

**THE LEGAL FIGHT AGAINST FOOD WASTE IN AMERICA: MITIGATING CLIMATE
DAMAGE FEDERALLY AND LOCALLY**

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TABLE OF CONTENTS

INTRODUCTION..... 3

I. THE CARBON FOOTPRINT OF FOOD WASTE 4

II. POTENTIALLY RELEVANT FEDERAL ACTION TO HELP MITIGATE FOOD WASTE 6

 A. THREE FAILED FEDERAL BILLS: THE SCHOOL FOOD RECOVERY ACT, THE COMPOST ACT, AND THE ZERO FOOD WASTE ACT 7

 B. THE POTENTIAL IMPACT OF THE INFLATION REDUCTION ACT..... 9

III. STATE FOOD WASTE REGULATION: A CLOSER LOOK AT CALIFORNIA’S LAW AND ITS RESULTS..... 10

 A. CALIFORNIA’S STATE FOOD WASTE BAN 11

 B. CURRENT PROGRESS AND SUCCESSES OF CALIFORNIA’S FOOD WASTE BAN 17

CONCLUSION..... 20



Introduction

This paper argues that food waste damages our environment through its heightened levels of carbon footprint, and due to its complexity only a federal or local set of regulations can successfully reduce it.¹ Currently, there is no pointed and specific federal food waste policy.

However, there are a few proposed federal food waste policies², such as the School Food Recovery Act, the Zero Food Waste Act, and Compost Act.³ Unfortunately, none of the bills have been adopted. At present, the only glimmer of hope for federal food waste regulations comes from the language located in the Inflation Reduction Act (“IRA”).⁴ Nonetheless, food waste can be reduced through state regulations, even if federal policies do not become enacted. While several states⁵ have introduced food waste bans, this paper will only discuss California’s because of its comprehensive law and current success.⁶ California’s food waste ban, previously named SB 1318, aims to reduce the volume of organic waste dumped in landfills.⁷ The law provides guidance for local jurisdictions to guide their citizens in composting as well as lays out stricter regulations for businesses generating a certain amount of organic waste.⁸ As such, welcoming similar state policies seems to be the feasible way to manage the negative impact of food waste on climate and reduce its nefarious carbon footprint.

1. *USDA and EPA Join with Private Sector, Charitable Organizations to Set Nation’s First Food Waste Reduction Goals*, U.S. DEPARTMENT OF AGRICULTURE (Sept. 16, 2015), <https://www.usda.gov/media/press-releases/2015/09/16/usda-and-epa-join-private-sector-charitable-organizations-set> (last visited Apr. 25, 2023) [hereinafter Reduction Goals].

2. *Federal Food Waste Policy*, REFED (Aug. 2, 2022), <https://policyfinder.refed.org/federal-policy> (last visited Apr. 25, 2023).

3. Federal Food Waste Policy, *supra* note 2.

4. Inflation Reduction Act of 2022, H.R. 5376, 117th Cong. (2022), <https://www.congress.gov/bill/117th-congress/house-bill/5376>.

5. California, Connecticut, Massachusetts, Rhode Island, and Vermont have all passed laws to prevent food waste from ending up in landfills. Federal Food Waste Policy, *supra* note 2.

6. Federal Food Waste Policy, *supra* note 2.

7. *SB 1383 Education and Outreach Resources*, CALRECYCLE, <https://calrecycle.ca.gov/organics/slcp/education/#:~:text=The%20SB%201383%20regulations%20require,and%20o%20ther%20food%20recovery%20organizations> (last visited Apr. 25, 2023) [hereinafter Education].

8. Education, *supra* note 7.



In conclusion, reducing foodwaste’s carbon footprint can be achieved through both federal and state regulations.

I. The Carbon Footprint of Food Waste

Food waste comes with its carbon footprint⁹ and thus negatively impacts climate change.¹⁰ The entire spectrum of food production¹¹ creates waste, called food loss and food waste.¹² Food loss is defined as the loss of food which occurred “before the food reaches the consumer as a result of issues in the production, storage, processing, and distribution phases.”¹³ Food waste is defined as “food that is fit for consumption but consciously discarded at the retail or consumption phases.”¹⁴ In practice, food waste and food loss are often used interchangeably and most often referred to as food waste.¹⁵ For the purposes of this paper all food waste and food lost will be referred to as food waste.

9. The carbon footprint is defined as “the total amount of greenhouse gases (including carbon dioxide and methane) that are generated by our actions.” *Calculate Your Carbon Footprint*, THE NATURE CONSERVANCY <https://www.nature.org/en-us/get-involved/how-to-help/carbon-footprint-calculator/> (last visited Apr. 25, 2023).

10. Jean Buzby, *Food Waste and its Links to Greenhouse Gases and Climate Change*, USDA (Jan. 24, 2022), <https://www.usda.gov/media/blog/2022/01/24/food-waste-and-its-links-greenhouse-gases-and-climate-> (last visited Apr. 25, 2023).

