

Steering Committee

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Susan E. Casey

Communications and Public Engagement Manager Climate Change Program, MD Department of Environment Submitted via email to susan.casey1@maryland.gov

Re: Composting Comments on Maryland's Climate Pathway

Dear Susan E. Casey and the Maryland Department of the Environment:

Thank you for the opportunity to comment on the Maryland Climate Pathway report. The MD-DC Compost Council along with the undersigned organizations respectively submit these public comments for consideration. The MD-DC Compost Council is an official committee of the US Composting Council. It is clear that significant work has gone into the plan, and we appreciate the hours of effort reflected therein. The MD-DC Compost Council is dedicated to the development, expansion, and promotion of composting in the region based on the latest science and principles of sustainability and economic viability.

The Pathway acknowledges that food waste diversion and composting can play an important role in reducing the amount of greenhouse gasses from the waste sector, but we believe that the Pathway could and should be strengthened to recognize that composting's climate benefits extend well beyond those associated with diverting waste. The Plan's proposed additional policies in the waste management sector are too minimal and only modeled to reduce GHG emissions by 2% beyond current policies (pg.71). Maryland's current policies on waste diversion don't sufficiently prioritize development of diverse and distributed composting infrastructure. Maryland's Climate Pathway presents an opportunity to build on existing waste diversion policies and introduce new policies that will achieve much more than 39% gross GHG emission reductions by 2031. The Pathway report also does not currently recognize the cross-sectoral benefits of distributed composting infrastructure and potential acceleration in achieving Maryland's net zero goal. Expanding composting and compost utilization in the state will promote soil carbon sequestration, support resilient food systems and food security, create green jobs, cut use of carbon-intensive synthetic fertilizers, and overall enhance climate resiliency.

We urge the Pathway to highlight these connections and detail a clear plan and goals for (1) increasing diversion of organic materials from disposal through a diverse and distributed composting infrastructure, and (2) promoting production and utilization of high-quality compost.

For all recommendations, it's important that Maryland policies take into account the benefits of compost operations of all sizes, from on-farm and small community composting to medium/large industrial scale where applicable. Maryland policies should not inadvertently promote reliance on depackaging technologies and the production of contaminated compost and other soil amendments with microplastics problems. Indeed, scaling up a network of distributed sites would likely result in higher-quality compost, less truck traffic, and better utilization of compost in local soils.

We look forward to seeing how our recommendations are incorporated into Maryland's Climate Pathway. Thank you.

Warmest regards, Brenda Platt, on behalf of the MD-DC Compost Council Steering Committee

Policy Recommendations and Considerations for Maryland's GHG Emissions Reduction Plan

In general, we recommend strengthening the Climate Action Pathways report to directly call for advancing a diverse and distributed composting infrastructure in Maryland. We particularly request that the State recognize the benefits of decentralized composting as business and workforce development strategies that will create jobs and support farmers and other local and small businesses. Distributed composting directly develops a local circular economy and community resiliency, converting wasted food into a soil amendment to sequester carbon and enhance local soils to grow local food.

To realize these mutually reinforcing climate practices, we urge the state to incorporate the following in Maryland's Climate Pathway and to prioritize implementation of these recommendations. Benefits and equity considerations are included with recommended policies.

1. Invest in composting infrastructure, education, and technical assistance.

- Assess a per-ton disposal surcharge on waste disposed of at landfills and incinerators to fund waste prevention, reuse, recycling, and composting
- Provide grants and financial incentives, such as tax credits, for small, local companies, farms, communities, etc. to offset costs associated with composting and compost use such as equipment, infrastructure, testing, and training
- Create grant funding or low-interest loans for facilities to purchase equipment, build infrastructure, and get specialized assistance and training that prioritizes areas with a need for facilities and quality end-market plans for the compost produced
- Invest in composting demonstration projects, including on farms, to facilitate hands-on learning
- Resource existing trusted technical support institutions, such as Soil Conservation Districts and University of Maryland Extension, to support farmers and gardeners who want to compost or use compost
- Expand markets for use of compost in state and municipal projects (such as public works projects and land development around the state)
- Support funding for composting and composting education in schools (each and every year)
- Prioritize funding and increase opportunities for frontline, underserved, and/or low-income communities
- Develop and launch educational outreach campaigns in multiple languages to expand composting education access to linguistically-isolated communities

Compost Training and Education Benefits: Maryland has some existing policies and ambitious goals to address waste diversion, healthy soils, and composting, but funding to support achievement of those goals is lacking. Access to education and training can enable composters at all sizes to succeed, troubleshoot on their own, and produce high-quality compost. Yet, training for backyard, community composting, and on-farm composting is too often overlooked. In addition to the suggested funding mechanisms listed, part of the Inflation Reduction Act makes \$4.6 billion available to governments to support climate mitigation strategies.

