



**US Composting
Council®**

Key Talking Points on Composting and Compost Use

Some of our most challenging problems today fall into the following categories. Providing jobs, reducing wastes, feeding our growing population while caring for our fragile environment. How can we solve these major issues and create a more sustainable society? One solution that can make a significant positive impact toward that sustainable society is Centralized Compost Manufacturing. There are approximately 5,000 active composting facilities in the United States today. Roughly only 10% of these facilities are permitted to accept food scraps as part of their feedstock input. Composting permits are issued by the state agencies under the solid waste section of the state's Department of Environmental Protection. Centralized Composting Manufacturing Facilities (CCMF) can also take a wide arrange of organic residuals as feedstocks to produce a compost product. These are as follows; yard trimmings, leaves, food scraps, clean unpainted untreated wood waste, manures and biosolids.

The 2016 ReFED report takes a deep dive into the food waste problem in the US.

This report determined the baseline amount of food wasted in the United States today to be 62.5 million tons annually. The total number is the sum of 52.4 million tons disposed annually (primarily in landfills including incinerators) and 10.1 million tons of on-farm waste. Most of the economics of this report concentrates around the reduction and recovery of food wastes as per the EPA Food Waste Recovery Hierarchy. The benefits of prevention and recovery, capture the value of edible food, are many times higher than those gained from recycling food scraps. On average, edible food purchased at retail is valued at approximately \$2.50 per pound, or \$5,000 per ton. Meanwhile, when food is ready to be thrown away as scraps, its value has generally dropped by 10 to 50 times to under \$100 per ton. When considering the "Economic Value" of solutions in this report recycling is stated as a lower value than recovery. Even after reduction and reuse there is still 13.8 million tons annually of food waste or as we term "food scrap" the non-edible portion that is either pre-consumer or post-consumer generated. This material is best used as feedstock in CCMF. By investing in compost manufacturing infrastructure, training, and policy, 13.8 million tons of food scraps can be diverted annually from landfills through compost manufacturing, reducing an estimated 4.94 million tons in greenhouse gas equivalents, while creating over 14,200 new jobs. This is the only recycling process that provides a valued end-product of the processing. CCMF can create over 6 million tons of compost product annually to fuel growth in the sustainable farming, stormwater management and environmental remediation markets. The ReFED report shows that CCMF can be expanded in roughly half of the largest municipal areas that current generate the most food scrap waste in the US.

The US Composting Council supports the establishment of a Food Recovery Act along with federal funding to increase composting infrastructure development. Food recovery should be considered as a closed loop system. Based on the EPA hierarchy food waste that cannot be utilized to feed people and or animals should be recovered and utilized for remanufacturing. Centralized Compost Manufacturing is the only cost-efficient method of processing food scraps whereby the process manufactures a final product that returns resources back to the soil. It also provides value added “ecosystem benefits” for our environment and planet, by reducing Green House Gases (GHG’s), sequestering carbon in the soil, water savings and reducing the reliance of synthetic fertilizers and pesticides. Food scrap recovery through centralized compost manufacturing can lead to healthy soils, healthy plants, healthy people, and a healthier planet.

Funding Sources

Funding sources could be in the form of Federal Grants, low interest loans and tax incentives. Also consider that these facilities are not all municipal owned and operated. In fact, many the facilities are commercial, privately held or public private partnerships. Funding sources should be made available to both the public and private sectors. Other sources of fund can be philanthropic sources along with private venture capital and corporate financing. Municipalities could consider adding an organics recycling tax to landfill fees to help jump start funding of equipment to collect and process organic wastes. Additional funding should be made available to promote organic recycling on the consumer level. This along with incentives to promote compost use. Compost use can have a positive effect on improving soils and providing ecosystem benefits to the local community as it relates to stormwater management. CCMF can also impact the local economy by providing skilled employment. As mentioned before CCMF’s could provide 14,200 new jobs to the US economy.

Compost Defined

The Association of American Plant Food Control Officials (AAPFCO) definition of Compost is as follows:

Compost – is the product manufactured through the controlled aerobic, biological decomposition of biodegradable materials. The product has undergone mesophilic and thermophilic temperatures, which significantly reduces the viability of pathogens and weed seeds and stabilizes the carbon such that it is beneficial to plant growth. Compost is typically used as a soil amendment but may also contribute plant nutrients.

AAPFCO has approved the following use of label claims for bulk compost product without registration as a fertilizer.

1. Improves soil structure and porosity – creating a better plant root environment.
2. Increase moisture infiltration and permeability and reduces bulk density of heavy soils. improving moisture infiltration rates and reducing erosion and runoff.
3. Improves the moisture holding capacity of light soils – reducing water loss and nutrient leaching and improving moisture retention.
4. Improves the cation exchange capacity (CEC) of soils.
5. Supplies organic matter.

6. Aids the proliferation of soil microorganisms.
7. Supplies beneficial microorganisms to soils and growing media.
8. Encourages vigorous root growth.
9. Allows plants to utilize nutrients more effectively, while reducing nutrient loss by leaching.
10. Enables soils to retain nutrients longer.
11. Contains humus – assisting in soil aggregation and making nutrients more available for plant uptake.
12. Buffers soil pH.

Addition Points to Consider:

Certified compostable food service packaging can aid in increasing the volume of food scrap capture rates. This is true in both pre-consumer and post-consumer food scrap composting. Compost Manufacturers would like to see a national standard of color and identification with regards to compostable product labeling. Fruit and vegetable sticker labels should all be compostable. Colored green or brown bags should only be used as the identifying colors in certified compostable bags and restricted from use in other plastic bag products.

We recommend that Federal government procurement office designate Compost a bio-preferred product for use as a soil amendment for Federally funded construction and maintenance projects. Some examples would be on highway projects for erosion control and vegetation establishment. On National Parks and federal buildings for landscaping and turf-grass management. Also, on green infrastructure projects for green roofs, bio swales, bio-retention, and infiltration. This allows cities and commercial buildings to comply with the EPA's National Pollutant Discharge Elimination System (NPDES) Phase II Stormwater rules.

We recommend that USDA support the use of compost in agriculture. Compost in agricultural can make a significant impact on both our economy and the environment. As demonstrated in the Marin Carbon Project. A small amount of compost applied to rangeland can help in sequestering carbon in our soil. The Food Safety Modernization Act recommends that manures be composted before they are applied to crop land. The USDA recommends increasing organic matter in our soils to increase the water holding capacity of the soil. Compost application is the most efficient and effective way of increasing organic matter in our soils. For every 1% of Organic Matter content, the soil can hold 16,500 gallons of plant available water per acre of soil down to one foot in depth.

References:

Centralized Composting - ReFED

<https://insights-engine.refed.com/solution-database/centralized-composting>

Compost Use-USCC

<https://www.compostingcouncil.org/general/custom.asp?page=CompostErosionControlUses>

Building Healthy Soils-ISLR

<https://ilsr.org/wp-content/uploads/2013/05/Compost-Builds-Healthy-Soils-ILSR-5-08-13-2.pdf>

Compost Jobs – ISLR

<https://ilsr.org/composting-sense-tables/>

Carbon Sequestration – The Marin Carbon Project

<https://www.marincarbonproject.org/>

Building Better Soils for Better Crops - SARE

<https://www.sare.org/wp-content/uploads/Building-Soils-For-Better-Crops.pdf>

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