11. Food waste occurs starting from the farm to retail distribution to the consumer and derives from many occurrences such as “mold, pests, or inadequate climate control; losses from cooking; and intentional food waste.” Buzby, *supra* note 10.

12. *Food Waste*, HARVARD T.H CHAN SCHOOL OF PUBLIC HEALTH <https://www.hsph.harvard.edu/nutritionsource/sustainability/food-waste/> (last visited Feb. 9, 2023).

13. Food Waste, *supra* note 12.

14. Food Waste, *supra* note 12.

15. Rovshen Ishangulyyev, Sanghyo Kim & Sang Lee, *Understanding Food Loss and Waste—Why Are We Losing and Wasting Food?*, 8 FOODS 297 (2019).



Food waste often ends up in landfills.¹⁶ Once there, it generates methane, which is a greenhouse gas¹⁷ even more potent than carbon dioxide.¹⁸ Methane highly contributes to global warming because it “is responsible for around 30 [percent] of the current rise in global temperature.”¹⁹ In the United States, food waste is the “single most common material landfilled and incinerated.”²⁰ The United States alone “produces roughly 265 million tons of solid waste annually, or 4.5 pounds per person, per day.”²¹ According to the Environmental Protection Agency (“EPA”), food waste makes up around one third²² of food intended from consumption, which is a significant portion of food.²³ All of that uneaten food contributes to climate change due to its massive carbon footprint.²⁴ To put it in perspective, the carbon footprint of United States food waste is so large that it trumps the global airline industry’s footprint.²⁵ Each year, United States food loss and waste created greenhouse gas emissions equivalent to over 42 coal- fired power plants.²⁶ The EPA “estimated that each year, U.S. food loss and waste embodies 170million metric tons of carbon dioxide equivalent (million MTCO2e) GHG emissions (excluding landfill emissions) – equal to the annual CO2 emissions of 42 coal-fired power plants.”²⁷

16. Buzby, *supra* note 10.

17. Food waste also produces the greenhouse gas carbon dioxide due to its “production, transportation, and handling.” Buzby, *supra* note 10.

18. Buzby, *supra* note 10.

19. *Global Methane Tracker 2022*, IEA, <https://www.iea.org/reports/global-methane-tracker-2022/methane-and-climate-change> (last visited Apr. 25, 2023).

20. *From Farm to Kitchen: The Environmental Impacts of U.S. Food Waste*, ENVIRONMENTAL PROTECTION AGENCY (Nov. 28, 2022), <https://www.epa.gov/land-research/farm-kitchen-environmental-impacts-us-food-waste> (last visited Apr. 25, 2023).

21. *California v. United States EPA*, 385 F. Supp. 3d 903, 906 (N.D. Cal. 2019).

22. Around 24 percent of all landfilled materials are comprised of food waste and around 22 percent of all combusted waste are derived from food waste. Buzby, *supra* note 10.

23. Buzby, *supra* note 10.

24. Sarah Kaplan, *A Third of All Food in the U.S. Gets Wasted. Fixing That Could Help Fight Climate Change*, WASHINGTON POST (Feb. 25, 2021), <https://www.washingtonpost.com/climate-solutions/2021/02/25/climate-curious-food-waste>.

25. Kaplan, *supra* note 24.

26. Kitchen, *supra* note 20.

27. Buzby, *supra* note 10.



Additionally, yearly food loss and waste created “enough water and energy to supply more than 50 million homes.”²⁸ Further, lost or wasted food in the United States consumes the amount of fertilizer that could be used to grow all plant based foods for national consumption.²⁹ Finally, every year food waste takes up agricultural land as large as the states of California and New York combined.³⁰ A significant amount of environmental damage, time, energy, resources, and money could be saved by mitigating climate change through food waste reduction.

II. Potentially Relevant Federal Action to Help Mitigate Food Waste

One way to reduce food waste is for the federal government to implement food waste bans. Many federal food waste acts have been proposed³¹, such as The School Food Recovery Act, The Compost Act, and The Zero Food Waste Act.³² Currently, the federal government does not regulate food waste or loss.³³ However, some norms contained in every single bill are encompassed in the Inflation Reduction Act (“IRA”), which could be used to fund food waste action plans.³⁴

28. Kitchen, *supra* note 20.

29. Kitchen, *supra* note 20.

30. Federal Food Waste Policy, *supra* note 2.

31. Other proposed federal legislation includes the Food Date Labeling Act, Food Donation Improvement Act, FindFood Act, and Farm Bill of 2018. Federal Food Waste Policy, *supra* note 2.

32. Federal Food Waste Policy, *supra* note 2.

33. Federal Food Waste Policy, *supra* note 2.

34. *Compost Act*, REFED, <https://policyfinder.refed.org/federal-policy/compost-act> (last visited Feb 14, 2023)[hereinafter Compost].



