonprofit organization may charge for nominal, necessary expenses to store the food for distribution to another charitable organization). Even if the donated food does not meet the quality requirements, the business can still claim a base tax deduction in the amount of the donation’s basis value. Businesses other than c-corporations may not deduct more than 30% of their taxable annual income, and c-corporations may not deduct more than 10%.

[The Farm Bill of 2018](#), or the Agriculture Improvement Act of 2018, is the first Farm Bill to include provisions tackling FLW.²⁸ The Farm Bill is updated every five years, and this most recent one expires in 2023. The 2018 Farm Bill details policies that include funding to support

²²United States Department of Agriculture. “Frequently Asked Questions about the Bill Emerson Good Samaritan Food Donation Act” available at <https://www.usda.gov/sites/default/files/documents/usda-good-samaritan-faqs.pdf>.

²³ Ibid

²⁴ Harvard Food and Law Policy Clinic. “Recommendations To Strengthen the Bill Emerson Good Samaritan Act.”

²⁵ ReFed. “Federal Liability Protection.”

²⁶ Protecting Americans from Tax Hikes Act of 2015

²⁷ ReFed. “Federal Tax Incentives.”

²⁸ Sandson, Katie. “2018 Farm Bill Includes Major Food Waste Reduction Provisions, Including Several FLPC Recommendations”

pilot projects in at least 10 states to expand state and local composting programs and food waste reduction plans; the creation of a “Food Loss and Waste Reduction Liaison” at the USDA; expanding state responsibility to process, package, and transport donated food; expanding liability protection to include those donating food directly to needy individuals; funding a new milk donation program; and establishing a Local Agriculture Market Program which will reduce food loss at farms via development of innovative business opportunities.²⁹ The National Resource Defense Council notes that the 2018 Farm Bill offers a promising step towards a more progressive, climate conscious federal food policy framework, particularly given the Farm Bill’s history of prioritizing pesticide and monocrop companies.³⁰

Though not an example of federal legislation to reduce FLW, in 2015, the USDA and Environmental Protection Agency (EPA) have jointly announced the goal of reducing FLW by 50% by 2030, in alignment with the UN Sustainable Development Goals.³¹ To achieve this goal, the agencies plan to work with partners and stakeholders to “promote action and bring more successful interventions and tools to advance the sustainable management of food.” In support of this goal, the EPA organized a summit in 2015 with organizations across the food chain to discuss opportunities and challenges in reducing FLW, and based on that summit created a Call To Action for stakeholders. The Call To Action provides a detailed list of activities and opportunities various organizations involved in the food chain can take to reduce FLW. However, this list does not incentivize organizations to substantially alter their actions and does not alleviate the legislative barriers (such as restrictive crop insurance) to regenerative agriculture.³²

Previously Proposed Federal Legislation to Ameliorate Food Loss and Waste

In the past five years, several proposed federal bills also attempted to address food waste.³³ Three relevant bills that legislators introduced in prior years include the [Food Recovery Act of 2017](#), the [Food Donation Act of 2017](#), and the [Food Date Labeling Act of 2019](#).

The Food Recovery Act offered a comprehensive approach to tackling FLW. It allocated funding for activities related to food waste awareness, reduced FLW at schools and farms, and installed composting facilities and anaerobic digesters that produce energy using food or crop scraps. The bill also proposed to create a Food Recovery Liaison within the USDA, expand tax incentives to include donated food sold by nonprofits, liability protection for food donors, and mandate that companies receiving federal food service contracts donate excess food to nonprofits that serve food-insecure populations. The bill proposed stricter date labeling regulations as well.

²⁹ USDA.gov. “Farm Bill.”

³⁰ Berkenkamp, JoAnne. “Food Waste Reduction Scores Big in the Farm Bill.”

³¹ Epa.gov. “United States 2030 Food Loss and Waste Reduction Goal”

³² Chen, Rachel J.C. “Using Two Government Food Waste Recognition Programs to Understand Current Reducing Food Loss and Waste Activities in the U.S.” See also “Redefining Value and Risk in Agriculture.”

