

2022-2023

ANNUAL REPORT

A large circular inset image showing a diverse group of people, including staff and community members, posing for a photo in front of a green eco-cycle truck. The truck has the text 'eco-cycle ZERO WASTE ZERO EMISSIONS' and 'The New s First ELECTRIC Commercial COMPOST Collection Truck' on its side. The people are smiling and waving. The background of the entire cover features a collage of organic waste like fruit and vegetables, and blue recycling bins.

eco·cycle®

Eco-Cycle's mission is to innovate, implement, and advocate for local and global **Zero Waste solutions** to foster a more sustainable, equitable, and **climate-resilient future.**



LETTER FROM THE EXECUTIVE DIRECTOR

One of the most rapid and cost-effective means of curbing carbon emissions and protecting our finite natural resources and our earth's populations is by adopting Zero Waste strategies to build a circular economy. Eco-Cycle develops Zero Waste solutions—policies, infrastructure, programs, and education—locally, and then promotes our models to communities far and wide.

In addition to our ongoing Zero Waste work to reduce plastic consumption and pollution, build reuse systems, and increase accessibility to recycling and composting, one of the major focus areas Eco-Cycle prioritized this past year was **furthering all things COMPOST in the context of new challenges and opportunities:**

- When A1 Organics, our regional compost manufacturer, changed compost guidelines to accept food and yard trimmings only, over five million Coloradans along the Front Range needed re-education. Working closely with other haulers and municipalities, we created the **Colorado Clean Compost Toolkit** to reduce contamination and produce cleaner compost streams. We also revamped our Green Star Schools program to educate students and teachers about new ways to create quality compost.
- Recognizing the limitations of relying on a single regional compost facility, we partnered with local regenerative farmers to advance Eco-Cycle's vision for a community-based **Circular Compost System**. The system consists of smaller, distributed production sites to make composting more accessible, more affordable, and ensuring the highest quality. To further this vision, we built seven compost demonstration projects to enable local farmers to compost on-farm and enrich their lands with the finished product.
- We worked to facilitate composting at the state level, successfully championing two bills: Truth in Labeling for compostable serviceware to reduce consumer confusion and contamination in compost streams, and an Organics Management study about necessary infrastructure and policies to promote composting statewide.
- In pursuit of a Zero Waste–Zero Emissions future, Eco-Cycle took a significant step forward in 2023. We initiated the electrification of our hauling fleet by deploying the nation's first commercial-scale compost collection truck!

With immense gratitude, I thank you for making all our work possible. Your engagement and unwavering support are the foundation upon which we are building a more equitable and climate-resilient future.

Yours in conservation,



Suzanne Jones
Executive Director



Suzanne Jones
EXECUTIVE DIRECTOR
ECO-CYCLE

2022–2023 Highlights

eco-cycle®



We gave **1,900**
Zero Waste presentations,
impacting **49,000 STUDENTS**.

Our GREEN STAR SCHOOLS program now includes:

60
schools

38k
students

up to a
67%
diversion
rate



7

farm partners started
trialing on-farm compost
production with
Eco-Cycle

TOOLKITS



Eco-Cycle's Colorado Clean Compost Toolkit

provides resources for 5 million
Colorado residents.

Plastic Pollution Reduction Act Toolkit

provides resources to help
businesses & municipalities
statewide.



ELECTRIC COMPOST COLLECTION TRUCK

Eco-Cycle deployed
the nation's first
commercial-scale
EV compost collection
truck in 2023!



