Community
Composting
and Priority
Climate
Action Plans
Guide

Model Measures and Template Language

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Introduction

The <u>Institute for Local Self-Reliance</u> (ILSR) is providing guidance for the inclusion of community composting in Priority Climate Action Plans (PCAPs) and Climate Pollution Reduction Grants (CPRG). Community composting is a nature-based climate solution with cross-cutting benefits that fight climate change, advance equity, and cultivate self-reliant communities.

<u>Food</u> and <u>waste</u> systems are among the most significant contributors to climate change, as evidenced in our breakthrough report, <u>Stop Trashing the Climate</u>. Still, climate action plans generally omit the cross-sectoral benefits of composting and rarely highlight the need for decentralized systems. Composting strategies rooted in and serving local communities will protect the climate while enhancing social equity, economic opportunities, food systems resilience, and quality of life. The path to meeting net-zero carbon emissions offers a unique opportunity to adopt sustainable, far-reaching climate protections while transforming food security and our trash-dependent society.

This guide outlines model language to be used as a template to incorporate community composting into Priority Climate Action Plans. In this guide, you can find:

- Program information on EPA's Climate Pollution Reduction Grants (CPRG), including the role of Priority Climate Action Plans (PCAPs), program objectives and priorities, and strategic considerations
- Template language on community composting for PCAPs with definitions, climate impacts, and cross-cutting benefits
- Model composting measures to include in PCAPs centering equity and community prosperity
- Equity considerations that serve as core values with a particular emphasis on community benefits, inclusion, accessibility, and environmental justice

Please visit our <u>CPR Campaign website</u> for more information about the Climate Pollution Reduction Grants program, including further resources on Priority Climate Actions Plans and more.

Climate Pollution Reduction Grants (CPRG) Program

Background on the CPRG Program

The US EPA's <u>Climate Pollution Reduction Grants Program (CPRG</u>), authorized under the <u>2022 Inflation Reduction Act</u>, provides \$5 billion to states, Puerto Rico, DC, metropolitan statistical areas (MSAs), U.S. territories, tribes, municipalities, and air pollution control agencies to (1) plan and (2) implement ambitious climate action plans to reduce GHG emissions and other harmful pollution. The program is organized into two phases: planning and implementation.

Phase 1: \$250 million for Noncompetitive

Planning Grants to provide funding to jurisdictions to develop Priority Climate Action Plans (PCAPs) that incorporate projects, policies, activities, and strategies (collectively referred to as "measures") to reduce GHG emissions. Only measures referenced in PCAPs will be eligible for funding through Phase 2 (Competitive Implementation Grants). Nearly every state, dozens of metropolitan areas, and many U.S. territories and tribes have received funding for CPRG's Phase 1. See the <u>list of participating entities</u>.

Phase 2: \$4.6 billion for Competitive Implementation Grants to implement GHG reduction measures identified in Phase 1 PCAPs. The Notice of Funding Opportunity (NOFO) outlines the application details, deadlines, and processes for both competitions: general and tribes and territories. Funding will only be allocated to select measures included in a jurisdiction's PCAP. States, local governments, tribes, and territories will apply for and receive the grants, but non-governmental organizations can receive sub-awards or contracts to conduct projects.

<u>Priority Climate Action Plans (PCAPs)</u> are documented plans reflecting a jurisdiction's commitment to reducing greenhouse gas emissions (GHGs).

- Plans must include a focused list of near-term, high-priority, and implementation-ready GHG reduction "measures"
- Measures include projects, programs, policies, activities, strategies, series of steps, and actions to achieve plan goals

- Stakeholders, relevant entities, and eligible applicants should participate in the PCAP development process (Phase 1) to provide input on priority measures and best practices
- PCAPs are currently being drafted and are due to the EPA before March 1, 2024 for the general competition and before April 1, 2024 for the tribes and territories competition

Key sectors generally included in PCAPs:

- 1. Electricity Generation/Electric Power
- 2. Industry
- 3. Transportation
- 4. Commercial & Residential Buildings
- 5. Agriculture
- 6. Natural and Working Lands
- 7. Waste, Water & Sustainable Materials Management

Strategic Considerations

CPRG Program Objectives & Priorities

- Implement ambitious measures that will achieve **significant cumulative greenhouse** gas reductions quickly (by 2030 and beyond)
- Achieve substantial community benefits (such as reduction of criteria and hazardous air pollutants), particularly in low-income and disadvantaged communities
- Complement other funding sources to **maximize these GHG reductions** and community benefits
- Pursue innovative policies and programs that are replicable and can be "scaled up" across multiple jurisdictions

Program Evaluation Scoring Summary

Grant Evaluation Criteria Summary (General Competition)	POINTS
Overall Summary & Approach • Description of GHG Reduction Measures • Demonstration of Funding Need • Transformative Impact	45
Impact of GHG Reduction Measures • Magnitude of GHG Reduction from 2025-2030 & 2025-2050 • Cost Effectiveness of GHG Reductions • Documentation of GHG Reduction Assumptions	60
Environmental Results - Outputs, Outcomes, and Performance Measures • Expected Outputs and Outcomes • Performance Measures and Plan • Authorities, Implementation Timeline, and Milestones	30
Low-Income and Disadvantaged Communities Community Benefits Community Engagement	35
Job Quality	5
Programmatic Capability and Past Performance • Past Performance • Reporting Requirements • Staff Expertise	30
Budget Budget Detail Expenditure of awarded funds Reasonableness of cost	45
Total Points Available	250

Evaluation criteria for the Competition for Tribes and Territories <u>can be found in the NOFO on page 48</u>.