³³ ReFed. “Federal Food Waste Policy”

At present, date labeling is unregulated and misleading due to the varied, redundant, and often unnecessary labels included on packaging.³⁴ Unable to distinguish between “Use by,” “Best by,” and “Sell by,” perfectly safe food is often thrown out.³⁵ The Food Date Labeling Act of 2019 proposed revising labeling to reduce consumer confusion. It restricted labeling to solely indicate quality date and safety date, using the phrases “Best if used by” and “Use by,” respectively. The act also proposed consumer education about product labeling, and barred states from banning the donation of food past their quality date.

Finally, the Food Donation Act of 2017 would have amended the Emerson Act by expanding liability protection for food donors to include products that are mislabeled, past the date label but still meet safety standards, or sold at “good Samaritan reduced” price that does not yield a profit, or donated by an organization directly to a needy individual.³⁶

Existing State Legislation to Eliminate Food Loss and Waste

We found state legislation that supports eliminating food waste through multiple approaches across the country. We can categorize state laws into one of the following categories: (1) expanding federal legislation that offers liability protection for food donations, (2) expanding federal tax incentives for food donation; (3) managing organic waste labeling; and (4) regulating animal feed. Due to their complexity, we do not discuss animal feed laws in this memo, but it is an important aspect of FLW legislation.³⁷

State law appears to build on federal policy in ways that both promote and inhibit solutions to FLW.³⁸ States that do not regulate date labeling, require redundant/irrelevant labeling, and/or prohibit feeding animals food waste exacerbate FLW.³⁹ For example, Montana bans the sale or donation of milk 12 or more days after pasteurization, even though the dairy industry considers milk to be safe as long as 21 days past its pasteurization date. Such an arbitrary ban results in thousands of gallons of wasted milk.⁴⁰ As detailed below, the most successful State-level policies appear to be those that expand liability protection, strengthen organic waste management, and further tax incentives.⁴¹

Expanding the Emerson Act’s Liability Protections⁴²

The Emerson Act’s limited liability protection discourages the donation of safe but past date food, donating to needy individuals directly, or donating to nonprofits that sell food at a

³⁴ Rts.com “Food Waste in America in 2021”

³⁵ Ibid

³⁶ Food Donation Act of 2017.

³⁷ ReFed. “Federal Animal Feed Policy.”

³⁸ ReFed. “U.S. Food Waste Policy Finder.”

³⁹ Ibid.

⁴⁰ Mont. Admin. R. 32.8.101 (2013).

⁴¹ Schultz, Jennifer. “Fighting Food Waste.”

⁴² ReFed. “U.S. Food Waste Policy Finder.”

“Good Samaritan” price. States have taken different approaches to address these limitations. Oregon has relaxed labeling requirements of donated food, and New Hampshire protects food donations directly to needy individuals and a variety of nonprofit organizations, as opposed to just nonprofit food banks.⁴³ Wisconsin also extends liability to nonprofits that sell donated food at handling costs.⁴⁴ California has launched an education and awareness program about liability protection to encourage donation while protecting donors.⁴⁵ Table 1 below provides the key provisions of state law that expands federal liability protection. The model bill accompanying this memorandum incorporates language from the Vermont, California, and New Hampshire state legislation.

Table 1: State Bills that Expand Emerson Act’s Liability Protections

| State and Citation | Donor | Distributor | Liability Type | Condition | Protects Food Sold at Handling Costs | Protects Direct Donation |
|---|--|-----------------------------------|--------------------|--|--------------------------------------|--------------------------|
| Arizona Ariz. Rev. Stat. Ann. § 36-916 | Any (including those donating to immediate family) | Nonprofit/charitable organization | Civil | Donation in good faith of food that is apparently fit for consumption Protects food that fails to meet quality and label standards, given the donor informs the recipient nonprofit and the recipient nonprofit reconditions the product. | Yes | Yes |
| Arkansas Ark. Code Ann. § 20-57-103 | Anyone donating in good faith | None | Civil and criminal | Donation in good faith of food that is fit for consumption, if not marketable | Yes | No |
| California | Food facility, nonprofit | Nonprofit/charitable | Civil | Donation in good faith of food that is | No | No |