500,000 plastic polybags



diverted from landfill through
our Pedal-Powered Polybag
Recycling Program

CHaRM

provided recycling solutions for 25+
hard-to-recycle materials

Pounds recycled

3.5 million

of visits to the CHaRM

55,000



95.5 million pounds

of materials RECYCLED by Eco-Cycle



135,000 metric tons
of carbon dioxide equivalent

equivalent to **40,000 cars**
taken off the road for a year





Community Programs

2022–2023 HIGHLIGHTS

REDUCING PLASTIC POLLUTION: IMPLEMENTING PLASTICS LEGISLATION

PIVOTAL CLIMATE SOLUTIONS: COMPOSTING & CARBON FARMING

GREEN STAR SCHOOLS: EMPOWERING FUTURE ENVIRONMENTAL STEWARDS



REDUCING PLASTIC POLLUTION: IMPLEMENTING PLASTICS LEGISLATION

Single-use disposable plastics, derived from oil and natural gas, are significant contributors to climate change and pose a grave threat to both human health and the environment. Since the 1950s, global plastics production has surged from around [2 million tons annually to a staggering 440 million tons in 2015](#), with projections indicating that plastics production will nearly quadruple in the next 30 years.

Particularly problematic are plastic bags, which, due to their light weight, are easily carried by the wind into the environment. The ingestion of plastic bags poses life-threatening risks to animals, including cattle, and represents the most prevalent source of litter discovered during creek cleanups in Colorado. Plastic pollution is becoming ubiquitous in the world's oceans as well as here in Colorado, where more than 1,000 tons of plastic particles find their way into dust and rainwater each year, contaminating even remote areas like Rocky Mountain National Park.

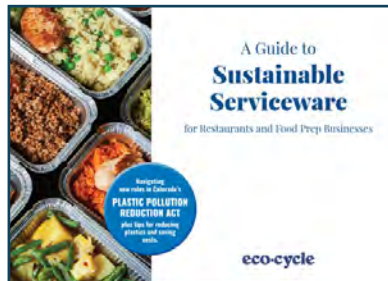
In a historic victory, Eco-Cycle and our partners championed the passage of the Plastic Pollution Reduction Act (PPRA) in 2021. The PPRA's first phase, effective January 1, 2023, mandated that large retail stores in Colorado charge a \$0.10 fee on paper and plastic bags. Implementing this change required education of municipalities and businesses on how to comply with the law, along with the necessary resources to support the new bag fees. Eco-Cycle addressed this need by creating our PPRA Toolkit, offering an array of free resources—including store signage, training materials, FAQs, and more—to assist Colorado communities in curbing their use of single-use disposable plastics and mitigating pollution.



Randy Moorman
LEGISLATIVE &
COMMUNITY CAMPAIGNS
DIRECTOR

Eco-Cycle created our Plastic Pollution Reduction Act Toolkit, with free tools and resources, to help Colorado communities comply with the Act and reduce plastic pollution.

SUPPORTING COMMUNITIES IN PHASE TWO OF THE PPRA: A BAN ON PLASTIC BAGS AND POLYSTYRENE CONTAINERS



In the spring of 2023, Eco-Cycle convened representatives from numerous Front Range communities to prepare for the second phase of the PPRA, set to take effect on January 1, 2024. This upcoming phase will prohibit single-use disposable plastic bags at major retailers in Colorado and ban polystyrene foam cups and food containers in all retail food establishments. To guide municipalities and businesses in this transition, **Eco-Cycle took the initiative to craft our “[Guide to Sustainable Serviceware](#),”** to identify alternative options—from reusables to recyclable or compostable takeout containers—to facilitate this shift away from polystyrene. Notably, the guide will be available in both Spanish and Mandarin, made possible through the generous support of Boulder County.

Eco-Cycle extends its gratitude to the following organizations and communities for funding this guide and supporting the sustainability efforts of businesses and communities throughout the state.



ecocycle.org/ppra

View Eco-Cycle's PPRA Toolkit and more information about the 2024 ban on plastic bags and polystyrene containers.



Examples of fictional look-alike products.

SUCCESS! TRUTH IN COMPOSTING BILL BECOMES LAW

To reduce compost contamination and create clean compost streams, Eco-Cycle and partners successfully advocated for the **Truth in Compost Labeling Bill (SB23-253)**, which will prevent companies from misleading consumers with look-alike compostable products (including using words such as “biodegradable” or “plant-based” on packaging) and create a clear standard for labeling truly compostable products. These changes could potentially lead to composters eventually accepting more certified compostable products.