Template Language for Community Composting in PCAPs

The language in this section can be used as a template to incorporate community composting into Priority Climate Action Plans. The model language below includes the definition of community composting, details its guiding principles, connects community composting to the climate crisis, and outlines its cross-cutting benefits.

Definition of Community Composting

Community composting is the process of sourcing and composting wasted food and organic materials within the same community where the materials are generated. It serves two purposes: (1) keeping the operation local and ensuring the community reaps its economic, environmental, and social benefits, and (2) engaging residents through education and participation.

Contrary to climate actions prioritizing large waste management haulers and processing facilities, anaerobic digestion and composting can remain local. (Repair and reuse are measures that also tend to be local with myriad community benefits.) Both anaerobic digestion and composting are biological processes that can be implemented in a wide range of sizes and technologies. Too often, policies and investments privilege large industrial sites over a distributed infrastructure. Composting, in particular, can be done through a decentralized network of businesses, worker cooperatives, non-profit organizations, and local governments. These community-based initiatives can include composting at home, community gardens, urban farms, schools, non-profits, micro-scale facilities, social enterprises, and government sites.

Guiding Principles of Community Composting

- **Resources recovered:** Wasted materials are reduced; food scraps and other organic materials are diverted from disposal and composted
- Locally based and closed loop: Organic materials are a community asset and are generated and recycled into compost within the same neighborhood or community

- Organic materials returned to soils: Compost is used to enhance local soils, support local food production, and conserve natural ecology by improving soil structure and maintaining nutrients, carbon, and soil microorganisms
- Community-scaled and diverse: Composting infrastructure is diverse, distributed, and sustainable; systems are scaled to meet the needs of a self-defined community
- Community-engaged, empowered, and educated: Compost programming educates the community in food systems thinking, resource stewardship, or community sustainability while providing solutions that empower individuals, businesses, and institutions to capture wasted organic materials and retain them as a community resource
- **Community supported:** Aligns with community goals (such as healthy soils and healthy people) and is supported by the community it serves. The reverse is true, too; a community composting program supports community social, economic, and environmental well-being



Community Composting as a Climate Solution

Wasted food accounts for <u>58% of landfill methane emissions</u>, and landfills release <u>14% of methane emissions</u> in the United States. Trash incinerators emit toxic pollutants and <u>more CO2 per ton</u> than energy produced by burning coal. If wasted food were a country, it would be the <u>third-highest emitter</u> of greenhouse gasses.

Diverting wasted organic materials from landfills and incinerators offers a near-term strategy to reduce GHG emissions quickly. Community composting reduces GHG emissions by cutting landfill pollution, increasing carbon storage in soils, curtailing carbon-intensive fertilizers, and limiting transport distance for hauling.

King County, Washington, found that composting its wasted organic materials could reduce 97,000 MTCO2e from entering the atmosphere. Providence, Rhode Island, found that if 32% of wasted municipal materials were composted, 44,033 tons of CO2e would be avoided.

National Focus on Composting, Food Loss, Waste and Climate Impact

The federal government has highlighted the climate benefits of reducing wasted food and recycling organics. In the last few months, several reports and a draft strategy have been released detailing the environmental impacts and methane emissions associated with waste and landfilled food and strategies to combat these issues.

- <u>From Field to Bin: The Environmental Impacts of U.S. Food Waste Management Pathways</u> (Environmental Protection Agency, October 2023)
- Quantifying Methane Emissions from Landfilled Food Waste (Environmental Protection Agency, October 2023)
- <u>Draft National Strategy for Reducing Food Loss and Waste and Recycling Organics</u> (Environmental Protection Agency, U.S. Department of Agriculture, U.S. Food and Drug Administration, December 2023)

Cross-Cutting Benefits for People and Climate

Prioritizing the expansion of composting and compost utilization can accelerate reaching net-zero goals while building prosperous, equitable, and resilient communities. The benefits of community composting extend beyond GHG reductions. Community composting:

- Breaks dependence on landfills and incinerators disproportionately affecting poor and BIPOC communities and addresses disinvestment and environmental injustices by employing and serving BIPOC, LGBTQ+ communities, and at-risk youth while filling hunger gaps in food deserts
- Promotes public health and safety with improved air and water quality, more green space and natural environments, and physical and outdoor activity, especially in underserved neighborhoods
- Builds healthy soils and supports farmers, cultivating a more economical and resilient food system, encouraging community reliance, and enhancing food security
- Stimulates local economies by creating more jobs than landfills or incinerators, promoting innovation, developing green markets, and supporting local farmers and small businesses
- Improves climate resiliency for communities and crops against extreme weather and natural disasters like flooding and heat island effects that often hit frontline communities the hardest
- Spurs community and youth engagement, education, and hope; connects neighbors to earth, food, and each other; uplifts the social fabric with inclusive gathering spaces, connection, social support, and local stewardship
- Keeps profits and benefits nearby, creating a sustainable ecosystem responsive to community needs with greater personal investment and higher-quality product
- Launches and scales up more quickly and is less expensive than landfills or incinerators

Model PCAP Measures for Community Composting

This section details model measures to strengthen Priority Climate Action Plans with community composting strategies. The model measures in this template highlight community composting as a cross-cutting climate strategy with far-reaching community benefits.