⁴³ Epa.gov “Wasted Food Programs and Resources Across the United States”

⁴⁴ Ibid

⁴⁵ Ibid

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|---|--|-----------------------------------|--------------------|---|-----|----|
| Cal. Civ. Code § 1714.25 | charitable organization or food bank | organization or food bank | | apparently fit for consumption, regardless of compliance with packaging and labeling laws | | |
| Connecticut § 52-557L | Any | None | Civil and criminal | Donation in good faith of food to a nonprofit or charitable organization that is not believed or known to be adulterated or unfit for human consumption | Yes | No |
| Georgia Ga. Code Ann., § 51-1-3 | Any | Nonprofit/charitable organization | Civil and Criminal | Donations in good faith of food that appears to be fit for consumption, even if not readily marketable | Yes | No |
| Idaho Idaho Code Ann. § 6-1301—1302 | Food establishment, farmer, processor, distributor, wholesaler, food retailer, gleaner handling cost | None | Civil and criminal | Donations in good faith of food that appears to be fit for consumption | No | No |
| Iowa Iowa Code Ann. § 672.1 | Gleaner, restaurant, food establishment, food or food services establishment, school, foodstuffs manufacturer, | Nonprofit/charitable organization | Civil and criminal | Donations of food in good faith that appears to be fit for consumption, even if not readily marketable | Yes | No |

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|--|--|--------------------------------------|-----------------|---|-----|-------------------|
| | meat or poultry establishment, or other person | | | | | |
| Louisiana La. Rev. Stat. Ann. § 9:2799 | Any | Food bank | Civil | Donations of food in good faith (standards not stated) | No | Only of wild game |
| Massachusetts Mass. Gen. Laws Ann. Ch. 94, 328, 105 Mass. Code Regs. 520.119. | Any | Nonprofit/charitable organizations | Civil | Donation of food in good faith that has not been misbranded or adulterated, and was manufactured, processed, prepared, handled, and stored in compliance with department of health regulations Explicitly protects donation of past-date food, given it remains fit for consumption, separated from foods that are not past-date, and clearly labeled as past-date | Yes | Yes |
| Michigan Mich. Comp. Laws Ann. § 691.1572 | Any | Nonprofit/charitable organization | Civil | Donations of food in good faith (standards not stated) | Yes | No |
| Minnesota Minn. Stat. Ann. § 604A.10 | Food manufacturer, processor, distributor, or person | Food bank or charitable organization | Civil liability | Donations of food in good faith that appears to be fit for consumption, even if not readily marketable | No | Yes |

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|--|---|--|---------------------------|--|------------|------------|
| <p>Montana Mont. Code Ann. § 27-1-716</p> | <p>Any processor, distributor, wholesaler, retailer, or gleaner</p> | <p>Nonprofit/charitable organization</p> | <p>Civil and criminal</p> | <p>Donations of food in good faith that appears to be fit for consumption, if not marketable</p> | <p>Yes</p> | <p>No</p> |
| <p>Nevada Nev. Rev. Stat. § 41.491</p> | <p>Any</p> | <p>Nonprofit/charitable organization</p> | <p>Civil</p> | <p>Donations of food in good faith that appears to be fit for consumption</p> <p>Protects food that does not meet federal/state requirements for quality and labeling if the donor informs the nonprofit recipient; they must then agree to recondition the food</p> | <p>No</p> | <p>Yes</p> |
| <p>New Hampshire N.H. Rev. Stat. § 508:15.</p> | <p>Any person, corporation, unincorporated business entity, nonprofit, or entity, or any employee, agent, officer, or volunteer thereof</p> | <p>Nonprofit/charitable organization</p> | <p>Civil and Criminal</p> | <p>Donating/distributing food in good faith that is not misbranded, adulterated, nor manufactured, processed, prepared, handled or stored in violation of the department of health and human services</p> | <p>Yes</p> | <p>Yes</p> |
| <p>New Jersey N.J. Stat. Ann. § 24:4A-1—A5.</p> | <p>Includes any farmer, processor, distributor, wholesaler, or retailer of food, higher educational institute, or</p> | <p>Nonprofit/charitable organization</p> | <p>Civil and criminal</p> | <p>Donations of food in good faith that appears to be fit for consumption, even if not readily marketable</p> | <p>Yes</p> | <p>No</p> |