PIVOTAL CLIMATE SOLUTIONS: COMPOSTING & CARBON FARMING

When organic material decomposes in a landfill without oxygen, it becomes the number-one source of human-caused methane—a greenhouse gas that [traps 84 times more heat in the atmosphere than carbon dioxide](#) in the short term. **By expanding access to composting, we can significantly curtail methane emissions from landfills.** Moreover, the application of finished compost to landscapes, gardens, and farms fosters healthier plant growth and soil health and helps sequester carbon from the atmosphere.

Eco-Cycle is pioneering a community-based Circular Compost System that diverges from the traditional model of one, large central facility alone and instead relies on a distributed network of compost production sites, starting with local farms. **Partnering with regenerative farmers in Boulder County, Eco-Cycle is building micro-scale circular compost systems** in which organic materials generated on the farm are composted on-site using odor-controlling Aerated Static Pile (ASP) systems.

After successful advocacy by Eco-Cycle, Boulder County recently updated their land use regulations to facilitate on-farm composting by, among other things, allowing farmers to bring materials generated offsite to the farm for composting. Not only are organic materials diverted from landfills, but farmers are empowered to make quality compost to their own specifications to apply to their soils. **This approach significantly reduces transportation emissions and financial expenses associated with processing organics at remote industrial facilities.**



Dan Matsch
COMPOST &
CARBON FARMING
DIRECTOR

Eco-Cycle is building a model community-based Circular Compost System that relies on a distributed network of compost production sites, rather than the traditional model of one large, centralized facility.

THANK YOU TO OUR REGENERATIVE FARM PARTNERS!

In fall of 2023, we led public tours at participating farm sites—Jack’s Solar Garden, the Boulder JCC Milk and Honey Farm, Long’s Gardens, Ollin Farms, and Yellow Barn Farm—to educate residents and local officials about the benefits of a distributed local compost system for Boulder County. With support from our community, we can turn a waste and climate problem into a soil, food, water, and climate solution!



Yellow Barn Farm

ecocycle.org/carbon-farming

Learn more about Eco-Cycle's Composting and Carbon Farming program and the development of a Circular Compost System in Boulder County.



Senator Lisa Cutter, front, with staff from Eco-Cycle and Recycle Colorado, celebrating the passage of SB23-191.

ECO-CYCLE & PARTNERS CHAMPION A STATEWIDE ORGANICS DIVERSION STUDY BILL

In 2021, Coloradans composted only 6% of our waste, largely due to lack of access to convenient diversion programs. To ensure a clean compost future for Colorado, Eco-Cycle led the charge—along with partners Recycle Colorado, Senator Lisa Cutter, House Representatives Junie Joseph and Cathy Kipp, Colorado Composting Council, and others—on passing the Organics Diversion Study Bill ([SB23-191](#)), signed into law by Governor Polis on May 17, 2023. This bill requires the Colorado Department of Public Health and Environment (CDPHE) to assess how the state can divert the millions of tons of organic materials that currently go to landfills into more productive uses, such as feeding hungry Coloradans and building healthier soils. In this process, CDPHE will engage stakeholders and make recommendations for compost policy and infrastructure statewide.



GREEN STAR SCHOOLS®: EMPOWERING FUTURE ENVIRONMENTAL STEWARDS

Moving to a Zero Waste system requires a big cultural shift. There's no more effective way to change our culture of wasteful habits than by educating and engaging youth, inspiring both them and their families to become environmental stewards. **Eco-Cycle's Green Star Schools program has been instrumental in making Zero Waste a way of life for students from preschool to 12th grade.** With a current enrollment of 60 public schools during the 2022–2023 school year, this program now serves over 30,000 students and 4,000 staff members.