A. Three Failed Federal Bills: The School Food Recovery Act, The Compost Act, and The Zero Food Waste Act

Regarding The School Food Recovery Act, on September 9, 2021, the School Food Recovery Act was introduced in the House.³⁵ The bill “direct[ed] the Department of Agriculture (“USDA”) to provide competitive grants and technical assistance for local educational agencies³⁶ to implement food waste measurement and reporting, prevention, education, and reduction projects.”³⁷ The bill would fund up to 75 percent of total food waste production programs, create habits through experiential learning, and emphasize collaboration with other eligible local educational agencies, tribes, nongovernmental and community-based organizations, and other community partners.³⁸ No other action has occurred since its introduction in 2021.³⁹

Relating to The Compost Act, it was introduced in the House and Senate in July 2021.⁴⁰ The bill would have “create[d] new USDA grant and loan guarantee programs for composting infrastructure projects, including large-scale composting facilities as well as farm, home, or community-based projects.”⁴¹ The bill would prioritize projects located in communities with “significant food waste or limited access to food waste composting.”⁴² It would also prioritize low income communities and communities of color.⁴³ Finally, the bill sought to create jobs and opportunities for developing

35. School Food Recovery Act of 2021, H.R. 5459, 117th Cong. (2021), <https://www.congress.gov/bill/117th-congress/house-bill/5459>.

36. The projects were required to comply with either the National School Lunch Program or the School Breakfast Program nutritional requirements. *Id.*

37. *Id.*

38. *School Food Recovery Act*, REFED (Aug 2, 2022), <https://policyfinder.refed.org/federal-policy/food-recovery-act> (last visited Apr. 25, 2023).

39. H.R. 5459

40. Compost, *supra*, note 34.

41. Compost, *supra*, note 34.

42. Compost, *supra*, note 34.

43. Compost, *supra*, note 34.



leadership and providing a living wage to workers.⁴⁴ The Act has not progressed since 2021.⁴⁵

Finally, concerning The Zero Food Waste Act, it was introduced by the House and Senate⁴⁶ in July 2021.⁴⁷ This proposed act would provide grant funding through the Environmental Protection Agency (“EPA”) from 2022 to 2031.⁴⁸ It would fund projects including “research on waste generation and management, measurement and data collection, and implementation of food waste reduction.”⁴⁹ Similarly to the Compost Act, it would prioritize those which serve tribal communities, communities of color, and low income communities which were disproportionately affected by negative environmental effects.⁵⁰ The House’s version of the Act referred to the subcommittee on Environmental and Climate Change, with no further movement.⁵¹ The Senate’s version was read twice and was referred to the Committee on Environment and Public Works, with no further action.⁵²

Although all three proposed bills had the potential to help mitigate climate change by decreasing the carbon footprint of food waste, all three bills were unsuccessful in becoming laws.

44. Compost, *supra*, note 34.

45. Compost, *supra*, note 34.

46. The House introduced H.R.4444 while the Senate introduced S.2389. *Zero Food Waste Act*, REFED (Aug. 2, 2022), <https://policyfinder.refed.org/federal-policy/zero-food-waste-act> (last visited Apr. 25, 2023) [hereinafter *Zero*].

47. *Zero Food Waste Act*, H.R.4444, 117th Cong. (2021), <https://www.congress.gov/bill/117th-congress/house-bill/4444/text>; *Zero Food Waste Act*, S.2389, 117th Cong. (2021), <https://www.congress.gov/bill/117th-congress/senate-bill/2389>.

48. *Zero*, *supra* note 46.

49. *Zero*, *supra* note 46.

50. *Zero*, *supra* note 46.

51. *Zero*, *supra* note 46.

52. H.R. 4444, note 47; S. 2389, note 47.



B. The Potential Impact of the Inflation Reduction Act

Although none of the proposed federal legislation has passed, many aspects of the previous bills have the potential to be fulfilled through the Inflation Reduction Act (“IRA”).⁵³ The IRA was introduced on September 9, 2021 by the House of Representatives and became law on August 16, 2022.⁵⁴ The Act provides over \$300 billion for strategic investments to mitigate climate change.⁵⁵ Of the \$300 billion, \$5 billion is allotted specifically for “Greenhouse Gas Planning and Implementation Grants that can be used to reduce food waste.”⁵⁶ Food waste directly creates greenhouse gases and is even responsible for around 8 percent of global greenhouse gas emissions.⁵⁷ Thus, by definition of the IRA, the Act is permitted to fund food waste prevention programs to reduce the greenhouse gases.⁵⁸ Additionally, there is a clear and large opportunity for state, local, or tribal grants to utilize the funds to invest in food waste programs, which was a previous goal of the previous food waste acts which never moved forward to becoming laws.⁵⁹ In addition to helping mitigate climate change, the IRA will also positively impact the United States Economy. According to the White House, the IRA “will set the United States on Course to meet its climate goals, create millions of good-paying jobs, enable more Americans to join and remain

53. Compost, *supra*, note 34. See e.g., *Food System Transformation*, USDA, <https://www.usda.gov/build-back-better#> (last visited Apr. 25, 2023); H.R. 5376.