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|---|---|--|--------------------|--|-----|-----|
| | gleaner nonprofits, food banks, and their agents | | | | | |
| New Mexico N.M. Stat. Ann. § 41-10-1—3 | Any | Nonprofit/charitable organization, food bank | Civil and criminal | Donations of food in good faith (standards not stated) | No | Yes |
| North Carolina N.C. Gen. Stat. Ann. § 99B-10 | Any | Nonprofit organization | Civil and criminal | Donations of food in good faith (standards not stated) | Yes | No |
| Oklahoma Okla. Stat. Ann. tit. 76, § 5.6 | Any person, profit or nonprofit distributor, or person who harvests perishable foods | None | Civil and criminal | Donations of food in good faith that appears to be fit for consumption, if not marketable | Yes | No |
| Oregon Or. Rev. Stat. § 30.890 | Person who operates a licensed or regulated restaurant or food establishment; any gleaner; any person of good faith | Nonprofit/charitable organization | Civil and criminal | Donations of food in good faith that appears to be fit for consumption, regardless of compliance with laws governing the packaging, labeling, storage, or handling of food | Yes | No |
| Pennsylvania | Any | Nonprofit/charitable | Civil and criminal | Donations of food in good faith that appears to be fit for | No | No |

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|---|-----|-----------------------------------|--------------------|---|---|-----|
| 10 Pa. Stat. Ann. § 351-58. | | organization | | consumption, even if not readily marketable | | |
| Rhode Island R.I. Gen. Laws Ann. § 21-34-1—2 | Any | Nonprofit/charitable organization | Civil and criminal | Donations of food in good faith that appears to be fit for consumption | The donor is protected even if the food is sold; the distributor must not sell the food to receive protection | No |
| Texas Tex. Civ. Prac. & Rem. Code Ann. § 76.001—004 | Any | Nonprofit/charitable organization | Civil and criminal | Donations of food in good faith that appears to be fit for consumption (meets all health and quality standards), even if not readily marketable | Donor is protected if the food is sold at handling costs, but the distributor is not | No |
| Vermont Vt. Stat. Ann. tit. 12, § 5761—5762. | Any | None | Civil and criminal | Donating food “apparently fit for human consumption” in good faith, even if the food is not readily marketable | No | Yes |
| Wisconsin Wis. Stat. Ann. § 895.51 | Any | Nonprofit/charitable organization | Civil | Donations of food in good faith that appears to be fit for consumption, even if not readily marketable | No | No |

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State Legislation to Improve Waste and Waste Labeling⁴⁶

Several states have progressive legislation to limit the accumulation of food scraps in landfills. Four states— Vermont, Rhode Island, Connecticut and Massachusetts—also have organic waste bans. California requires commercial generators of waste to either compost organic waste or anaerobically digest it. Similar policies are seen at a municipal level across many cities. Table 2 provides state bills regulating organic waste. These bills should serve as models for other states to adopt organic waste bans as well. The model bill accompanying this memorandum incorporates some of the language in the California legislation referenced below to redirect food residuals that can be consumed into compost.

Table 2: State Bills that Ban or Restrict Organic Waste

| State | Key Provisions | Applies to |
|--|---|--|
| California Cal. Pub. Res. Code § 42649.8 - 42649.872. | <p>Started January 1st, 2020, if the state has not reduced organic waste levels by 50% since 2014, then any business that that generates at least two cubic yards of commercial organic waste per week shall arrange for its recycling in an authorized manner, unless the state “determines that this requirement will not result in significant additional reductions of organics disposal”</p> <p>Businesses that are property owners “may require a lessee or tenant of that property to source separate their organic waste to aid in compliance with this section.”</p> <p>A business that is physically accessible to customers must provide “an organic waste recycling bin or container to collect material purchased on the premises for immediate consumption”</p> | Any business that that generates at least two cubic yards of commercial organic waste per week |

⁴⁶ ReFed. “U.S. Food Waste Policy Finder.”