Composting Public Engagement and Social Benefits: Participation in composting encourages residents to engage in local climate action. Schools in particular can be important venues for building climate protection literacy, and hands-on composting activities engage and educate the next generation. Composting is an outdoor activity and a direct way to be active in protecting the climate and our community, where neighbors can come together for a common cause, also improving the social fabric of the community.

2. Increase local composting infrastructure. The current regulatory barriers and lack of incentives create difficulty for new, non-municipal facilities to open and for existing operations to grow.

- Coordinate with local agencies and businesses to remove barriers to and establish incentives for backyard, community garden, and other smaller-scale hauling and composting businesses
- Encourage municipal and county agencies to facilitate zoning for compost sites of all sizes in order to attract more compost producers
- Coordinate with local agencies to create a small-size composting facility permit (independent of the on-farm composting facility permit exemption) designed to facilitate more facilities coming on line
- Set a goal for increasing infrastructure capacity and conduct a needs assessment to realize these goals

Composting for Waste Sector Climate Benefits: Unlike landfilling or incinerating waste, composting sequesters carbon back into the soil. Composting can be as large or as small as fits the needs of an area – residents can compost some food waste, while farms, private facilities, and municipal compost can handle more types of food and compostable waste. The State should set a goal for increasing the capacity of these facilities, as well as the geographic diversity so food waste diversion is more accessible to residents while the final compost product is more accessible to farmers.

Localized Composting for Community, Climate, and Economic Benefits: Availability of localized composting operations reduces the emissions associated with hauling organic materials long distances to few and far between large-scale facilities. Similarly, having local sources for high-quality compost reduces emissions associated with shipping it from faraway states while also reducing the overall cost of compost for local use. Supporting localized composting will also help to build accessible, close-in composting capacity for food waste generators subject to <u>mandatory diversion under HB 264</u>. Local procurement of compost builds circularity into the economy by creating a market for end products. In addition, local distributed solutions – composting at home, community gardens, urban farms, schools, nonprofit micro-scale facilities, social enterprises, and local government sites – can be implemented quickly, engage and educate citizens, and support citywide composting efforts and local agriculture.

3. Support farmers producing and using compost.

- Facilitate farmers taking advantage of existing on-farm composting facility permit exemptions by keeping associated requirements streamlined and financially feasible
- Prioritize on-farm composting as a means to expand local composting capacity and support local food waste diversion efforts
- Provide financial and technical assistance for farmers generating and using compost
- Officially designate composting as an agricultural practice to allow farmers to compost on site and to unlock funding for on-farm composting.
- Designate composting as an approved agricultural activity that may not be prohibited in local zoning codes

Composting for Agricultural Sector Climate Benefits: Section 2.8, Agriculture, is missing the impact of synthetic fertilizer use on agricultural greenhouse gas emissions. Synthetic nitrogen fertilizers are estimated to contribute 2.1% of global greenhouse gas emissions, largely because of how they are produced. Researchers from Clemson University found that annual compost amendments can <u>replace synthetic fertilizer</u> and improve soil moisture. Farmers can be encouraged to use more organic fertilizers; however, the state needs to provide financial and technical assistance for compost use, and reduce barriers and incentivize local composting capacity, including on farms. On-farm composting provides farmers with an economical method for managing organic wastes produced on site and an opportunity to sell finished compost for added income. Adding compost to agricultural soils also <u>benefits a farm's bottom line</u>: it increases crop yields, improves nutrient cycling, reduces the need for chemical inputs, and decreases the likelihood of <u>plant disease</u> and <u>pest issues</u>. Thanks to Maryland's smart growth policies, many suburban waste generators are near potential

on-farm composters, reducing transportation costs for food waste generators. By enabling farms to generate their own tailor-made organic fertilizer the state can also help farms reduce synthetic fertilizer use, reducing greenhouse gas emissions and creating a local, circular economy.