54. H.R. 5376.

55. Nina Sevilla, *Inflation Reduction Act Can Fund Food Waste Solutions*, NDRC (Aug. 24, 2022), <https://www.nrdc.org/experts/nina-sevilla/inflation-reduction-act-can-fund-food-waste-solutions#:~:text=The%20newly%20signed%20Inflation%20Reduction,investments%20in%20USDA%20conservation%20programs> (last visited Apr. 25, 2023).

56. Sevilla, *supra* note 55.

57. Sevilla, *supra* note 55.

58. Sevilla, *supra* note 55.

59. Sevilla, *supra* note 55.



in the labor force, and grow our economy from the bottom up and the middle out.”⁶⁰ Because IRA related grants can fund food waste programs, the IRA has the potential to help mitigate climate change by decreasing food waste’s carbon footprint.

III. State Food Waste Regulation: A Closer Look at

California’s Law and Its Results

Another method of decreasing food waste is by regulating the states. While the federal government does not explicitly regulate food waste, five states⁶¹ have already passed food waste bans.⁶² These state food waste laws have launched communities to start organic waste programs, that previously did not exist within

60. *The Build Back Better Framework*, WHITE HOUSE, <https://www.whitehouse.gov/build-back-better/#:~:text=The%20Build%20Back%20Better%20framework%20will%20impose%20a%2015%25%20minimum,in%20profits%E2%80%94report%20to%20shareholders> (last visited Apr. 25, 2023).

61. States which have passed food waste laws include California, Connecticut, Massachusetts, Rhode Island, and Vermont. *Fighting Food Waste*, NATIONAL CONFERENCE OF STATE LEGISLATURES (Oct. 24, 2022), <https://www.ncsl.org/agriculture-and-rural-development/fighting-food> (last visited Apr. 25, 2023). Per Connecticut law, those falling within certain parameters shall “(A) Separate such source-separated organic materials from other solid waste; and (B) ensure that such source-separated organic materials are recycled at any authorized source-separated organic material composting facility that has available capacity and that will accept such source-separated organic material.” Conn. Gen. Stat. § 22a-226e (LexisNexis, Lexis Advance through 2023 Regular Session Act approved by the Governor on and before February 14, 2023). *See e.g., Commercial Organics Recycling Law*, DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION (Aug. 2022), <https://portal.ct.gov/DEEP/Waste-Management-and-Disposal/Organics-Recycling/Commercial-Organics-Recycling-Law> (last visited Apr. 25, 2023). Massachusetts law bans the disposal of commercial organic waste created by businesses or institutions that generate a ton or more of said materials. *Commercial Food Material Disposal Ban*, MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION (Nov 1, 2022), <https://www.mass.gov/guides/commercial-food-material-disposal> (last visited Feb 8, 2023). In Rhode Island, “(A) On and after January 1, 2016, each covered entity and each covered educational institution shall ensure that the organic waste materials that are generated by the covered entity or at the covered educational facility are recycled at an authorized, composting facility or anaerobic digestion facility or by another authorized recycling method if: (1) The covered entity or covered educational facility generates not less than one hundred four (104) tons per year of organic waste material; and (2) The covered entity or covered educational facility is located not more than fifteen (15) miles from an authorized composting facility or anaerobic digestion facility with available capacity to accept such material.” R.I. Gen. Laws Section 23-18.9-17 (Lexis Advance through Chapter 4 of the 2023 Session, not including all corrections and changes by the Director of Law Revision). Finally, Vermont state law does not permit the disposal of food scraps in trash or landfills. *Vermont’s Universal Recycling Law*, AGENCY OF NATURAL RESOURCES DEPARTMENT OF ENVIRONMENTAL CONSERVATION WASTE MANAGEMENT AND PREVENTION DEVISION, <https://dec.vermont.gov/waste-management/solid/universal-recycling> (last visited Apr. 25, 2023).

62. Federal Food Waste Policy, *supra* note 2.



the state. This paper dives into and discusses the structure and current progress of California's food waste ban.

A. California's State Food Waste Ban

In 2022, California Passed S.B. 1383, which regulated organics recycling statewide.⁶³ S.B. 1383 added Sections 39730.5, 39730.6, 39730.7⁶⁴, and 39730.8⁶⁵ to the California Health and Safety Code as well as added Sections 42652 to 42655 in the California Public Records Code, Division 30, Part 3, Chapter 13.1.⁶⁶ Between two Codes and numerous sections, California's food waste laws are comprehensive and detailed. Under California law, all jurisdictions must provide organic waste⁶⁷ collection services to all residents, businesses, and must recycle organic materials.⁶⁸ Jurisdictions must additionally educate their residents on the new law electronically, through hard copies, or by outreach programs.⁶⁹ The laws lay out different collection and disposal requirements for single family residents and multifamily complexes of less than five units, multifamily residents and multifamily complexes, businesses, and public schools, school districts, state agencies, special districts and federal facilities.⁷⁰ Currently, California is the only state which mandates that food to

63. Bill Text, S.B. 1383, 2015 Leg., Reg. Sess. (Cal. 2015). *See e.g., Organics Recycling in California (SB 1383)*, REPUBLIC SERVICES <https://www.republicservices.com/organics-sb-1383> (last visited Feb 14, 2023).