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|---|---|---|
| | <p>Multifamily dwellings are exempt</p> <p>“On and after January 1, 2016, each jurisdiction (in CA) shall implement an organic waste recycling program that is appropriate for that jurisdiction and designed specifically to divert organic waste generated by businesses”</p> | |
| <p>Connecticut</p> <p>Conn. Gen. Stat. Ann. § 22a-226e</p> | <p>Starting January 1st 2020, each “commercial food wholesaler or distributor, industrial food manufacturer or processor, supermarket, resort or conference center” located within 20 miles of an authorized composting facility that generates at least 52 tons of organic waste annually shall separate their organic waste from other solid wastes and ensure that their organic waste is recycled at an authorized composting facility with available capacity</p> <p>Organic waste may also be composted or treated on site if “pursuant to the general statutes or federal law”</p> | <p>Commercial food wholesaler or distributor, industrial food manufacturer or processor, supermarket, resort or conference center” located within 20 miles of an authorized composting facility that generates at least 52 tons of organic waste annually</p> |
| <p>Massachusetts</p> <p>310 Mass. Code Regs. 19.017</p> | <p>Any individual, partnership, association, firm, company, corporation, department, agency, group, or public body that generates over 1 ton of organic waste per week must be separated from other solid wastes and transferred to an authorized recycling/composting/digestion facility, or treated onsite in an authorized manner</p> | <p>Any individual, partnership, association, firm, company, corporation, department, agency, group, or public body that generates over 1 ton of organic waste per week</p> |
| <p>Rhode Island</p> <p>R.I. Gen. Laws Ann. § 23-18.9-17</p> | <p>These entities must ensure that their generated organic waste is recycled at an authorized composting facility/anaerobic digestion facility, or through another authorized recycling method</p> <p>These entities may petition for waiver of the requirements if “the tipping fee charged by the Rhode Island resource recovery corporation for non-contract commercial sector waste is less than the fee charged by each composting facility</p> | <p>Commercial food wholesaler/distributor, industrial food manufacturer/processor, food retailer, resort or conference center, banquet hall, restaurant, religious institution, military installation, prison, corporation, medical care</p> |

| | | |
|---|--|--|
| | or anaerobic digestion facility located within fifteen (15) miles of the covered entity's location.” | institution, casino, and covered educational facility that is a.) producing at least 104 tons of organic waste per year, b.) within 15 miles of an authorized composting/anaerobic digestion facility that is able to manage its organic waste |
| Vermont Vt. Stat. Ann. tit. 10, § 6605k More information available at: https://dec.vermont.gov/sites/dec/files/wmp/SolidWaste/Documents/Universal-Recycling/Food-Scrap-Ban-Guidance.pdf | Mandates that food scraps be separated from other solid wastes and be transferred to a facility that will manage the scraps in one of the following ways: diversion for human consumption, diversion for agricultural use (including consumption by animals), composting, land application, and energy recovery. This may also be done on site. As of July 1st, 2020, this applies to all food scraps | All food scraps |

State Law to Increase Tax Incentives for Donating Food⁴⁷

State level tax incentives can effectively encourage food donation and prevent food waste. California offers tax credit for donors to cover the cost of transportation of donated food, alleviating a bar to donation. Virginia's Food Crop Donation Tax Credit supports those who donate excess from food crops to nonprofit food banks. Table 3 contains all of the current state bills expanding tax incentives.