Our primary goal is to integrate Zero Waste principles into the daily routines of students and staff. We achieve this through environmental literacy, establishing the necessary infrastructure, and providing daily practice of waste reduction, recycling, and composting within the school environment.

In April 2023, A1 Organics, the primary compost manufacturer for Front Range communities, revised its compost guidelines to accept food scraps and yard trimmings only, and to send any contaminated loads of organic material to landfills. Because all of our Green Star Schools were composting throughout the school (including non-recyclable paper in classrooms, paper towels in bathrooms, and napkins and paper serveware in the cafeteria), these guideline changes required significant modifications. **Thanks to a collaborative effort involving Eco-Cycle and Boulder Valley and St. Vrain Valley School Districts, as well as dedicated students and staff, our Green Star Schools pivoted to meet the new guideline standards and divert compost free from contaminants.** The enduring partnerships Eco-Cycle has cultivated with schools and the strong sense of environmental responsibility instilled in students and staff proved indispensable in preserving clean compost practices at Green Star Schools.



Kim Orr

SCHOOLS PROGRAM
DIRECTOR

With a current enrollment of 60 schools, our Green Star Schools program provides daily practice in waste reduction, recycling, and composting to over 30,000 students and 4,000 staff.

EXPANDING OUR GREEN STAR SCHOOLS INITIATIVE TOWARD 100% ENROLLMENT

With the aim of enrolling every school within the Boulder Valley and St. Vrain Valley School Districts in our Green Star Schools program, **Eco-Cycle welcomed Fall River Elementary in Longmont into the program during the 2022–2023 school year.** This addition brought 516 new students and 59 staff members into the program. Looking ahead to the 2023–2024 school year, we are on track to enroll a record-breaking six schools into the Green Star Schools program, taking a big leap toward 100% enrollment of all local public schools!

ecocycle.org/green-star-schools

Learn more about our Green Star Schools program and how students are learning to become environmental stewards.



ZERO WASTE PARTY KITS FOR A GREENER FUTURE

The more restrictive compost guidelines implemented in April 2023 exclude certified compostable serviceware and paper products, including plates and napkins. This change has posed significant obstacles to hosting Zero Waste Events, such as school carnivals and classroom celebrations. In response to this challenge, Eco-Cycle laid the groundwork for new Zero Waste Event Kits that feature reusable serviceware and napkins designed to accommodate an entire classroom. These kits are set to be introduced in 2024, paving the way for a more sustainable and Zero Waste approach to school events.

Thank you to our Green Star School Sponsors!

ORACLE®

NORTHROP
GRUMMAN



BOULDER VALLEY
SCHOOL DISTRICT



ST. VRAIN VALLEY SCHOOLS
academic excellence by design





Services & Facilities

2022–2023 HIGHLIGHTS

A NATIONAL MODEL: THE CENTER FOR HARD-TO-RECYCLE MATERIALS

INITIATIVES FOR A CIRCULAR ECONOMY: ZERO WASTE HAULING & CONSULTING

INNOVATIVE RESOURCE RECOVERY: BOULDER COUNTY RECYCLING CENTER



A NATIONAL MODEL: THE CENTER FOR HARD-TO-RECYCLE MATERIALS

In 2001, Eco-Cycle and the City of Boulder joined forces to establish the Center for Hard-to-Recycle Materials (CHaRM)—the first facility of its kind in the nation dedicated to accepting a wide array of hard-to-recycle (HTR) materials that are not accepted in single-stream recycling.

In 2022–2023, **customers made over 55,000 visits** to drop off their unusable computers, printers, TVs, cell phones, books, block foam, and more, contributing to the **3.5 million pounds recycled through the CHaRM**. Our goal is to identify or develop socially and environmentally responsible end markets for these diverse materials in support of diverting them to become productive raw materials for remanufacturers.

Over time, CHaRM has become a nationally recognized model of a **Zero Waste facility and drop-off center**, inspiring numerous other U.S. communities to pursue this unique approach to managing hard-to-recycle materials.