64. Section 39730.7 discusses dairy and livestock methane emissions, which are outside the scope of this paper. Cal. Health & Safety Code § 39730.7 (Deering, Lexis Advance through the 2023 Extra Session Ch 1, 2023 Regular Session Ch. 2).

65. Section 39730.8 discusses incentivizing renewable gas programs, which are outside the scope of this paper. Cal. Health & Safety Code § 39730.8 (Deering, Lexis Advance through the 2023 Extra Session Ch 1, 2023 Regular Session Ch. 2).

66. S.B. 1383, note 63.

67. Under California law, "organic waste" is defined as "food, green material, landscape and pruning waste, organic textiles and carpets, lumber, wood, paper products, printing and writing paper, manure, biosolids, digestate, and sludges." *New Statewide Mandatory Organic Waste Collection*, CALRECYCLE <https://calrecycle.ca.gov/organics/slcp/collection/> (last visited Apr. 25, 2023) [hereinafter New].

68. *California's Short-Lived Climate Pollutant Reduction Strategy*, CALRECYCLE <https://calrecycle.ca.gov/organics/slcp/> (last visited Feb 14, 2023).

69. New, *supra* note 67.

70. New, *supra* note 67.



be donated to food recovery agencies and the remaining food must be recycled.⁷¹ California enforces the food waste ban through jurisdiction discretion.⁷² The law permits jurisdictions to establish fines but does not require it.⁷³ Each section discusses different governmental rules and requirements for the food waste ban.

i. California’s Food Waste Ban: Overarching Goals and Targets to Achieve Them

California legislatures aimed to reduce methane emissions by 40 percent, hydrofluorocarbon gases by 40 percent, and anthropogenic black carbon by 50 percent by 2030.⁷⁴ To achieve the methane emissions reduction goals, the State created two targets to reduce the number of organic materials ending up in landfills.⁷⁵ First, the State aimed for a 50 percent reduction of statewide organic waste disposal⁷⁶ by 2020.⁷⁷ Second, the State targeted for a 75 percent decrease in statewide organic waste disposal⁷⁸ by 2025.⁷⁹ In order to achieve this goal, the State board must:

- (1) develop strategy measures in coordination with other state agencies, local agencies, and districts;
- (2) hold at minimum three public hearings in geographically diverse areas in the state;
- (3) ensure cost effective and technologically feasible strategies; and (4) incorporate and prioritize

71. *Food Recovery in California*, CALRECYCLE, <https://calrecycle.ca.gov/organics/slcp/foodrecovery/> (last visited Apr. 25, 2023) [hereinafter Food].

72. *Bans and Beyond: Designing and Implementing Organic Waste Bans and Mandatory Organics Recycling Laws*, FLPC (Jul. 2019), https://chlpi.org/wp-content/uploads/2013/12/Organic-Waste-Bans_FINAL-compressed.pdf (last visited Apr. 25, 2023) [hereinafter Bans].

73. Further, the law “permits localities to grant exemptions to otherwise covered entities in certain scenarios, such as when businesses lack sufficient space for additional recycling bins or when businesses are already taking actions to recycle a significant amount of their organic waste.” See e.g., Bans, *supra* note 72.

74. Cal. Health & Safety Code § 39730.5 (Deering, Lexis Advance through the 2023 Extra Session Ch 1, 2023 Regular Session Ch. 2).

75. Cal. Health & Safety Code § 39730.6 (Deering, Lexis Advance through the 2023 Extra Session Ch 1, 2023 Regular Session Ch. 2).

76. This waste reduction measurement was based off the measured levels from 2014. *Id.*

77. *Id.* § 39730.6.

78. Like the previous measurement, this waste reduction measurement was based off the measured levels from 2014. *Id.*

79. *Id.*



certain co-benefits.⁸⁰ Such strategies must have public notice on the State board’s website at least one month before approving the strategy.⁸¹ The California Legislature declared that one of the state policy goals was “that not less than 75 percent of solid waste generated by source reduced, recycled, or composted by the year 2020, and annually after.”⁸² The Legislature determined that organic reduction targets were essential to achieve this goal.⁸³ Such organic reduction targets required significant investment, state, and local funding to develop and expand the organics recycling capacity.⁸⁴ The state desired these strategies for implementation to begin on January 1, 2018, however implementation was not achieved until 2022.⁸⁵ This affected the potential to achieve the State’s goals.⁸⁶

Starting on or after January 1, 2022, to achieve organic waste reduction goals set out in Section 39730.6 of the Health and Safety Code, the Department of Resources Recycling and Recovery (“the Department”) shall adopt and comply with certain regulations.⁸⁷ Local jurisdictions may impose requirements and penalties⁸⁸ on organic waste generators.⁸⁹ The regulations, “[s]hall include requirements intended to meet the goal that not less than 20 percent

80. Such prioritized co-benefits include: “Job growth and local economic benefits in the state; public health benefits; potential for new innovation in technology, energy, and resource management practices.” *Id.* § 39730.5.