These recommended PCAP measures are organized by six central strategies: (1) increase organic waste diversion from landfills and incinerators, (2) invest in diverse and distributed local composting infrastructure, (3) conduct public outreach and expand education programs, (4) support urban and rural farmers in producing and utilizing compost, (5) leverage composting for climate mitigation and resiliency, and (6) promote local production and utilization of high-quality compost as a resource. **See Appendix A on page 17 for existing measures and language from the sample climate action plans referenced.**

1) Increase organic waste diversion from landfills and incinerators

- Adopt zero-waste and organic diversion goals as a cross-cutting solution that builds equity and local economic development opportunities
- **Commit to closing any trash incinerators** which emit GHGs and poison the air disproportionately in underserved communities
- Ban landfilling of organic materials (e.g., yard trimmings and wasted food) and mandate diversion to reduce methane emissions and capture wasted materials as a resource
- **Establish disposal fees and fines**, including pay-as-you-throw policies or a fee per ton on wasted materials, that discourage wasting organic materials through disposal in landfills and incinerators

Example Measures:

<u>Oregon Draft PCAP</u> pg. 16, <u>King County CAP</u> pg. 139, <u>Detroit CAP</u> pg. 25, <u>Phoenix CAP</u> pg. 109, <u>New York CAP</u> pg. 326

2) Invest in diverse and distributed local composting infrastructure

- Create and expand local, decentralized organics collection, recycling, and composting programs for wasted food and yard trimmings to build capacity for increased waste diversion (including supporting farmers to compost)
- Fund, contract, and partner with local composting operators (including local independent enterprises and mission-driven nonprofit organizations) to expand services while keeping benefits in the community
- Update permitting and zoning policies to remove barriers to local composting operations and facilities
- **Develop incentives and programs to encourage** increased recycling and local composting, such as fee charges or industry-themed competitions
- Require waste diversion stations in all businesses and municipal buildings

Example Measures:

Oregon Draft PCAP pg. 27-28, 40 & 53, King County CAP pg. 225, Albuquerque CAP pg. 23 & 26, Memphis CAP pg. 135, New York CAP pg. 325 & 327, Montgomery County CAP pg. 194, Providence CAP pg. 65 & 67

3) Conduct public outreach and expand education programs

- Launch outreach and education campaigns to inform the community about resource conservation; the impacts of wasting; composting's ability to capture wasted materials as a resource; and the health, environmental, economic, and community benefits of composting
- Partner with schools, urban gardens, farms, non-profits, and community organizations for educational presentations and curriculum on wasting and composting to engage youth and residents
- Promote behavioral changes for waste reduction and conscious consumerism to reduce consumption, increase recycling compliance, and increase local composting
- Build an understanding of connections between wasted materials, climate, healthy soils, and food system resilience and the cross-sectoral benefits of community composting

Example Measures:

<u>Albuquerque CAP</u> pg. 23, <u>Memphis CAP</u> pg. 158, <u>Phoenix CAP</u> pg. 108, <u>New York CAP</u> pg. 326, <u>Montgomery County CAP</u> pg. 194, <u>Santa Monica CAP</u> pg. 28 & 56

4) Support urban and rural farmers in producing and utilizing compost

- Expand access to funding, training, technical assistance, and equipment for local farmers to cultivate resilient food systems and strengthen community food security
- Promote composting for materials recycling and compost application in order to build healthy soils and provide an alternative to carbon-intensive and polluting fertilizers
- Increase land security for urban agriculture by offering long-term leases, prioritizing use for government-owned land, simplifying permitting processes, and updating land use regulations
- Develop government partnerships with the local farming community to connect food production with local needs

Example Measures:

<u>King County CAP</u> pg. 164 & 225, <u>Phoenix CAP</u> pg. 133 & 144, <u>New York CAP</u> pg. 325, <u>Montgomery County CAP</u> pg. 192-193, <u>Santa Monica CAP</u> pg. 54 & 56

5) Leverage compost for climate adaptation and resiliency

- Advance local utilization of high-quality compost to sequester carbon through direct application and increased vegetation through soil enhancement
- Allow compost application on public lands to advance sequestration of carbon
- Advance compost utilization for stormwater management, erosion and runoff prevention, and soil resiliency to extreme heat and flooding

Example Measures:

<u>King County CAP</u> pg. 153 & 165, <u>Memphis CAP</u> pg. 135, <u>Montgomery County CAP</u> pg. 291, <u>Providence CAP</u> pg. 67

6) Promote local production and utilization of high-quality compost as a resource

- Establish and develop decentralized markets for compost in partnership with farming communities and local composting enterprises
- **Support local compost production and application** by establishing a production tax credit, providing financing mechanisms and incentives, and offering business development support
- **Develop government procurement requirements**, sustainable purchasing policies, technical assistance programs, and mandates to prioritize local compost
- **Institute quality standards requirements** for organic recycling byproducts to eliminate contamination and uplift high-quality compost and local composting initiatives
- **Expand funding and infrastructure** for quality testing and contamination remediation

Example Measures:

<u>King County CAP</u> pg. 137, 139 & 150, <u>Memphis CAP</u> pg. 127 & 129, <u>New York CAP</u> pg. 327-328, <u>Santa Monica CAP</u> pg. 26 & 28, <u>San Francisco CAP</u> pg. 113

Equity Considerations for PCAPs

The equity and community implications of climate action plans and projects must be prioritized. Incorporating equitable strategies into climate action plans is a crucial step in planning for a just transition. The language below serves as a template for centering frontline and local communities in Priority Climate Action Plans. Model language and guidance cover equity considerations in sustainable materials management, benefits to local communities, environmental justice issues, accessibility and inclusion, and plan development.