Justin Stockdale
CHARM & ZERO WASTE
HAULING DIRECTOR

ecocycle.org/charm

Get the most current information about the hard-to-recycle materials that we accept, our hours of operation, and fees.

THE CENTER FOR HARD-TO-RECYCLE MATERIALS (CHaRM)

In 2022–2023, Eco-Cycle collected more than 3.5 million pounds of materials from over 55,000 customers at the CHaRM facility in Boulder, which Eco-Cycle founded and continues to operate with support from the City of Boulder.



ELECTRONICS
781,137 lbs



MATTRESSES
141,920 lbs



BOOKS
284,908 lbs



PORCELAIN
180,000 lbs



PLASTIC FILM
179,061 lbs



BLOCK FOAM
89,781 lbs

BREAKING BARRIERS: INCLUSIVE RECYCLING INITIATIVE FOR HARD-TO-RECYCLE MATERIALS



Unlike single-stream recyclables, hard-to-recycle materials such as electronics, mattresses, and plastic film, can only be recycled through specific collection processes, and the cost can often be prohibitive for low-income households. **In partnership with the City of Boulder, Eco-Cycle is working to change that.**

Conversations with residents made it clear that subsidizing CHaRM fees and translating recycling guidelines was not enough to best serve the community. In addition to these financial and language barriers, other challenges, including transportation and lack of awareness of the opportunities for diversion through the CHaRM, needed to be addressed.

In response, we redesigned our strategy to bring CHaRM services on-site to low-income housing communities, where residents were able to recycle everything from mattresses to electronics to plastic film, free of charge. We will continue to work with our partners on new approaches to ensure everyone can responsibly manage their hard-to-recycle materials.



INITIATIVES FOR A CIRCULAR ECONOMY: ZERO WASTE HAULING & CONSULTING

Eco-Cycle collaborates with a network of over 600 local businesses, assisting them in their waste reduction efforts, employee engagement, sustainable objectives, and community support, all while actively contributing to the establishment of a Circular Economy in Colorado.

Our Business Consulting Services are tailored to conduct comprehensive waste audits and craft impactful waste reduction and recycling strategies. This includes initiatives like packaging redesign, cooperative endeavors to establish industry-wide recycling solutions, and pioneering new recycling markets in partnership with leaders in the outdoor retail industry.

Within our Hauling Services, we facilitate the diversion of materials away from landfills, boosting recycling and composting rates. **To align with our mission of achieving Zero Waste with Zero Emissions, we are committed to the electrification of our fleet used for the collection of recyclable and compostable materials.** In 2023, we proudly deployed the nation's first commercial-scale electric compost collection truck, with plans to introduce our first electric recycling truck in 2024.



Anthony Martinez
ZERO WASTE HAULING
OPERATIONS MANAGER



Kate Christian
CORPORATE SUSTAINABILITY
MANAGER

ecocycle.org/hauling-consulting

Join the hundreds of businesses working with Eco-Cycle's Zero Waste Hauling and Consulting Services!

A CLEAN COMPOST ROUTE IN BOULDER COUNTY

In response to AI Organics' change in composting guidelines, Eco-Cycle **launched an initiative to assist the commercial compost customers we haul for** to be able to meet the stricter standards. Any loads that contained contamination could be rejected by AI Organics, sending the whole truckload to be landfilled.

In spring 2023, we introduced a comprehensive feedback protocol to ensure real-time reporting of any contamination issues to our partners. This has fostered active engagement with our customers, enabling us to address collection system problems and identify noncompliant materials effectively.

In addition to our customer engagement strategy, we've implemented an innovative fleet routing system. This system rewards those businesses that are working diligently to keep their compost clean by assigning them to our "Clean Compost Route"—a hauling route comprised of other commercial customers with consistently contamination-free compost. By doing so, these businesses are assured that their compost streams are not being mixed in with contamination and ending up at landfills—instead they are being remanufactured into a high-quality finished compost!