4. Expand organic diversion mandates. Maryland's current organic diversion mandate focuses on large generators of organic waste and exempts restaurants and other food waste generators. Additionally, Maryland's municipal solid waste landfills account for 96% of large industrial methane emissions. While landfill methane capture is impactful, ultimately the State should prevent landfill methane by diverting the methane-producing waste before it has the opportunity to rot and create methane.

- Reduce exemptions to Maryland's organic diversion mandate
- Expand Maryland's organic diversion mandate, eventually including all food waste generators
- Assess existing community composting and hauling operations to facilitate community engagement and public-private partnerships
- Ensure access to rural communities and multi-family buildings through strategic drop-off sites and expanded hauling routes
- Remove incinerating trash as eligible for the State's renewable energy credits and create and implement a plan to phase out waste incineration
- Do not discount incinerator emissions from biogenic sources

Composting for Strengthening Farm Businesses, Local Economies, and Underserved Sectors: Composting is not only an alternative to landfills and incinerators that have historically and disproportionately affected poor and African American neighborhoods but it also supports more jobs per ton compared to landfilling and incineration. Further, advancing community-engaged, on-farm, and other local composting builds appropriately-sized capacity in underserved communities and in rural Maryland. Supporting local independently owned food scrap collection service providers and distributed composting operations creates business and workforce development opportunities.

5. Promote compost's role in building healthy soils. Compost is one of the most efficient ways to recycle nutrients and build soil organic matter. It improves soil's ability to store nutrients and water, reducing losses from erosion and pollution from runoff, while increasing crop yields. The current Healthy Soils Program in Maryland doesn't acknowledge the value of compost in building soil health.

- Explicitly list composting and compost use as practices eligible for support in Maryland soil health programming, including Maryland's Healthy Soils Competitive Fund
- Make on-farm composting and compost use as accessible as possible for farmers (see above section "Support farmers producing and using compost.")
- Partner with local research institutions to encourage research and field trials that dial in carbon sequestration estimates, and composting and compost use guidelines to Maryland's environment, soil types, and prevalent feedstocks and crops
- Invest in compost use demonstration projects, including on farms, since farmers learn best from other farmers
- Develop a compost procurement program for the State to purchase compost for use in construction and green space projects (public parks, tree planting, etc.)

Composting for Climate Resiliency: Application of finished compost not only improves soil health for local food production but also enhances resilience to changing weather conditions, drought, fire, and stormwater runoff. Indeed, ensuring healthy soils will be critical to ensuring resilient food systems in the face of climate disruption. Compost application can be included in both preventative and restorative strategies for improved climate resiliency. Soils supplemented with compost have higher water holding capacity which leads to improved resilience to drought

conditions. Compost-amended soils and mulches can also <u>lower the risk of wildfires</u> starting and spreading. Areas treated with compost mixes after fire and construction damage resulted in <u>enhanced plant regrowth and reduced</u> <u>water runoff</u> which resulted in less pollution runoff, including phosphorus, nitrate, and metals.

With an elaborated compost plan, Maryland can get wasted food out of polluting incinerators and landfills and reduce their associated climate pollutants, while creating a high-quality soil amendment that can substitute for carbon-intensive synthetic fertilizers and bring a myriad of other soil-related climate protection and climate resiliency benefits. Expanding composting in the state will support climate goals across multiple sectors. For broad success of mutually reinforcing climate mitigation strategies across a green circular economy the State should prioritize local operators, including a community needs & benefits analysis to assess the existing network of haulers, community composters, and farmers in Maryland and involve them in designing waste diversion and GHG reduction strategies.

Endorsements

Michelle Hickerson Alice Ferguson Foundation

Trey Sherard Anacostia Riverkeeper

Marvin Hayes Baltimore Compost Collective

Tom Taylor Beaverdam Creek Watershed Watch Group

Philip Bogdonoff Biodiversity for a Livable Climate

Lee McNair Cedar Lane Environmental Justice Ministry

Billy Humphrey City of Refuge Baltimore, Inc

Steph Compton Clean Air Baltimore Coalition

Emily Ranson Clean Water Action

Kristie Blumer Compost Crew

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Lacey Walker Fox Haven Learning Center

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Yvette Cabrera Natural Resources Defense Council (NRDC) Senay Emmanuel Progressive Maryland

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