Table 3: State Bills that Expand Federal Tax Incentives for Food Donations

| State | Key Provisions | Citation and Other Resources |
|---------|---|--|
| Arizona | Restaurants that donate prepared food, drinks, or condiments to nonprofits that | Ariz. Rev. Stat. Ann. § 42-5074, § 43-1025 |

⁴⁷ ReFed. “U.S. Food Waste Policy Finder.”

| | | |
|------------|---|--|
| | <p>serve free meals to the needy may receive a tax deduction equivalent to the gross proceeds of sales or gross income from donated food</p> <p>Agribusinesses, farmers, and agricultural crop processors can receive tax deductions equivalent to the full wholesale market price or most recent sale price (whichever is greater) of crops donated to a charitable organization whose use of the crop is related to their tax-exempt status</p> | <p>More information available at https://codes.findlaw.com/az/title-42-taxation/az-rev-st-sect-42-5074.html,</p> <p>https://law.justia.com/codes/arizona/2016/title-43/section-43-1025/</p> |
| California | <p>Taxpayers responsible for planting, managing, and harvesting crops may receive tax credit equal to 10% of inventory cost for fresh produce donations to food banks in California</p> <p>Taxpayers involved in agribusiness (processing, distributing, or selling agricultural products) may receive tax credit equal to 50% of transportation costs for crop donations to nonprofits</p> | <p>Cal. Rev. & Tax. Code § 17053.88, § 17053.12</p> <p>More information available at: https://law.justia.com/codes/california/2011/rtc/division-2/17041-17061/17053.88,</p> <p>https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=RTC&sectionNum=17053.12.</p> |
| Colorado | <p>All taxpayers are eligible for tax credit equivalent to 25% of wholesale market price (maxed at \$5,000 annually) for crop, livestock, eggs, and dairy donations to nonprofit hunger-relief organizations</p> <p>C-Corporations are eligible for tax credit equivalent to 25% of wholesale market price (maxed at \$1,000 annually) for crop and livestock donations to charitable organizations that only distribute products for free</p> | <p>Colo. Rev. Stat. § 39-22-536</p> <p>More information available at: https://codes.findlaw.com/co/title-39-taxation/co-rev-st-sect-39-22-536.html,</p> <p>https://codes.findlaw.com/co/title-39-taxation/co-rev-st-sect-39-22-301.html</p> |
| Kentucky | <p>Taxpayers employed in agribusiness can receive tax credit equal to 10% of fair market value for donations of edible agricultural products to nonprofit food programs located in Kentucky</p> | <p>Ky. Rev. Stat. Ann. § 141.392:</p> <p>More information available at: https://codes.findlaw.com/ky/title-xi-revenue-and-taxation/ky-rev-st-sect-141-392.html</p> |

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| Iowa | Taxpayers that produce a food commodity can receive tax credit equal to 15% of fair market value (maxed at \$5,000 annually) for donation of any apparently wholesome food to food banks and emergency feeding organizations | Iowa Code §§ 190B.101-.106, 422.11E, 422.33(30) More information available at: https://www.legis.iowa.gov/docs/publications/ACOD/767407.pdf |
| Missouri | All taxpayers can receive tax credit equal to 50% of food or cash donations to food pantries located in MO <ul style="list-style-type: none"> ○ Food must not be past date ○ Credit maxes out at \$2,500 annually | Mo. Rev. Stat. § 135.647 |
| Oregon | Taxpayers and corporations that grow crops and/or livestock can receive tax credit equal to 10% of the wholesale market price of donated crop/livestock to food banks/charitable organizations in Oregon that distribute food for free | O r. Rev. Stat. § 315.154 and 315.156 More information available at https://www.oregonlaws.org/ors/315.154 |
| South Carolina | Licensed meat packers, butchers, and processing plants can receive tax credits of \$75/carcass for donated venison to nonprofits that distribute food for free to the needy | S.C. Code Ann. § 12-6-3750 More information available at https://law.justia.com/codes/south-carolina/2018/title-12/chapter-6/section-12-6-3750/ |
| Virginia | Any person engaged in the farming business can receive tax credits equal to 30% of the fair market value for food crop donations to nonprofit food banks Credits max out at \$5,000 per year, and recipient nonprofits may sell the food to the needy or other nonprofits | V A Code Ann. § 58.1-439.12:12 More information available at https://law.lis.virginia.gov/vacode/title58.1/chapter3/section58.1-439.12:12/#:~:text=Food%20crop%20donation%20tax%20credit.&text=%C2%A71.175%2D3%20that%20donates,taxable%20year%20of%20the%20donation. |

Local Ordinances and Policy to Reduce Food Waste⁴⁸

⁴⁸ ReFed. "U.S. Food Waste Policy Finder."

