Climate Assessment

Office of Legislative Oversight

EXPEDITED SPECIAL CAPITAL IMPROVEMENTS

BILL 15-25: PROJECT – NEW ORGANICS PROCESSING

FACILITY (P802508)

SUMMARY

The Office of Legislative Oversight (OLO) anticipates Expedited Bill 15-25 will have a positive impact on the County's contribution to addressing climate change as if authorized, the proposed facility would divert food waste from County landfills, reducing the amount of greenhouse gas emissions released.

BACKGROUND AND PURPOSE OF EXPEDITED BILL 15-25

The Montgomery County Charter requires the County Executive to prepare, and the Council to adopt, a biennial Capital Improvements Program (CIP).¹The CIP is a six-year plan for long-term investments in County facilities and infrastructure, commonly referred to as "capital projects" such as schools, transportation systems, and libraries. The CIP can be amended between biennial updates to address changing needs and priorities. The annual Capital Budget, also developed by the County Executive and approved by the Council, provides yearly appropriations for capital projects and must be consistent with the CIP.² County law further requires the Council to individually authorize any project in the Capital Budget and CIP, called a "special capital improvement project," if the locally funded cost exceeds a certain threshold—currently \$25,190,000 in FY26 dollars.³

The purpose of Expedited Bill 15-25 is to authorize the planning and construction of a capital improvement project, a new organics processing facility. Under County law, the Council must authorize "Special Capital Improvements Projects" if their local costs exceed a given threshold, which is set at \$25,190,000 in FY26 dollars.⁴

The New Organics Processing Facility would process food scraps into soil amendments which could then be sold. It would also allow the expansion of the current limited food scraps collection program to a Countywide program, as no facility in the County has the capacity to process the waste that would be generated by a Countywide program. An existing facility that processes yard trimmings located in the Little Monocacy Basin Dickerson-Barnesville area is planned to be modified to process food scraps.⁵

It is estimated the locally funded cost of this project will total \$28,000,000 for planning, design, construction, and other costs. Since the anticipated cost of the project exceeds the FY26 local funding threshold, the Executive needs the Council's authorization through legislation to continue the project. Expedited Bill 15-25, Special Capital Improvements Projects – New Organics Processing Facility was introduced on May 22, 2025.⁶

METHODOLOGIES, ASSUMPTIONS, AND UNCERTAINTIES

Methodology. OLO spoke with County staff, reviewed County reports on municipal solid waste and reviewed literature on environmental impacts of composting and food scrap processing facilities.

Assumptions. This assessment assumes that if the project is authorized, it will be built. Currently, a revision to the County's agreement with the Sugarloaf Citizens Association, a HOA near the proposed site, would be needed to proceed with the modification of the existing compost facility in Dickerson.⁷ OLO notes there are two more potential sites for the facility, the transfer station in Derwood and "Site 2" in Dickerson.

Uncertainties. It is uncertain how many multi-family homes would participate in food scraps collection services as it is not currently required by the County to divert food scraps from trash. All single family homes would have food scrap collection services as trash and recycling services are implemented by the County, but multi-family properties' services are managed by the property owner. Therefore, it is unknown how much food waste generated by multi-family homes would be diverted from the landfill and sent to the processing facility.

ENVIRONMENTAL IMPACTS OF FOOD SCRAP DIVERSION

According to the most recent County waste composition study conducted in 2023, out of all solid waste in the County generated by residential, commercial, industrial and other activities, food scraps and other compostable organics make up 23% of all solid waste received at the transfer station. This means that of the 600,000 tons of solid waste received at the transfer station each year, approximately 138,000 tons is compostable organics. Within the residential sector, it was estimated that single-family and multi-family residences disposed of 61,000 tons of food scraps annually. According to DEP staff, food waste represents the "single biggest opportunity for the County to substantially increase its waste diversion. 10

Currently, there is not a Countywide food scraps recycling program but there are food scrap recycling drop off locations around the County as well as a pilot curbside composting program available in certain neighborhoods. Food scraps collected from these limited programs are transported to facilities in Prince George's and Howard County for processing.

Food waste can be diverted from the landfill and instead be converted into high quality soil amendments via processing facilities. Composting and conversion of food scraps have multiple benefits on the environment such as:

• Diverting compostable organic waste from landfills reduces methane emissions, a type of greenhouse gas¹²;

- Soil amendments improve the physical properties of gardens and lawns, such as water retention, permeability, and drainage. Better absorption and retention of water helps to reduce erosion and flooding during periods of heavy rain and retain water during droughts droughts.
- Soil amendments can also reduce the use of fertilizers and pesticides, which can have negative environmental effects such as nutrient runoff into waterways. Further, compost slowly releases and retains nutrients in the soil which reduces nutrient runoff into waterways; ¹⁵ and
- Compost can help store carbon in the soil and prevent it from being released as greenhouse gases. 16

ANTICIPATED IMPACTS

Capital improvement planning is an important tool for local jurisdictions to systematically identify, budget, and prioritize investment in local projects. If authorized, the proposed project would upgrade the existing yard trim composting facility in Dickerson to accept food scraps Countywide. The upgraded facility is expected to be able to process commercial and residential¹ food waste.