81. *Id.*

82. Cal. Pub. Res. Code § 41780.01 (Deering, Lexis Advance through the 2023 Extra Session Ch 1, 2023 Regular Session Ch. 2).

83. Cal. Pub. Res. Code § 42652 (Deering, Lexis Advance through the 2023 Extra Session Ch 1, 2023 Regular Session Ch. 2).

84. *Id.*

85. *Id.* § 39730.5.

86. *Id.*

87. Cal. Pub. Res. Code § 42652.5 (Deering, Lexis Advance through the 2023 Extra Session Ch 1, 2023 Regular Session Ch. 2).

88. If the board finds that the jurisdiction failed to make a good faith effort to implement the regulation, they may “impose administrative civil penalties upon the city or county or... upon the city or county as a member of a regional agency, of up to ten thousand dollars (\$10,000) per day until the jurisdiction implements the element.” Cal. Pub. Res. Code § 41850 (Deering, Lexis Advance through the 2023 Extra Session Ch 1, 2023 Regular Session Ch. 2).

89. *Id.* § 42652.5.



of edible food that is currently disposed of is recovered for human consumption by 2025.”⁹⁰ Each jurisdiction must follow a specific schedule⁹¹ to “procure a quantity of recovered organic waste products.”⁹² Local jurisdictions are permitted to “adopt, implement, or enforce requirements in addition to those set forth in the regulations adopted pursuant to this chapter.”⁹³ Luckily, the Department and the Board “shall assist local jurisdictions in complying with the requirements of this chapter, including any regulations adopted by the Department.”⁹⁴

ii. California’s Food Waste Ban: Determining Progress Analysis and Further Regulation

In addition to implementing rules and penalties, California has also established regulations for analyzing the progress of waste reduction goals.⁹⁵ First, the Department alongside of the State Air Resources Board (“the Board”) shall analyze “[t]he status of new organics recycling infrastructure development.”⁹⁶ This includes state funding, appropriate rises for services to support the developing and expanding infrastructure.⁹⁷ Second, analysis shall include “[t]he progress in reducing regulatory barriers to the siting of organics recycling facilities and the timing and effectiveness of policies that will facilitate the permitting of organics recycling infrastructure.”⁹⁸ Finally, the Department and Board shall analyze the markets for organics recycling generated products.⁹⁹

90. *Id.*

91. The schedule is as follows: each jurisdiction shall procure organic waste products which meets or exceeds 30 percent of its target on or after January 1, 2023; each jurisdiction shall procure organic waste products which meets or exceeds 65 percent of its target on or after January 1, 2024; and each jurisdiction shall procure organic waste products which meets or exceeds 100 percent of its target on or after January 1, 2025. *Id.*

92. *Id.*

93. Cal. Pub. Res. Code § 42654 (Deering, Lexis Advance through the 2023 Extra Session Ch 1, 2023 Regular Session Ch. 2).

94. *Id.*

95. Cal. Pub. Res. Code § 42653 (Deering, Lexis Advance through the 2023 Extra Session Ch 1, 2023 Regular Session Ch. 2).

96. *Id.*

97. *Id.*

98. *Id.*



Such products include “cost-effective electrical interconnection and common carrier pipeline injection of digester biomethane and the status of markets for compost, biomethane, and other products from the recycling of organic waste.”¹⁰⁰ If the Department and Board determine that under their conducted analysis significant progress has not been achieved then they may include incentives or more requirements to the regulations.¹⁰¹ So long as the directors and board meet and consult with organic waste reduction stakeholders, they may additionally recommend more revisions to the organic waste reduction goals.¹⁰²

iii. California’s Food Waste Ban: Limitations Built Within the Law

The regulation included certain limits built into the law. However, these restraints do not prevent the government from achieving food waste reduction, they merely guide jurisdictions into more organized and gentler means to achieve their goals.¹⁰³ Regulations cannot establish a numeric disposal limit for organic waste on individual landfills.¹⁰⁴ Also, progress to meet the 2020 and 2025 goals are based on relevant factors, such as “reviews conducted pursuant to Section 41825, the amount of organic waste disposed compared to the 2014 level, per capita disposal rates, the review required by Section 42653, and other pertinent information provided by a local jurisdiction.”¹⁰⁵ Another significant limitation to the regulation is rural exemptions.¹⁰⁶ Certain jurisdictions¹⁰⁷ are exempt from the procurement requirement until December 31, 2026.¹⁰⁸

99. *Id.*

100. *Id.*

101. *Id.*

102. *Id.*

103. *Id.*

104. *Id.* § 42652.5.