Local FLW ordinances represent a grassroots effort to reduce food loss and waste, and are often the most impactful, as seen in several counties.⁴⁹ The most notable modes of impact that reduce FLW at a local level include consumer education; supply chain and operational efficiency; secondary marketplaces; donation coordination/transportation; expanded composting; and supporting scrap-based animal feed. All of these areas are worth exploring for localities to address FLW.

Several cities nationwide have implemented progressive and effective local policies to reduce food loss and waste. [New York City](#) requires all restaurants to divert their food waste to processing facilities, or process onsite themselves. Austin, Texas, and [Boulder, Colorado](#) also requires restaurants, event coordinators, and property owners to compost food scraps. [Alameda county](#) in the San Francisco bay area has seen great success with their mandatory recycling and plant debris landfill ordinance, and San Francisco itself has enacted a city wide food waste composting program. These kinds of policies appear easier to enact on a smaller, local scale, have sizable impacts on reducing FLW, and should be adopted by more municipalities across the country.

Equally important are private organizations' actions to improve composting and/or reduction of food loss and waste.⁵⁰ Notable examples include [private sector participation in supporting] consumer education; supply chain and operational efficiency; secondary marketplaces; donation coordination/transportation; expanded composting; and supporting scrap-based animal feed. San Francisco (SF), for example, has bolstered its reduction of FLW by partnering with private companies such as Recology Inc. The City sets and approves the rates for Recology's waste services, and the two work together to provide waste removal services, allowing SF to divert 80% of its waste between 2002 and 2012. Possibly, more municipalities should explore partnerships with private organizations to tackle food waste, though multiple enabling conditions--inclusive of existing state level policy--are likely necessary.

Companies such as Imperfect Produce and Ugly Fruit and Veg Campaign offer sustainable grocery options for consumers that also repurpose food which would have otherwise been discarded. Food banks such as GleanKY, AmpleHarvest, and Feeding America also reduce FLW by redistributing excess food to those in need. Organizations are also doing innovative research and solution ideation to remedy FLW in novel ways. For example at the University of Cincinnati, MBA students have developed SolerCool, a solar-powered refrigerator that runs on eight solar panels to keep food comfortably cool when it is being transported. This reduces the carbon footprint of efforts to prevent food spoilage (which can, in turn, lead to food waste). Investing in, collaborating with, and supporting such companies and organizations is key to create a sustainable food system that holistically addresses FLW.

International Policies Tackling Food Waste

⁴⁹ Walia, Bhavneet, and Shane Sanders. "Curbing food waste: A review of recent policy and action in the USA"

⁵⁰ Epa.gov "Wasted Food Programs and Resources Across the United States."

Effective and progressive policies tackling FLW can be seen in several countries. Though these policies may not be directly translatable to the American food system, they provide good models for future legislation. A notable policy is Japan's Food Waste Recycling Law, which encourages recycling and waste minimization amongst food businesses, and requires compulsory reporting of food waste generation for mass emitters.⁵¹ Similarly, the EU Platform on Food Losses and Waste, held in 2015, created several action items to tackle FLW.⁵² It developed a common EU methodology to measure FLW and define relevant indicators, so as to standardize reporting of FLW across Europe. It also took measures to clarify EU legislation relating to waste, food, and feed, and facilitate food donation/repurposing without compromising food and feed safety. It examines ways to improve and standardize date labeling, and also created the Waste Framework Directive, which sets a target for all member states to achieve a reduction of FLW by 30% by 2025, and 50% by 2030, detailing specific FLW prevention policies. Specific countries in the EU have even more progressive policies; France requires grocery stores to donate unsellable but edible food to social institutions, and Germany and Spain have guidelines for preventing food waste in the catering sector.⁵³ Several provinces in Canada also have legislation to fight FLW. Nova Scotia has a disposal ban for materials including paper, plastic, and organic waste, Metro Vancouver also has disposal bans, and Ontario's 2016 update to its disposal ban policies includes development of an organics diversion strategy.⁵⁴