Greenhouse Gas Emissions. While there will be greenhouse gas emissions associated with the construction of the facility and transportation of food scraps to the facility, food scraps in the County's municipal solid waste stream will be diverted from the landfill and instead processed into soil amendments. Diversion of waste from the landfill would decrease methane emissions associated with the County's landfill and soil amendments can be used in lawns and gardens around the County – aiding in the storage of carbon in soil. According to DEP, the facility would have the capacity to compost 100,000 to 125,000 tons per year of food scraps in addition to yard trim the existing facility already processes.¹⁷ This would be able to accommodate the potential amount of food scraps to be collected under a residential curbside program and any drop-off of commercial food waste.¹⁸ While there are emissions associated with construction, there are ways to decrease emissions and ultimately, this facility would decrease County emissions associated with landfills.¹⁹

Community Resilience. OLO is unable to predict the amount of soil amendments that would be produced from the facility and how much of the soil amendments would be used in soil around the County. However, there is opportunity for improved climate resilience if soil amendments are used in County-managed land, such as parks. Soil amendments can improve soils' ability to both retain water and improve drainage, which can reduce flooding during periods of heavy rain and retain water during heavy periods of drought. This also reduces the amount of nutrient runoff in nearby waterways, which can improve river and stream health.²⁰

¹ Residential food scraps would include all single-family homes and some multi-family homes. Collection of waste is managed by the property owner, not by the County, so it is unknown how many multi-family homes would opt into food scrap collection services. Further, the County does not currently require that food scraps be diverted from trash. However, the County does provide technical assistance to multi-family properties to implement food scrap collection programs.

RECOMMENDED AMENDMENTS

The Climate Assessment Act requires OLO to offer recommendations, such as amendments or other measures to mitigate any anticipated negative climate impacts.²¹ OLO does not offer recommendations or amendments as Expedited Bill 15-25 is likely to have a positive impact on the County's contribution to addressing climate change, including the reduction and/or sequestration of greenhouse gas emissions, community resilience, and adaptative capacity.

CAVEATS

OLO notes two caveats to this climate assessment. First, predicting the impacts of legislation upon climate change is a challenging analytical endeavor due to data limitations, uncertainty, and the broad, global nature of climate change. Second, the analysis performed here is intended to inform the legislative process, not determine whether the Council should enact legislation. Thus, any conclusion made in this statement does not represent OLO's endorsement of, or objection to, the bill under consideration.

PURPOSE OF CLIMATE ASSESSMENTS

The purpose of the Climate Assessments is to evaluate the anticipated impact of legislation on the County's contribution to addressing climate change. These climate assessments will provide the Council with a more thorough understanding of the potential climate impacts and implications of proposed legislation, at the County level. The scope of the Climate Assessments is limited to the County's contribution to addressing climate change, specifically upon the County's contribution to greenhouse gas emissions and how actions suggested by legislation could help improve the County's adaptative capacity to climate change, and therefore, increase community resilience.

While co-benefits such as health and cost savings may be discussed, the focus is on how proposed County bills may impact GHG emissions and community resilience.

CONTRIBUTIONS

OLO staffer Kaitlyn Simmons drafted this assessment.

¹ Montgomery County Charter, "Sec. 302. Six-Year Programs for Public Services, Capital Improvements, and Fiscal Policy," Accessed June 3, 2025.; Montgomery County Maryland Operating Budget, "Capital Improvements Program (CIP)", Accessed June 3, 2025.

² Montgomery County Charter, "Sec. 303 Capital and Operating Budgets", Accessed June 3, 2025.

³ Montgomery County Code, "Sec. 20-1. Authorization of Special Capital Improvement Projects by Law", Accessed June 3, 2025.

⁴ Montgomery County Council, Introduction Staff Report for Expedited Bill 15-25, Introduced May 22, 2025.

⁵ Ibid.

⁶ <u>Ibid.</u>

⁷ Montgomery County Council, FY25-30 Capital Improvements Program: Recycling and Resource Management: New Organics Processing Facility, May 8, 2024.

⁸ Montgomery County Council, Introduction Staff Report for Expedited Bill 15-25, Introduced May 22, 2025.

- ⁹ <u>Department of Environmental Protection: Recycling and Resource Management Division,</u> "2022-2023 Montgomery County Waste Composition Study, April 18, 2023.
- ¹⁰ Montgomery County Council, FY25-30 Capital Improvements Program: Recycling and Resource Management: New Organics Processing Facility, May 8, 2024.
- ¹¹ <u>Department of Environmental Protection</u>, "Single Family Residential Food Scraps Recycling Pilot, Accessed 6/4/2025.; <u>My Green Montgomery</u>, "Food Scraps Recycling Drop-Off Program", Accessed 6/4/2025.
- ¹² Somers, J. C., "Household Landfill Diversion and the Impact on Methane Emissions", June 2025.
- ¹³ University of Maryland Extension, "Soil Amendments and Fertilizers: Fertilizing Guidelines Included by Plant Group", 2013.
- ¹⁴ U.S. Environmental Protection Agency, "Composting", Accessed 6/3/2025.
- ¹⁵ U.S. Environmental Protection Agency, "Composting at Home", Accessed 6/3/2025.
- ¹⁶ Natural Resources Defense Council, "Compost is a Climate Solution", December 5, 2023.; <u>UC Davis College of Agricultural and Environmental Sciences</u>, "Compost Key to Sequestering Carbon in the Soil", August 21, 2019.
- ¹⁷ Montgomery County Council, FY25-30 Capital Improvements Program: Recycling and Resource Management: New Organics Processing Facility, May 8, 2024.
- 18 Ibid.
- ¹⁹ <u>United Nations Environmental Programme,</u> "Building materials and the Climate: Constructing a New Future", September 12, 2023.
- ²⁰ Natural Resources Defense Council, "Compost is a Climate Solution", December 5, 2023.; <u>UC Davis College of Agricultural and Environmental Sciences</u>, "Compost Key to Sequestering Carbon in the Soil", August 21, 2019.
- ²¹ Bill 3-22, Legislative Branch Climate Assessments Required, Montgomery County Council, Effective date October 24, 2022