Equity in Sustainable Materials Management (SMM)

- SMM programs should follow a **local** circular economy model involving consumption reduction and the recovery, conversion, reuse, and recycling of materials
- Food scrap collection and recycling services must include and expand access for traditionally underserved communities, such as multi-family buildings and rural areas
- Composting and SMM programs must not be relegated to high-earning communities but must be established in low-income communities
- Focus programs on Low-Income and Disadvantaged Communities (LIDACs), food deserts, and affordable housing developments
- Establish a community-led local food council or advisory board focusing on accountability and community partnerships, elevating the voices of BIPOC-led or BIPOC-serving composting programs, and democratizing funding decisions

Keeping Benefits in the Community

- To ensure benefits accrue to LIDACs and other community members, programs should be kept local and not privatized by large monopoly companies
- Programs and efforts should be developed through partnerships with local composters, schools, non-profits, farmers, and more
- Composting programs should establish a plan to improve local food security
- Programs should highlight the workforce benefits of community composting landfills and incinerator operations employ <u>three to six</u> times <u>fewer jobs</u> than community composting

Addressing Environmental Injustices

- Purposefully address policies and initiatives that target the systemic causes of climate change
- Address systemic injustices of landfills and incinerators, which are disproportionately located in poor neighborhoods and communities of color
- Address health and environmental disparities of trash incinerators, which emit toxic
 pollutants harmful to the environment and humans, causing poor air quality and
 respiratory health issues
- Acknowledge gentrification and commit to ensuring that any composting program does not lead to the displacement of vulnerable populations
- Acknowledge the environmental injustices marginalized communities have faced and meaningfully incorporate residents into composting solutions to right these wrongs
- Prioritize action and investment in communities structurally excluded

Ensuring Accessibility and Inclusion

- Prioritize language access in conjunction with community partners
- Historically marginalized communities, including people of color, low-income, immigrants, people with impairments, and limited English proficient individuals, should be given meaningful opportunities to engage in the planning and operation of any composting or SMM program requiring outreach and accessible means of participation
- Outreach and education campaigns must reach underserved and disadvantaged communities
- Make green spaces and parkland accessible for all community members identify barriers to access and improve equity

Developing an Equitable Plan

- All community members, regardless of race, age, sex, gender, income, or ability, should have full access to participate in the planning, decision-making, and implementation of priority climate action plans
- Create inclusive language for residents so they understand how this process benefits their daily lives, future, and community

- Engage a diverse range of stakeholders early in the process
- Ensure marginalized communities have access to the decision-making processes that impact them by cultivating an ongoing relationship between community members and those in power
- Conduct early and continued public engagement with partners, community leaders, frontline communities, and the public to gather input, understand community perspectives, build trust, and prioritize action that responds to the community's needs
- Solidify an end goal and a continual course of action toward a shared vision that results in the prosperity of those involved and a more equitable system
- Promote the plan in a way that does not create disadvantages
- Hire staff who understand systemic change and racial injustice or have lived experience with disadvantaged communities

Climate Action Plans with Strong Equity Language

- King County, Washington 2020 Strategic Climate Action Plan
- Albuquerque, New Mexico Climate Action Plan 2021
- New York State Climate Action Scoping Plan 2022
- Providence, Rhode Island Climate Justice Plan 2019
- San Diego, California Climate Action Plan 2022
- San Francisco, California Climate Action Plan 2021

See Appendix B on page 23 for details on the equity language in each of these plans. If you have additional examples of climate action plans with strong equity language, please share them with us here.

Appendix A. Example Measures from Climate Action Plans

This chart includes text directly quoted from the publicly available climate action plans. Text from each plan is organized to align with the corresponding strategy number where the plan is referenced in the guide.

Climate Action Plan	Guide Strategy and Existing Model Measures
Oregon Draft Priority Climate Action Plan 2024	(1) Increase organic waste diversion from landfills and incinerators Food and biological waste diversionIncludes community composting for Tribal communities. Co-benefits: reducing soil amendment needs, improving soil health, improving air and water quality, and workforce development opportunities. (pg. 16)
	(2) Invest in diverse and distributed local composting infrastructure Increase food waste recovery infrastructure: Grants to build or expand infrastructure as associated with anaerobic digestors and compost facilities While there is significant interest in large-scale food waste recovery systems, DEQ would also use CPRG funds to support smaller-scale infrastructure, including in underserved communities, to encourage localized collection of food waste for composting that supports local food production. (pg. 27-28)
	 Increase in composting means an increase in availability of compost to farmers which produces healthier soils and lower use of chemical fertilizers
	 Expanding the infrastructure for food waste recovery could create additional jobs in the collection and management of food waste through composting and digestion. Many of these industries are located in rural and underserved communities
	Improved food access while reducing food waste reduces household expenses. Also possible economic opportunity in underserved communities that develop highly localized composting businesses and food production. (pg. 40)
	Grants for targeted efforts to build and expand smaller-scale infrastructure in underserved communities to encourage localized collection of food waste for composting that supports local food production. (pg. 53)
King County, Washington Strategic Climate Action Plan 2020	(1) Increase organic waste diversion from landfills and incinerators Achieve a circular economy, whereby waste is minimized through prevention, reuse and recycling, and materials stay in use longer through improved product design and shared responsibilities for end-of-use material management. (pg. 139) (2) Invest in diverse and distributed local composting infrastructure
	Develop a circular economy framework and deliver a zero waste of resources plan that identifies opportunities to support community food banks, community-based compost initiatives, and community-owned food businesses. (pg. 225)