COVID-19 and Food Waste

The COVID-19 Pandemic has revealed several weaknesses in our current national food system, particularly by emphasizing the importance of a more decentralized, local food supply chain that includes small producers.⁵⁵ Business shutdowns shocked our food supply chain and created staggering amounts of FLW for large scale food producers, who, due to their size, were unable to adapt to the drastic change in demand.⁵⁶ For example, the closure of schools and coffee shops generated high levels of milk waste, which cannot be quickly repurposed due to its limited processing capacity and cold storage.⁵⁷ Having a shorter, decentralized, local food supply chain including small producers would have created a lower magnitude of waste and a more elastic response to consumers with less economic loss.⁵⁸ However, the COVID stimulus bill, which provides 16 billion to Big Ag and just 225 million to small ag, and 75 million to SNAP fruit and

⁵¹Library of Congress. "Japan: Diet Passes New Act Aimed at Reducing Food Loss."

⁵² European Commission. "EU Platform on Food Losses and Food Waste."

⁵³ Légifrance. "LAW No. 2016-138 of February 11, 2016 on the fight against food waste (1)."

⁵⁴ Halifax Regional Municipality Solid Waste Resource Collection And Disposal By-Law No. S – 600; Ontario.ca "Strategy for a Waste Free Ontario: Building the Circular Economy."

⁵⁵ Ellison, Brenna and Maria Kalaitzandonakes. "Food Waste and Covid-19: Impacts along the Supply Chain."

⁵⁶ Aldaco et al. "Food waste management during the COVID-19 outbreak: a holistic climate, economic and nutritional approach."

⁵⁷ Ellison, Brenna and Maria Kalaitzandonakes.

⁵⁸ Ibid.

vegetables incentives, perfectly represents the misaligned priorities in our nation's food system.⁵⁹ To avoid a similar splurge in FLW following a pandemic-related economic shock, the nation should start decentralizing its food system and include a greater number of smaller food producers.

Next Steps to Reduce Food Loss and Waste

Current federal and state law has made some efforts towards reducing food waste, but more progress is needed. Further action requires additional federal and state legislation to support transitioning to a circular food system, and designing out food waste. Congress can strengthen federal liability protection programs by reforming the Emerson Act to support a campaign to increase awareness of existing protections, extend liability protection to non-profits that sell donated food, extend liability to food service establishments that donate safe food to individuals, and include liability relief for organizations that donate mislabeled and past-date (but still completely safe for consumptions) foods.⁶⁰

Similarly, Congress could improve on existing tax credits to encourage increased food donation and FLW reduction.⁶¹ As detailed in the 2018 Farm Bill, federal tax credits are only applicable to farms following traditional and outdated "good farming" practices that, more often than not, are inherently wasteful.⁶² This restrictive policy deters farmers from pursuing innovative, less wasteful practices.⁶³ An alternative tax credit could also be included that can be used by low margin businesses (who currently have no access to any tax credits), as well as a deduction or credit to cover the cost of transporting donated food.⁶⁴

The Federal Government can also adopt a bill that standardizes date labeling to minimize consumer confusion and reduce the disposal of safe-to-eat food. Many states have overtly restricted date labeling laws, and adjacent states often have contradictory date labeling rules that foster consumer confusion. Thus, a federal bill that standardized date labeling requirements and language would decrease FLW, especially with the inclusion of a public education program about date labels.

⁵⁹ Ibid.

⁶⁰ ReFed. "Recommendations for Strengthening Federal Liability Protection Policy."

⁶¹ ReFed. "Federal Tax Incentives."

⁶² Farm Bill of 2018

⁶³ Walia and Sanders.

⁶⁴ ReFed. "Federal Tax Incentives."

Supporting a Circular Food System Through Policy and Law: Appendix

This appendix provides the full PDF text of previously proposed federal bills to address FLW for review.

[The Food Recovery Act of 2017](#)

[The Food Donation Act of 2017](#)

[The Food Date Labeling Act of 2019](#)