105. *Id.*

106. *Id.*

107. Per the California Rural Exemptions regulation, “[t]he Department shall grant an exemption from complying with the organic waste collection requirements specified in this article for rural jurisdictions that meet the definition of a



Finally, even if a regulation is broken, there are measures in place to rectify the issue before resorting to punishment. Local jurisdictions which face continuous regulation violations can submit a notification of an intent to comply.¹⁰⁹ Thus, an eligible local jurisdiction¹¹⁰ may have access to an administrative penalty relief for 2022 and a corrective action plan.¹¹¹ Department approved regulation violations from 2022 which were disclosed in the notification of intent to comply shall be waived of administrative civil penalties if “the jurisdiction implements the proposed actions according to the schedule proposed.”¹¹² Additionally, civil penalties from violations occurring during 2022, continuing into 2023, and accruing as of January 1, 2023 “shall be waived upon complete compliance with the terms of a corrective action plan.”¹¹³ Further, if a jurisdiction does not adhere to the proposed action and schedule laid out by the jurisdiction “the Department may revoke its approval of the intent to comply and impose administrative civil penalties for violations occurring during the 2022 calendar year retroactive to the date of violation.”¹¹⁴ Moreover, “[n]otwithstanding any proposed actions and schedule provided by a local jurisdiction in an approved notification of intent to comply..., the Department may instead address through a

Rural Jurisdiction" in Section 42649.8 of the Public Resources Code, if the governing body of the jurisdiction adopts a resolution that includes a finding as to the purpose of and need for the exemption." Cal. Code Regs. tit. 14, § 18984.12 (Lexis Advance through Register 2023, No. 12, March 24, 2023). According to the California Public Resources Code, rural jurisdiction is defined as “a jurisdiction that is located entirely within one or more rural counties, or a regional agency comprised of jurisdictions that are located within one or more rural counties.” Cal. Pub. Res. Code § 42649.8 (Lexis Advance through the 2023 Extra Session Ch 1, 2023 Regular Session Ch.2).

108. *Id.* § 42652.5.

109. *Id.*

110. To be approved for a notification of intent to comply, the jurisdiction must meet the following requirements: It must submit a notification of intent to comply “in writing, adopted by formal resolution by the governing body of the local jurisdiction, and filed with the department no later than March 1, 2022.” *Id.* Further, the notification of intent to comply must include: a specific description of the continued violations; a detailed explanation as to the reason the jurisdiction was not able to comply, along with documentation for support; a description of the COVID-19 impacts on compliance; and details of the proposed actions the jurisdiction will follow to remedy the violations within the allotted timeline. *Id.*

111. *Id.*

112. *Id.*

113. *Id.*

114. *Id.* § 42652.5.



corrective action plan any violations disclosed in that notification that may take more than 180 days to correct. Under those circumstances, the proposed actions and schedule provided pursuant to an approved notification of intent to comply...shall control until a corrective action plan is finalized.”¹¹⁵ Prior to January 1, 2025, the state board was not permitted to adopt any requirements to control methane emissions related to organic waste disposal within landfills other than through landfill methane emissions control regulations.”¹¹⁶

B. Current Progress and Successes of California’s Food Waste Ban

California’s food waste laws have started improving composting within the State. Prior to the statewide food waste ban, a sizable amount of organic waste was dumped into landfills.¹¹⁷ This organic waste would then decompose and release methane into the air.¹¹⁸ Since the food waste ban was enacted, jurisdictions have made significant strides to divert organic waste from entering these landfills. For example, to comply with the state’s new organic food waste laws, California jurisdictions are building new composting plants to improve the quality and quantity of composting. San Diego is currently working on a plan to “spend \$77 million on a large-scale composting plant in Miramar to process all yard trimmings, food scraps, and other organic materials.”¹¹⁹ The new facility will have a processing capacity of around 250,000 tons per year,

115. *Id.*

116. *Id.* § 39730.6.

117. *Analysis of the Progress Toward the SB 1383 Organic Waste Reduction Goals*, CALRECYCLE, (Aug. 18 2020), <https://www2.calrecycle.ca.gov/Publications/Details/1693> (last visited Apr. 25, 2023) [hereinafter *Analysis*].

118. Kate Huun, *Waste and its Contribution to Climate Change*, UNIVERSITY OF COLORADO BOULDER (Dec. 10, 2020), <https://www.colorado.edu/ecenter/2020/12/10/waste-and-its-contribution-climate-> (last visited Apr. 25, 2023).

119. Haley Rischar, *San Diego to Construct \$77M Composting Facility*, WASTE TODAY (Jan. 23, 2023), <https://www.wastetodaymagazine.com/news/san-diego-california-to-construct-77-million-dollar-composting->



far exceeding the current processing capacity of the city.¹²⁰ The facility is scheduled to open during the summer of 2024.¹²¹ Further, the city has already launched a residential green waste collection program by providing recycling bins and kitchen pails to 250,000 people.¹²² With such a significant dissemination of composting bins, Californians will have more opportunities to compost in an easier and more accessible manner. Such implementations of California’s food waste laws have started making substantial change within the state. According to the Department’s Waste Characterization studies, there has been a significant decrease of statewide disposal for organic waste materials.¹²³ Organics have decreased by 2,091,331 tons from 2018 to 2021.¹²⁴ Such waste is being diverted from landfills, just as the California food waste laws intended.¹²⁵

The California food waste ban has helped improved state and local economies by creating new jobs, in addition to helping combat climate change by reducing the carbon footprint.