(4) Support urban and rural farmers in producing and utilizing compost

Explore Compost Benefits: King County will support farmers on King County-owned farmland in the application of compost to their lands in order to improve their soils and to demonstrate compost's value. This program will establish compost environmental benefits on farmlands, encourage land stewardship, and offer information and training to these farmers...support research into the climate benefit of compost to help provide clear evidence of climate impacts of using compost on King County lands, including agriculture and seeks to better understand the carbon sequestration potential of compost. (pg. 164)

Partner with frontline communities to support a regenerative and sustainable local zero waste food economy that prioritizes the physical and economic vitality of communities, health of food ecosystems, and well-being of food/farm workers.

• Develop a Good Food purchasing policy or guidelines that prioritizes and supports local, sustainable, small business and WMBE (women, minority-owned businesses and entrepreneurship) food vendors to purchase from for county-led and sponsored events (pg. 225)

(5) Leverage compost for climate mitigation and resiliency

Resilient Local Agriculture: King County and partners will support farmers and farmland owners to implement climate resilient agricultural practices to both enhance potential for farmland to sequester carbon (e.g., expanded use of compost) and to better respond to predicted changes in climate (e.g., greater availability and use of recycled water). (pg. 153)

Quantifying GHG Reductions: Sustainable farming techniques, especially organics practices, can enhance soil health, reduce fossil fuel-based resources, and increase the potential for agricultural soils to serve as a carbon sink. Alternative forest management can increase carbon sequestration potential. Efforts to increase access to and availability of locally produced low-impact food and timber can help reduce GHG emissions associated with transportation and storage. (pg. 165)

(6) Promote local production and utilization of high-quality compost as a resource

At the Regional Organics Stakeholder Summits, stakeholders highlighted the opportunity to create and support a local circular economy around the organics and composting program in King County, including local government purchase of compost. This highlighted that compared to other materials and products, the County has many of the tools needed to make change. (pg. 137)

Deliver Regional Organics Plan: King County's vision is that organic material waste is prevented, reduced, recycled, and ultimately reused locally. There is significant opportunity to develop a regional self-sustaining circular system, where organic material is processed and returned to the soil, helping absorb and store more carbon. Adopted in 2019, this plan sets out to expand and enhance the regional market for compost, reduce wasted resources and contamination, and expand regional organic materials processing. (pg. 139)

Build markets for compost and other recycled content materials. To achieve a circular economy, to improve the health of the recycling system and to achieve the maximum GHG reductions, materials that enter the recycling system need to be made into new products. King County can affect the marketplace through policies and programs and further support the demand for recycled materials in the region because it purchases a wide range of goods and services. To achieve this objective, King County will further develop its procurement and technical assistance programs for the purchasing of products with recycled content, which will include developing standard specifications for a suite of materials. The county will focus its market development efforts on organics, paper, and plastic because of their relatively high volumes within the waste stream. King County will also use compost on pilot projects starting in 2020 through 2025. It will baseline compost's carbon sequestration potential by 2021 and reduce contamination through ongoing educational campaigns. (pg. 150)

King County, Washington Strategic Climate Action Plan 2020

(continued)

City of Albuquerque Climate Action Plan 2021	(2) Invest in diverse and distributed local composting infrastructure Recycling, Composting & Waste Reduction: Fund physical infrastructure and coordination for neighborhood and school composting, including educational programs about how to compost and benefits for greenhouse gas reduction, soil health, regenerative agriculture, native crops, local foods and plant-based diets. (pg. 23) Job Creation in Frontline Communities: Develop community and economic development opportunities that mitigate climate change and increase human-nature interaction via local recycling efforts, processing yard waste to compost, earn-while-you learn and apprenticeship opportunities for solar and community solar installation, land revitalization for community gardens (using City-owned vacant lots) and other green redevelopment efforts. (pg. 26)
	(3) Conduct public outreach and expand education programs Recycling, Composting & Waste Reduction: Promote methods of recycling, reuse, and composting in frontline communities highlighting their health and environmental benefits with the support of community-based educators (i.e., promotoras). (pg. 23)
Detroit, Michigan Climate Action Plan 2017	(1) Increase organic waste diversion from landfills and incinerators End City contract with Detroit Renewable Power (incinerator) by 2021 (pg. 25)
Memphis Area Climate Action Plan 2020	(2) Invest in diverse and distributed local composting infrastructure There are also a handful of companies and local nonprofits that are working to reduce and reuse organic waste, particularly food waste. Memphis Tilth shares information and resources on composting to community gardens and the broader community; Project Green Fork and Clean Memphis work with restaurants to reduce food and material waste; and Compost Fairy is a new local company that provides food composting services to residential and commercial customers. Working partnerships between public and private entities will support waste reduction programs and foster a better waste-reduction culture. Additional movement towards reaching organic waste reduction goals includes both augmenting existing programming and generating interest in new initiatives. (pg. 135) (3) Conduct public outreach and expand education programs Expand Education & Outreach Efforts to Encourage Behavior Change: Waste outreach and education plans should aim to influence the behavior of a target audience. This will make them more likely to
	minimize their waste and recycle, take advantage of the programs available in Shelby County, and understand the importance of diverting waste from landfills, reducing litter, and the connection between solid waste and climate change Education and outreach can also lead to greater support of public policy changes that can improve waste management and reduce GHG emissions. (pg. 158)
	(5) Leverage compost for climate mitigation and resiliency Health: More efficient waste practices help improve air quality and create agricultural opportunities that decrease dependence on chemical fertilizers, improving food production practices, and reducing contamination of stormwater runoff. (pg. 135)
	(6) Promote local productionn and utilization of high-quality compost as a resource The major goals and related priority actions on waste offer the chance to positively impact our community in terms of public health, environmental health, neighborhood aesthetics, quality of life, and increased economic opportunity. It is important to consider context and locally relevant solutions Another key recommendation involves supporting a circular economy through incentivizing and creating markets for the waste generated from one practice or industry to benefit the needs of another. (pg. 127)
	Incentivizing practices to use waste products in the local economy and generate revenue from these waste streams is central to these efforts. (pg. 129)

