Reduce Greenhouse Gas with composting

Organic Waste including food waste and yard waste when dispose at landfill produces carbon dioxide (CO2) and methane (CH4), both of which are greenhouse gas (GHG). The most part of the CH4 in the landfill gets collected and use for electricity or simply burned. However some CH4 emission still leave the landfill uncontrolled and it has 21 times higher impact on Green House Emission compare with CO2 . On top of the landfill emission, when organic waste is delivered to landfill the vehicle would produce CO2 emission and air pollutants such as nitrogen oxides (NOX) and sulphur oxides (SOX).

The composting process produces CO2, but compost is a useful product and it is much less harmful to the environment compare with methane. It isn’t only a substitute for artificial fertilizer of plants. Compost is an important soil conditioner. Soil which is treated with compost has a higher water holding capacity, easier tillage, decreased erosion-prone, enhancement of soil life, phytosanitary, higher nutrient storage, more stable soil structure and faster floor heating. Or simply, the soil is healthier and the produced CO2 will be used by the plants.

To reduce the GHG, on site composting is a good solution. The composting process can take place directly where the organic waste arises. After treatment from a minimum of 21 days, with temperature over 55°C that sanitized the compost, the compost can be used readily. Composting systems with an own biofilter can avoid outgoing odour. These systems are available in the market and have capacities less than 100 kg/day and up to over 1,000 kg/day.

On site composting can avoid the trouble on transportation for the waste disposal and plants replacement due to inadequate fertilizer. The lifetime of the plants will be longer in soil with compost. Healthier and strong plants will absorb more CO2 which reduces greenhouse gas emission.

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