

CASE STUDY

DENVER'S OWN ECOGRO COLLABORATION AND THE COMPOST END MARKET

As cities around the country ramp up municipal composting programs, they are looking for innovative ways to create local markets for their finished compost and close the food waste loop. Without individuals, businesses, and organizations that will buy the finished compost product, an organics processing program cannot be viable.



Denver residents who participate in the Denver Composts program can dispose of their food scraps in a city-provided compost cart. The content of that compost cart is picked up by a Denver Solid Waste Management collection truck, driven to a city-owned transfer station, loaded onto a larger truck, and sent 44 miles northeast to rural Keenesburg, Colorado. Here, Al Organics processes Denver's discarded food scraps and yard debris into U.S. Composting Council-certified compost in as little as three months.

Ideally, this Denver-produced compost would stay in Denver and benefit the community it came from. Denver Composts is working to make that happen through a partnership with Al Organics and Rocky Mountain Ace Hardware stores. Today Denver residents can buy Denver's Own $\mathsf{EcoGro}^\mathsf{TM}$ Compost at their neighborhood Ace Hardware, regenerating their soil with locally produced and climate-adapted nutrients and organic matter while also reducing emissions associated with transporting and landfilling this material.

Denver's Solid Waste Management (SWM), a division of the Denver Department of Transportation and Infrastructure, provides solid waste collection services to 182,000 households in Denver, with no direct fee for trash or recycling. In 2008 SWM started the Denver Composts program, a grant-funded curbside organics collection program with capacity for 2,300 participants. In 2010, when grant funding ran out, the program began charging a \$9.75 monthly fee to residents wishing to participate. Today, Denver Composts services 25,000 households and has grown participation by more than 20 percent each year for the past five years. In 2019 alone, the program generated more than 9,000 tons of feedstock (primarily food scraps and yard debris) for composting.

Although currently only 23.1 percent of Denver's waste is diverted from landfill through recycling and composting, waste characterization studies have shown that almost 50 percent of what Denver residents send to landfill is compostable—making clear the need to increase participation in the program. However, as the composting initiative continues to grow, it will be increasingly important to build viable end markets to ensure the program's success. Denver's Own EcoGro is one innovative way to create an end market and bring compost back to the community.

CREATING DENVER'S OWN ECOGRO

Recognizing the rapid and consistent annual growth of its organics collection program, Denver Composts needed to quickly find ways to distribute finished compost and increase its use. "This whole project stemmed out of Denver residents asking for finished compost outside of our original one-day compost sale event," says Tay Dunklee, SWM program administrator. "We knew there was demand for the compost and we knew we wanted to get more compost into Denver's soil; we just needed to make it more convenient." Denver SWM already had programs in place for residents to acquire finished compost but were interested in making the product available year-round, in practical quantities, and with well-labeled use instructions.

Building on established relationships with A1 Organics and Ace Hardware, Denver Composts staff started discussions in May 2018 to come up with a plan to produce bagged compost, sold locally. By year's end, the three partners had a viable, mutually beneficial plan to sell Denver's Own EcoGro Compost. "It was the perfect storm of champions at all three partner organizations. We found the right people with the motivation to make this happen," says Dunklee. "There is a benefit for everyone in the project: Denver is connecting residents to the finished product from its organics collection program, A1 is building the market for the high-quality, certified compost they produce from Denver's organics, and Ace Hardware is driving customers to their store by offering a local product."