(1) Increase organic waste diversion from landfills and incinerators

WR3.2 Increase organic diversion from the landfill. Waste diversion efforts include diversion of organic materials. Through the Green Organics Residential Collection program, organic material, like yard trimmings, untreated wood, tree fruit, and cactus, is collected from residential properties...Program goals include establishing value in the local compost market by manufacturing a high-quality compost, reducing environmental and climate impacts from landfilling, and creating more community awareness around organic commodities and waste. (pq. 109)

(3) Conduct public outreach and expand education programs

WR3.1 Provide outreach and feedback to residents what can and cannot be recycled through presentations to schools and communities. The Zero Waste team provides education on proper recycling, including group tours of the city's North Gateway Transfer Station and MRF, educational presentations to schools, neighborhood and community meetings, and hosting informational booths at community events. (pg. 108)

City of Phoenix Climate Action Plan 2021

(4) Support urban and rural farmers in producing and utilizing compost

Achievement of local food system goals results in reduced rates of hunger, obesity, and diet-related diseases through elimination of food deserts, increasing urban agriculture, and adopting zoning, land use guidelines, and other policies to improve the food system...Local food systems are networks of food production and consumption operating wholly within a limited geographic area. They reduce food transportation and increase trust and social connectedness between producers and consumers. The more direct sales structure allows for farmers and producers to make more off their produce while consumers pay similar prices as with traditional food sales. Meanwhile, reduced transportation distances means less pollution and fossil fuel dependence. (pg. 133)

LFS3.1 Update codes and ordinances where appropriate to eliminate barriers and encourage developing a healthy food infrastructure. (pg. 144)

(1) Increase organic waste diversion from landfills and incinerators

W2. Fee per ton on waste: As stated in Strategy W1, the State should enact legislation in 2023 to establish a disposal disincentive (fee per ton) on all waste generated in New York to provide financial support for reduction, reuse, and recycling. (pg. 326)

(2) Invest in diverse and distributed local composting infrastructure

- W1. Financial assistance for organics recycling infrastructure: The State should expand existing financial assistance programs for organics recycling facility infrastructure, including collection and processing, for small-scale and larger-scale operations. (pg. 325)
- W1. Expand food scraps collection and recycling at multi-family buildings: DEC and appropriate housing authorities should expand and replicate successful models of organics collection and recycling programs inclusive of multifamily buildings and public housing. (pg. 325)

W2. Support for local facilities: The State should provide financial support from new funding provided to implement the Climate Act and other sources, for local reuse centers, material exchanges, and repair shops to move beyond volunteer-run operations. (pg. 327)

(3) Conduct public outreach and expand education programs

W2. School curriculum: The State should educate students on the connections between waste and the environment through curriculum development and use. (pg. 326)

(4) Support urban and rural farmers in producing and utilizing compost

W1. Engagement with the farming community: The State should work with the farming community to increase the use of organic products, explore the potential for organics recycling facilities on farms, increase the use of food scraps for animal feed, and explore the potential for increased food donation from farms. (pg. 325)

New York State Climate Action Scoping Plan 2022

New York State Climate Action Scoping Plan 2022

(continued)

(6) Promote local production and utilization of high-quality compost as a resource

W2. State procurement standards: The State should codify its GreenNY procurement program in statute to ensure the long-term success of the program and continued progress on issuing new green procurement standards for products that reduce GHG emissions, are energy-efficient, produce less waste and are made with recycled content, and reduce the usage of toxic chemicals in State operations. (pg. 327)

W2. Reduce toxics in products: The State should enact additional legislation to ban materials and chemicals that may be found in products that are of concern for human health or environmental impacts. DEC should support research and activities that will lead to less toxic alternatives. (pg. 328)

(2) Invest in diverse and distributed local composting infrastructure

S-5 All levels of composting must be implemented, including backyard, on-farm, and on-site composting, and collection of food scraps from the government, commercial, and residential sectors. The County will also need to establish legislation in support of a countywide healthy soils program and review relevant state and local law to address the use of compost as a nutrient supplement for lawn care. (pg. 194)

Ensure that municipal composting is available to apartment dwellers and community members who do not own land (pg. 194)

(3) Conduct public outreach and expand education programs

Engage with residents to share the benefits of healthy soils, provide guidance on how to improve soil health, and ensure engagement efforts are undertaken in multiple languages. (pg. 194)

(4) Support urban and rural farmers in producing and utilizing compost

S-4 Regenerative Agriculture:

