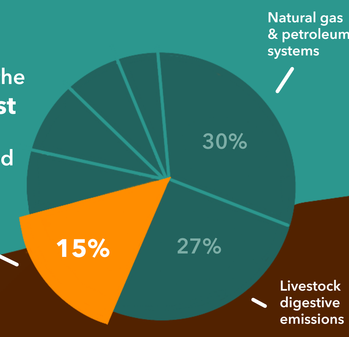
HOW COMPOSTING COMBATS THE CLIMATE CRISIS

1 AVOIDS WASTE OUTCOMES WITH HIGH EMISSIONS

Landfilling food scraps produces **20x** the CO_2e emissions (as methane) as composting

...and when used, compost's net emissions become negative!

Landfills are the **third-largest** source of human-related methane emissions in the U.S.



2 ENHANCES SOIL QUALITY

Compost increases:

Nutrients in soil

- Grows healthier, more nutritious plants & food
- Reduces use of synthetic nitrogen & fossil-fuel-intensive fertilizers

Synthetic nitrogen accounts for **80%** of human-related nitrous oxide emissions

Water holding capacity

Increases soil resiliency to extreme heat & flooding

Soil aggregation

Prevents erosion & runoff, thus protecting & restoring waterways

Normally it takes **1,800 years** to build **6 inches** of topsoil but with compost, it takes only **6 months**

3 SEQUESTERS CARBON

World soils hold **1.5 trillion** tons of carbon in the form of organic matter

What's one of the best ways to build soil organic matter?

Compost!

Degraded soil actually **RELEASES** carbon

But a **1-time** application of compost can make soil a carbon sink again!

Just 1 acre amended with compost can sequester up to **75%** of a car's annual emissions

Compost also increases crop yield & vegetation, leading to even more carbon sequestration

4 BUILDS COMMUNITY RESILIENCY

Healthy soil =

- Food security
- Profitable farms
- Enhanced habitat & biodiversity
- Resilient ecosystems

Degraded soil has been linked historically to the fall of civilization!

Community composting =

- Local jobs
- Environmental education
- Community bonds & safety
- Physical activity & healthy diets
- Social inclusion & empowerment

ILSR INSTITUTE FOR Local Self-Reliance

ilsr.org/compost-climate