

## Composting

[https://assets.publishing.service.gov.uk/media/63974500e90e077c329444f0/Statistics\\_on\\_carbon\\_emissions\\_Waste\\_Households\\_England\\_v8\\_2018.pdf](https://assets.publishing.service.gov.uk/media/63974500e90e077c329444f0/Statistics_on_carbon_emissions_Waste_Households_England_v8_2018.pdf)

Yes, composting is adding to CO<sub>2</sub> emissions as CO<sub>2</sub> is emitted when organic matter is broken down by composting as part of what's called the biogenic (or short) carbon cycle, where carbon is released into the soil and atmosphere by respiring and decaying organisms. However, this is effectively offset by the carbon taken up by photosynthesising and growing the organisms in the first place. Therefore, composting at home is probably a pretty much net zero emissions option.

Other options, such as council collection to compost centrally, or burn or send to landfill, lead to higher emissions (due to transportation and mechanical processing) or much higher emissions (due to methane emissions from landfill for example). Burning in a biochar facility might also be a good option when it becomes available.

So that's the biogenic or short carbon cycle. The long carbon cycle takes place over millions of years. Carbon is sequestered in the earth through geological processes, such as weathering of silicate rocks, and emitted into the atmosphere through volcanic activity.

Carbon has also been sequestered through the very slow creation of coal, gas and oil (fossil fuels) from organic matter. Mining and burning fossil fuels releases carbon that has been stored underground for millions of years with no realistic way of us removing such large additional quantities it from the atmosphere, whereas CO<sub>2</sub> emitted through composting is offset on a continual basis.