The County should work with local farmers to increase regenerative agriculture practices in the County. Regenerative agriculture practices should be incentivized for farmers, such as...healthy soil practices (including use of compost on degraded soils)... These systems increase carbon sequestration on farmland while improving biodiversity, the water cycle, and natural ecosystems. To support this, the County should work with the Montgomery County Green Bank to develop incentive financing and revolving loan funds to maximize local, sustainable agriculture efforts. (pg. 192)

- Launch this action through a pilot project partnership with local farmers to facilitate and incentivize the adoption of farming practices that are carbon neutral and sustainable
- To eliminate barriers to farming, prioritize incentives for lower-income farmers and Black, Indigenous, and People of Color (BIPOC) farmers based on need and in partnerships that encourage both tenant farmers and landowning farmers

Sustainably farmed, local food has the co-benefits of sequestering carbon through the use of regenerative agriculture practices, reducing greenhouse gas (GHG) emissions associated with transporting agricultural products over long distances, and building greater self-sufficiency in the face of supply chain disruptions associated with climate change. (pg. 193)

(5) Leverage compost for climate mitigation and resiliency

For a local jurisdiction like Montgomery County, focusing on carbon farming is the most viable option right now. By adopting nature-based solutions such as composting, biochar, and other smart agriculture practices addressed in the Carbon Sequestration Actions section, the County can contribute positively to reducing its GHG emissions. (pg. 291)

Montgomery County, Maryland Climate Action Plan 2021

Providence, Rhode Island <u>Climate Justice Plan</u> 2019	(2) Invest in diverse and distributed local composting infrastructure A growing number of local composting businesses and nonprofits are providing residential and commercial food scrap collection or drop-off options. Providence's Office of Sustainability, in partnership with the Zero Waste Providence group, are exploring neighborhood-scale composting solutions and working on a campaign to get 100 business in Providence to compost by the end of 2020. (pg. 65) Work with local community groups to pilot community composting throughout the City. Use various models of neighborhood composting that incorporate curbside pickup, multiple drop-off locations, incentivize at-home composting, etc. Ensure that the resulting composting program will not economically or otherwise burden communities of color. (pg. 67) (5) Leverage compost for climate mitigation and resiliency Explore the benefits of adding compost to soils to increase carbon sequestration and stormwater runoff treatment capacity. Continue to promote local use of finished compost. (pg. 67)
Santa Monica, California Climate Action & Adaptation Plan 2019	(3) Conduct public outreach and expand education programs ZW2: Zero Waste Outreach & Education: increase material sorting compliance in multiunit dwellings and businesses through education, waste audits, and enforcement. Recommend ways to reduce consumption and increase composting and recycling. (pg. 28)
	LCFE1: Resilience Through Local Food - Promote Low-Carbon, Low-Waste Lifestyles: Promote more sustainable food and drink options through campaigns, outreach events, and community resources. Include all five pillars of the City's Sustainable Food Commitment: 1) reduce meat and dairy, 2) avoid processed foods, 3) eat organic, 4) eat local, and 5) reduce waste. Develop incentives and rewards programs to support the local food system and low-carbon foods. (pg. 56)
	(4) Support urban and rural farmers in producing and utilizing compost Going Local With Food: In Santa Monica, many residents are already embracing local and low-carbon food choices. Santa Monica offers Farmers Markets at various locations three days a week to provide residents with locally produced, fresh, and healthy foodCommunity gardening provides an opportunity for residents to connect to their food, the land, and their neighbors while reducing the environmental impact of the conventional food system. (pg. 54)
	LCFE2: Increase Productivity of Public & Private Lands: Facilitate micro-agriculture operations that utilize open land and rooftops or space-efficient operations, like aquaponicsTarget affordable housing developments, homeless service providers - in order to empower communities to become self-sustaining. Support residents to start their own gardens by providing educational and training opportunities. (pg. 56)
	(6) Promote local production and utilization of high-quality compost as a resource Compost: The Next Frontier: Organic materials, like food scraps and yard waste, are extremely valuable natural resources that can be transformed into earth-enriching compost. However, businesses and residents have historically been provided limited options to sort and manage their organic materials. State regulations now require all commercial properties and large residential properties to utilize composting services. (pg. 26)
	ZW11: Explore Waste-to-Energy Conversion Technologies - Pilot decentralized systems that convert locally collected organic waste into usable energy or byproducts, like compost. (pg. 28)
San Francisco, California Climate Action Plan 2021	(6) Promote local production and utilization of high-quality compost as a resource Organic discards collected through the City's zero waste program ("green bins") have been used to create nutrient-rich compost and are sold to regional agricultural operations, creating a circular flow of materials, and reduces emissions by keeping organics out of landfills where they emit methane. (pg. 113)

Appendix B.

Examples from Climate Action Plans with Strong Equity Language

This chart includes text directly quoted from the publicly available climate action plans.