California’s food waste ban¹²⁶ “requires certain food businesses to donate the maximum amount of edible food they would otherwise dispose, to food recovery organizations.”¹²⁷

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aterials (last visited Apr. 25, 2023).

120. Rischar, *supra* note 119.

121. Rischar, *supra* note 119.

122. Rischar, *supra* note 119.

123. *2018 Facility-Based Characterization of Solid Waste in California (DRRR-2020-1666)*, CALRECYCLE (May 15, 2020), <https://www2.calrecycle.ca.gov/Publications/Details/1666>; *2021 Disposal Facility-Based Waste Characterization Study*, CALRECYCLE (Nov 2022), <https://calrecycle.ca.gov/wcs/dbstudy/> (last visited Apr. 25, 2023) [hereinafter Facility].

124. *Facility*, *supra*, note 123.

125. California is working diligently and making significant change to the ways it diverts food waste within the state, although it did not meet its 2020 goal for a 50 percent reduction of statewide organic waste disposal. Analysis, *supra* note 117.

126. Under California law, “[c]overed commercial food waste generators must donate edible food to food recovery agencies and recycle the remaining.” *California Food Waste Policy*, REFED (Jul 28, 2022), <https://policyfinder.refed.org/california/#organic-waste> (last visited Feb 8, 2023).

127. *Food Donors: Fight Hunger and Combat Climate Change*, CALRECYCLE, <https://calrecycle.ca.gov/organics/slcp/foodrecovery/donors/> (last visited Feb 8, 2023).



To comply with the law, the Department competitive grant programs¹²⁸ such as the Edible Food Recovery Grant Program and the Food Waste Prevention and Rescue Grant Program.¹²⁹ These programs have profoundly positive effects. In fact, the programs¹³⁰ have created 345 local jobs.¹³¹ Moreover, with new organic waste composting facilities such as the one soon to be built in San Diego comes more jobs. In fact, according to a 2013 study conducted by the Institute for Local Self Reliance, composting can create “at least twice as many jobs as landfills and four times as many jobs as incineration facilities.”¹³²

The California food waste ban has shown some success to the State, despite not being fully implemented.¹³³ As composting facilities are built, bins are distributed to the public more, and the State becomes accustomed to the newer laws of composting, it will be interesting to see how the success stories grow for the State. In conclusion, in response to California’s food waste ban, state jurisdictions are implementing thorough composting solutions which have started to decrease food waste within landfills and have simultaneously helped improve local economies.

128. Such programs “lower greenhouse gas emissions by establishing new or expanding existing food waste prevention projects (either by edible food recovery for people or source reduction efforts) in California to reduce the amount of food disposed of in landfills.” *Food Waste Prevention and Rescue Grant Program*, CALRECYCLE, <https://calrecycle.ca.gov/climate/grantsloans/foodwaste/> (last visited Feb 8, 2023) [hereinafter *Rescue*]. Through these programs, the Department has awarded 68 projects with a combined \$20 million. *Food*, *supra* note 71.

129. *Rescue*, *supra* note 128.

130. In addition to creating new jobs, these programs have also created 86 million meals for those in need as well as diverted 103 million pounds of food from entering landfills to date. *Food*, *supra* note 71.

131. *Food*, *supra* note 71.

132. *Jobs & Economic Benefits of Zero Waste*, ECOCYCLE, <https://ecocycle.org/learn-about-zero-waste/jobs-and-economic-benefits/#:~:text=Composting%20creates%20at%20least%20twice,times%20more%20jobs%20than%20landfills> (last visited Apr. 25, 2023); Brenda Platt, *Composting Makes \$en\$e: Jobs through Composting & Compost Use* (May 8, 2013), <https://ilsr.org/composting-sense-tables/> (last visited Apr. 25, 2023).

133. *Analysis*, *supra* note 117.



Conclusion

Food waste harms our environment because of its high levels of carbon footprint, and only a federal or local set of regulations can effectively reduce it.¹³⁴ At present, there is no enacted federal food waste policy. However, there are a few proposed federal food waste policies.¹³⁵ Some proposed policies include the School Food Recovery Act, the Zero Food Waste Act, and Compost Act.¹³⁶ Sadly, none of the bills have been adopted yet. Presently, the potential for current federal food waste change derives from the language located in the IRA. Thankfully, food waste can be mitigated through state laws, even if federal policies do not move forward to become enacted. While each state¹³⁷ has forged its own approach to reducing food waste,¹³⁸ California's regulations have been successful in reducing the carbon footprint of food waste, proving that federal and local regulations are the way to manage this issue.

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134. Reduction Goals, *supra* note 1.
 135. Federal Food Waste Policy, *supra* note 2.
 136. Federal Food Waste Policy, *supra* note 2.
 137. Federal Food Waste Policy, *supra* note 2.
 138. Federal Food Waste Policy, *supra* note 2.

