

Combating Climate Change by Composting
with New Jersey Composting Council

When it comes to climate change, emissions from energy and transportation are considered the prime culprits. However, wasted food and organics are often overlooked as significant contributors and present an important opportunity to reduce greenhouse gases and mitigate climate change impacts. Here's a brief explanation of the cause-effect of food waste on climate change and how reducing the amount of food wasted and increasing composting can help.

1. How does food waste contribute to these greenhouse gases?

The third-largest source of human-related methane emissions in the US is municipal solid waste (MSW) landfills, where wasted food and other organics decomposing in a low-oxygen environment produce methane gas (CH₄), which is 30 times more powerful than CO₂ at returning heat to the earth. Wasted food also contributes greenhouse gases (GHG) all along the production and distribution chain, from resources it took to grow, transport, cool, and cook food. [Project Drawdown](#) notes that reducing wasted food could eliminate more than 70 billion tons of GHG.

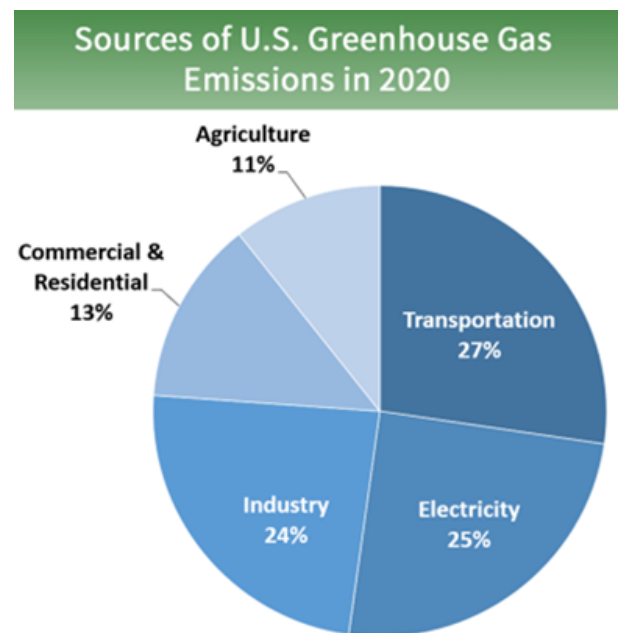


Photo 1: EPA Sources of [Greenhouse Gas Emissions](#)

2. How does diverting food waste from disposal help reduce greenhouse gases?

As noted by the U.S. Environmental Protection Agency (EPA), over 30% of the waste disposed of across the United States is organic matter such as food scraps and yard waste ([EPA](#)). In the landfill, organic matter releases methane as it decomposes. Although aerobic or oxygen-rich composting releases small amounts of biogenic carbon dioxide (CO₂), it does not create methane. Therefore, we can reduce methane emissions by taking organic matter, especially food waste, out of the solid waste disposal stream.

3. What is the scale of the Wasted Food Problem in the US?