The Compost Solution:

The Answer to Many of Our Greatest Challenges

Producing and applying compost is one of the most significant actions communities can and must take NOW to reduce greenhouse gas emissions—turning a waste and climate problem into a soil, food, water, and climate solution. It is such a clear and obvious approach, future generations might wonder why we didn't employ it much earlier.

We have unnecessarily created our own crises:

- **Producing climate-changing methane emissions:** Landfilled organic matter such as food discards and yard debris is a major generator of methane emissions. Methane is not just a greenhouse gas; it's a climate-heating powerhouse that traps 84 times more heat in our atmosphere than carbon dioxide over the short term.
- **Robbing our soil and food of nutrients:** Our industrial agricultural practices like monocropping, synthetic fertilizers, and pesticides are depleting our soils, and the nutrient values of our food.
- **Depleting the resiliency of our arid soils:** These same agricultural practices make our soils less absorbent, decreasing their ability to retain moisture and carbon and requiring more water to grow plants.

The Compost Solution: Producing and applying compost turns each of these crises into a Natural Climate Solution.

Natural Climate Solutions are central to addressing our climate crisis. They involve supporting the natural carbon cycle that holds the climate in balance by avoiding greenhouse gas emissions and restoring and improving the ability for plants and landscapes (both urban and wild) to store carbon.

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A Natural Climate Solution:

- Keeping organics out of the landfill and diverting them to composting prevents methane emissions (landfills are the third-highest source of human-caused methane!).
- Using even a half-inch layer of that finished compost on agricultural and urban lands can increase the ability of healthy soils and plants to pull even more carbon dioxide out of the atmosphere and store it in the soil—REVERSING climate change. It's called "carbon farming."

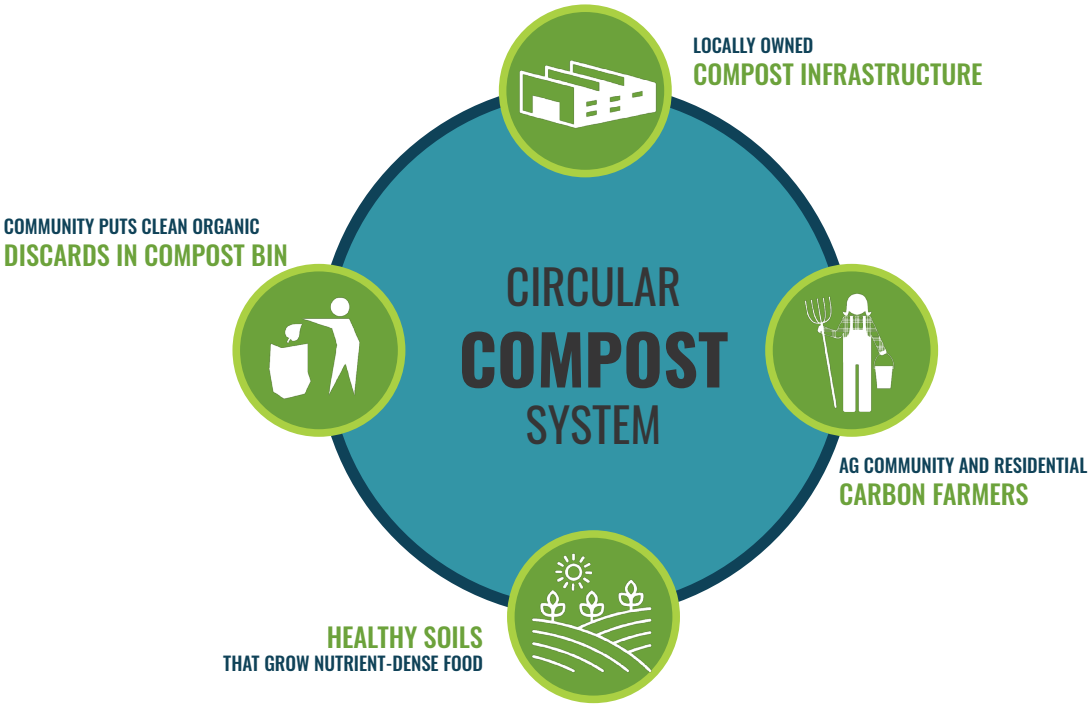
A soil health and local resilience solution:

- By adding finished compost to our soils, nutrients that were removed from the soil by harvesting crops are returned. As a result, the soil is able to grow more nutrient-dense foods and plants the next season.
- Applying compost to landscapes also increases the organic matter in the topsoil, increasing its ability to absorb and retain water and be more resilient to drought. Landscape absorbency of both water and carbon is a HUGE asset as climate change makes our arid region even hotter and drier.

We need a CIRCULAR COMMUNITY COMPOST SYSTEM

For the potential of the Compost Solution to be fully realized, we must create a model Community Compost System based on Circular Economy principles that engages every sector of a community to:

1. **Generate clean organic discards for composting.**
   Residents and businesses must recognize that their organic discards are not waste that we need to make "go away." They are a vital resource we need to retain locally to produce the very compost that our local gardeners can use on their own growing spaces and that our farmers can use to grow our local food. So we all need to make sure we're composting only the good stuff (food and yard debris) and NONE of the bad stuff (plastic, glass, Styrofoam, etc.).
2. **Build local compost infrastructure.**
   Boulder County is committed to composting, with many communities within the county providing compost collection services, but emission-spewing trucks are now traveling 100 miles round-trip to the nearest compost facility. Every community needs composting infrastructure within a reasonable distance to minimize travel emissions and to make local compost available to farmers and residents. Here in Boulder County, Eco-Cycle is advocating for both decentralized, on-farm composting models where farmers can generate their own compost, and for a centralized facility to serve the entire county.



3. **Use compost on agricultural and urban lands to build soil, save water, sequester carbon, support vibrant ecosystems, and build community resilience to climate change.**
   For carbon farming to be the climate solution we desperately need, new models are necessary—ones that reward farmers for building soil. We need to make compost available to "carbon farmers" (and backyard gardeners) at a cost that is competitive with their cost to spread synthetic fertilizers.
4. **Grow nutrient-dense foods for the local community.**
   With access to locally produced, clean compost, every community, farmer, and gardener can apply compost to produce soils that grow more nutrient-dense, drought-resistant crops and make those crops available for sale to the local community, who will then return the clean food scraps back into the circular system.
5. **Support healthy ecosystems.**
   Healthy absorbent soils are the foundation for regenerating diverse plant and tree ecosystems that provide life-saving shade in our warming cities, support pollinators that are necessary to grow crops and maintain wild ecosystems, and provide resiliency and stability in the face of extreme weather events and climate change.

Every community has organic discards, so every community can benefit from the Compost Solution. That's why Eco-Cycle is committed to working with the Boulder County community to help build a Circular Community Compost System model that includes the infrastructure, policy, and educational programs needed to innovate and implement the compost solution for communities everywhere.

Join us in creating this model!