This combined approach has led to an impressive outcome: **more than 90% of the materials designated for composting by our customers are successfully diverted from landfills.**



PEDAL-POWERED POLYBAG COLLECTION IS ON A ROLL!

Since January 2023, we've successfully collected 3,600+ lbs of polybags from ten sustainability-minded Pearl Street retailers, employing high school students to operate our emissions-free, pedal-powered collection wagon.

Since the polybag collection program launched in October 2021, our program has diverted over 7,500 lbs of polybags from the landfill, which equates to roughly 500,000 individual bags! Our polybag collection program has garnered participation from several notable establishments—including Patagonia, Fjallraven, Jones & Co, Bliss Boulder, Arc'teryx, Helly Hansen, Stio, Norrona, Artilect, and Backcountry—and we are exploring ways to further expand the impact of this program.



INNOVATIVE RESOURCE RECOVERY: BOULDER COUNTY RECYCLING CENTER

Eco-Cycle championed the campaign to fund and build the Boulder County Recycling Center (BCRC) back in 1994. Today, the BCRC is a modern single-stream processing facility that sorts and bales roughly 48,000 tons (or 93.5 million lbs) of recyclable materials from across the county each year.

Owned by Boulder County and operated by Eco-Cycle, this partnership created a unique model for recycling facilities. Eco-Cycle processes and sells materials based on the sustainability values and Zero Waste goals adopted by Boulder County and its communities—not just to maximize profits, like in most other recycling facilities.

Further enhancing the success of the BCRC, Eco-Cycle's community programs educate the public on how to recycle correctly, resulting in some of the cleanest, most valuable recyclables on the market!



Kalin Stovall
MRF OPERATIONS
DIRECTOR



Cecilio Lechuga
PRODUCTION FOREMAN

ecocycle.org/bcrc

Learn more about the Boulder County Recycling Center and view videos of the facility at work.

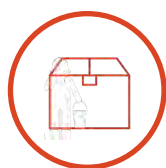


THE CLIMATE BENEFITS OF RECYCLING

Recycling, composting, and other Zero Waste practices are among the quickest and most effective ways a community can reduce greenhouse gas emissions that are driving climate change. This year, Eco-Cycle's recycling efforts kept 135,000 MTCO₂E out of the air through our operation of the Boulder County Recycling Center and the Eco-Cycle/City of Boulder Center for Hard-to-Recycle Materials (CHaRM), equivalent to taking more than 40,000 cars off the road for a year!*

RECYCLING AT THE BOULDER COUNTY RECYCLING CENTER

In FY 2022–2023, Eco-Cycle collected and processed almost 48,000 tons of traditional recyclables—paper, cardboard, glass, aluminum, steel, and plastic—as operator of the Boulder County Recycling Center.



CARDBOARD
21,997 tons



PAPER
10,282 tons



GLASS
7,444 tons



PLASTIC
3,763 tons



ALUMINUM
965 tons



STEEL
1,300 tons

*Calculated using the WARM model.

NEW TECHNOLOGY AT THE BOULDER COUNTY RECYCLING CENTER

Over the past six years, Eco-Cycle and Boulder County have been adding new material-sorting automation and technology at the BCRC, starting with optical sorting for plastics in 2017, which uses cameras and air jets to identify and separate containers made of different plastic resins. In 2020, two robots were added to the BCRC workforce: “Sorty McSortface” and “Sir Sorts-a-Lot.” Designed by AMP Robotics, the robots use cutting-edge AI technology, enabling them to adapt, learn patterns, and complete complex tasks such as removing contaminants from recyclables on a conveyor belt. Most recently, in September 2023, fiber optical sorting was added to remove containers from the fiber line and help sort paper and cardboard into different material grades.