Climate Action Plan	Model Equity Language
King County, Washington Strategic Climate Action Plan 2020	We must ensure that frontline communities benefit from the transition to a clean energy economy, have the knowledge, skills, resources, capacity, and the social and political capital to prepare for the impacts of climate change, and can equitably recover, adapt, and thrive in a changing climate (pg. 5)
	 We value the expertise of our communities, base decisions on the best available science, embrace innovation, and lead with racial justice and equity (pg. 5)
	 There cannot be climate justice without racial justice. Systemic social, environmental, racial, and economic inequities in our Black, Indigenous, and People of Color (BIPOC) communities will only be exacerbated as climate impacts occur and contribute to the risk of our communities being left out of the transition to a sustainable future (pg. 5)
	 Provides stronger support to frontline communities and a more sustainable future for all, which will only be achieved with a commitment to racial justice and accountability to the most impacted communities (pg. 6)
	• Prioritize collaborative language access in partnership with trusted community partners (pg. 13)
	 Advance frontline community leadership by investing in long-term community and tribal partnerships, community capacity development, and improved infrastructure for community driven policy and decision-making (pg. 13)
	 Prioritize and elevate the needs of BIPOC communities, immigrants and refugees, people living with low incomes, people with disabilities, limited-English-speaking communities, and other frontline communities in climate action (pg. 20)
City of Albuquerque Climate Action Plan 2021	 Moving forward with a commitment to equity in grounding sustainability-related action will allow Albuquerque to progress towards a future in which the city's abundance is equitably experienced (pg. 8)
	 Center all climate mitigating actions in communities with an explicit commitment to equity, inclusion, and accessibility. Decisions and action must be taken in partnership with, rather than on or for, frontline communities (pg. 11)
	 Move beyond policies that focus primarily on the role and responsibility of individuals and look at larger systemic issues (pg. 11)
	 Support state and other policies that strengthen the City of Albuquerque's commitment to social justice (pg. 11)

City of Albuquerque Climate Action Plan 2021 (continued)	• Economic Development: In the [task force]'s discussions, the guiding principle outlining the intent of economic development recommendations was to leverage and direct funds to support reparations efforts to redress harms caused by environmental injustice to frontline communities. Central to this belief is the importance of localized, community-based job creation – a strategy which could help to boost community interest in sustainability and reduce transportation related issues by averting the need for long commutes. The group strongly voiced the need to enact economic policies which align with Just Transition principles, such as developing economic activity that supports both environmental and worker health. (pg. 24-25)
New York State Climate Action Scoping Plan 2022	 Centering equity, environmental justice, and a just economic transition (pg. 33) Seek to lift up New Yorkers in the transition to a low-carbon economy (pg. 72) Reduce methane emissions by implementing practice systems specifically planned and designed for each farm, including composting (pg. 288) Equity should be integrated into the design of any economy-wide strategy (pg. 339) Promote equity in a way that does not unduly burden New Yorkers or create disadvantages (pg. 339) Develop investment programs that ensure at least 35%, with a goal of 40%, of the benefits of investments flow to Disadvantaged Communities (pg. 343)
Providence, Rhode Island Climate Justice Plan 2019	 We choose to lead with equity and partner with those who are most impacted by the climate crisis and other environmental injustices (pg. 3) Make sure climate action doesn't lead to displacement, and that we prioritize reducing carbon emissions that harm Providence's most vulnerable populations (pg. 3) We worked with a cohort of frontline community members for a program to understand how our energy system currently works, and what a more equitable, just, and carbon-free system might look like (pg. 18) Frontline communities are autonomous and have the right to craft decisions that impact their lives and their communities (pg. 20) Acknowledge gentrification and commit to stopping the displacement of indigenous and people of color, especially by developers and universities (pg. 20) To effectively partner with community organizations, local government staff should be resourced with anti-racism, anti-bias and cultural competency trainings and institutionalized practices (pg. 31) Allocating resources appropriately to ensure the commitment to equity is supported and implemented with concrete solutions. Hire staff who have a system-change and racial equity analysis, as well as lived experience conducive to collaborating effectively with impacted communities (pg. 31)
San Diego, CA Climate Action Plan 2022	 Recent City policies like the Parks Master Plan incorporate this commitment by prioritizing park and recreation investments in Communities of Concern and recognizing the Indigenous history in our parks and recreational spaces (pg. 6) The City is committed to leading on climate equity by involving more community voices in the decision-making process and exploring ways to shift toward a shared decision-making model (pg. 6) We must prioritize action and investment where the need is greatest by involving impacted community members in the City's decision-making process early and through continual partnerships (pg. 11)

- The CAP identifies actions to address inequities across sectors, including in housing and transportation. It supports communities that have been most impacted by climate change yet have not historically benefited from climate solutions (pg. 24)
- By centering racial equity and focusing on what matters most to San Francisco's diverse communities, implementing the CAP will create good jobs that are tied to meaningful work (pg. 24)
- In addition to eliminating emissions, equity is a co-equal priority for the CAP. To support transparency and rigor, SF Environment created the Racial and Social Equity Assessment Tool (R-SEAT) especially for the CAP (pg. 29)
- In addition to reducing emissions to zero over the next 20 years, the CAP strives to ensure all San Franciscans have the skills, knowledge, and resources to meet interconnected challenges that lie ahead, including climate change. To do so, the proposed strategies leverage community strengths, advance racial and social equity, and provide critical benefits to the entire community (pg. 43)
- Equity can be advanced by ensuring inclusive access to benefits, for example by providing subsidies for green technologies such as solar panels, electric vehicles or energy efficiency upgrades to those who cannot afford them. In this example, strategies deliver benefits to populations who may lack access to them while also promoting new technologies (pg. 44)
- Climate solutions that fail to address racial inequity are less likely to be successful while those that advance multiple goals and provide sustainable solutions for many years (pg. 45)
- In keeping with its commitment to equity and consideration of those who will impacted the most by climate change, this plan integrates actions to reduce emissions from production and consumption, recognizing the effect local and regional purchasing decisions have all over the world (pg. 102)

San Francisco, California <u>Climate Action Plan</u> 2021