CHALLENGES

In creating this new kind of partnership, several challenges arose that Al and Denver Composts had to work through to build success. Those included:

- Contamination and screening. As is the case with any municipal organics stream, contamination and debris are challenges for A1. Food waste in particular needs to be finely screened for non-compostable elements of food packaging. This requires a high level of quality control from A1. Clinton Sander, A1's marketing manager, notes that "we can remove 98 percent of all the contaminants in the compost, but until the incoming stream is 100 percent free of non-compostable materials, there will always be a small amount in the finished product."
- High competition and low margins. There are lot of bagged compost products on the market, and the profit margin from sales of these products is small after the costs of bagging and handling are accounted for. The greater benefits for all partners involved are the ability to reach a broader community and the environmental benefits accrued from creating a local partnership between private industry and a government agency.
- Expectation for free compost products and services. Denver Composts is a fee-for-service program, and customers have expressed frustration about having to pay to participate in the program and also pay for finished compost. Dunklee's and Sander's teams have worked to educate customers by explaining that there are costs associated both with processing a waste stream and with creating a useful product.

LESSONS LEARNED

Though this project, both teams have come away with several takeaways and lessons learned, valuable for other regions looking to recreate a similar concept. These include:

- Finding project champions helps ensure that the program will get off the ground. Building on past collaborations, Dunklee and colleagues looked to the Rocky Mountain Ace Hardware stores for marketing support at the regional level. They also built a partnership with Al Organics' newly hired Sander, who was a strong champion of the project.
- Certification and use guidelines are important parts of attracting customers. To help educate and reassure consumers on compost use and quality, EcoGro is labeled with U.S. Compost Council use guidelines, the council's Seal of Testing Assurance certification, a Colorado Proud logo indicating that the product is manufactured in state, and the Al Organics and Denver Composts logos.
- Leveraging existing partnerships can enable smoother implementation. As the longtime processor of Denver's compostable materials, Al Organics has a long history of working with Denver Recycles. And with 45 years in the composting business, Al Organics already had a relationship with a compost bagging operation.
- Consumers like the story of local resource circularity. As Denver's Own EcoGro Compost gains in popularity, partners are realizing that the Denver story line is impactful. "People connect to the idea that they can buy compost directly from their community and add it back into their soil," says Dunklee. "They like knowing the story behind the brand and want to close the compost loop locally." Adds Sander, "Retailers also have a powerful selling point for a local product; their staff can easily get behind the mission and know they are also helping to benefit their local community."
- Individual store buy-in is important to successful marketing. Al and Denver Composts have worked hard to market the product to individual Ace Hardware store owners so that those stores can champion the products with customers. Buy-in from individual Ace Hardware locations is a very important piece of the success of this program.

IMPACT AND NEXT STEPS

Since launching in 2019, close to 25,000 bags of EcoGro have been sold at Ace Hardware stores. In addition, 3,000 bags were sold at the city's annual Mulch Giveaway and Compost Sale event in 2019. Dunklee says, "In addition to the number of bags sold, Denver's Own EcoGro Compost has been a catalyst for conversations about compost use, not just in people's homes and gardens but at the city level and with a wider audience." Dunklee continues to explore additional opportunities to drive compost use in the city, including partnerships with other city departments. For example, as part of a partnership with the Denver Parks and Recreation Department in May 2019, 30 cubic yards of Denver's Own EcoGro Compost were used at Hirshorn Park to pilot the use of compost as a soil amendment in the city's parks.

Moving ahead, stakeholders look forward to expanding the project. They would like to see at least twice as many bags sold in 2020. They continue to build demand and brand awareness and are finding ways to communicate the environmental benefits of using compost and keeping organics out of the landfill.

ADDITIONAL RESOURCES

Al Organics: EcoGro

Denver Recycles: Denver's Own EcoGro

ENDNOTES

 $Denver \, Recycles, 2018 \, Annual \, Report, \, https://www.denvergov.org/content/dam/denvergov/Portals/709/documents/DR_Annual Report_2018_Final.pdf \, (Accessed Long-Content/$ $9/1/2020).\ City\ of\ Denver, "Denver\ Compost\ Challenge",\ Recycle\ Compost\ and\ Trash,\ https://www.denvergov.org/content/denvergov/en/trash-and-recycling$ composting/compost-expansion.html (Accessed 9/1/2020).