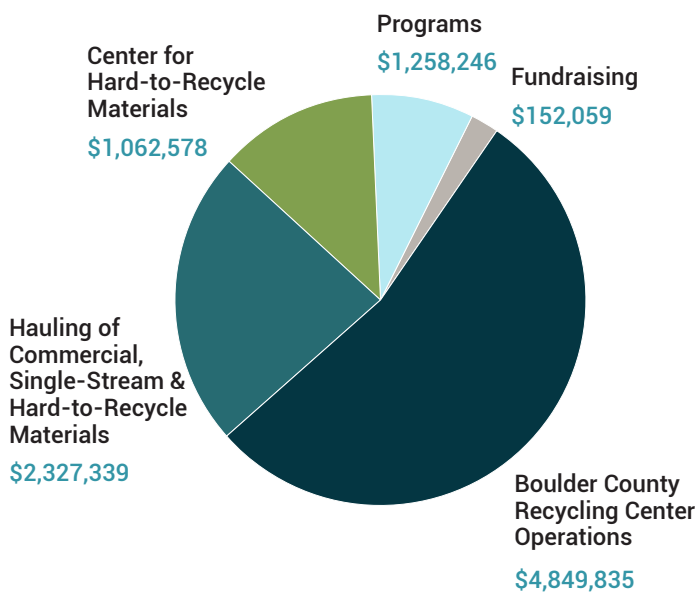
With these additions, Eco-Cycle and Boulder County are ushering in the newest wave of recycling technology to maximize recovery of recyclable materials and remove contamination. These machines are designed to perform the tedious and physically taxing work of sorting materials, while creating new opportunities for workers to be trained to transition into quality-control and mechanic roles within the recycling facility.



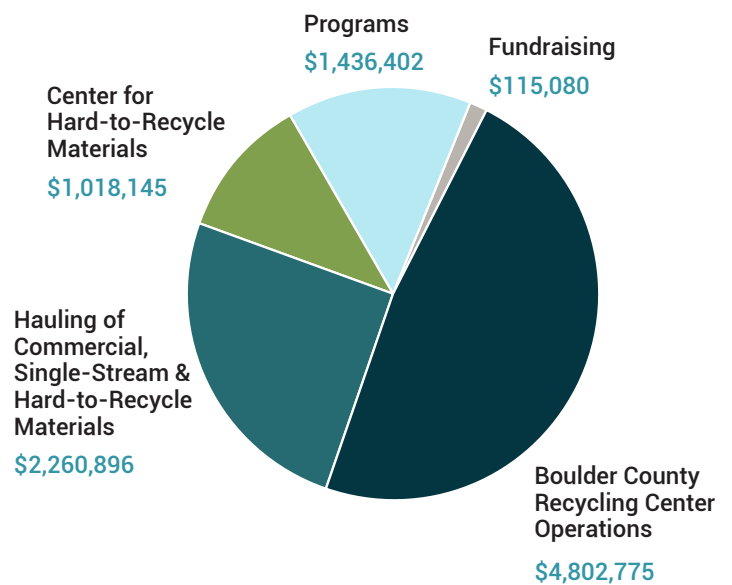
FY 2022–2023 FINANCIALS

Eco-Cycle is a nonprofit social enterprise, which means we conduct mission-based business activities (such as commercial hauling and operation of the Boulder County Recycling Center and CHaRM), and use surplus revenues to fund our Zero Waste education, outreach, and advocacy work.

REVENUES



EXPENSES



REVENUES

BCRC Operations	\$4,849,835
Hauling of Commercial, Single-Stream & Hard-to-Recycle Materials	\$2,327,339
Center for Hard-to-Recycle Materials	\$1,062,578
Programs	\$1,258,246
Fundraising	\$152,059

TOTAL **\$9,650,057**

EXPENSES

BCRC Operations	\$4,802,775
Hauling of Commercial, Single-Stream & Hard-to-Recycle Materials	\$2,260,896
Center for Hard-to-Recycle Materials	\$1,018,145
Programs	\$1,436,402
Fundraising	\$115,080

TOTAL **\$9,633,298**

eco-cycle®