



# ANNUAL REPORT 2022-23

## **AUTHORS**

Chris Herr  
Cassy Cadwallader

## **CONTRIBUTORS**

Sydney Ziegler  
Amy Nash

## **PRESENTED BY**

Auraria Sustainable  
Campus Program



# TABLE OF CONTENTS

## Where We Are Now

*Forward by Director, Chris Herr .....2*

## Our Mission

*Our Values .....3*

## Impact By Metric

*Waste Diversion.....4*

*Library Solar Array .....5*

## Major Project Highlights

*ShareMeals App .....6*

*ASCP Free Store .....6*

*Tivoli Lighting Upgrade .....7*

*Water Savings .....7*

*H2R Program Expansion .....8*

## Auraria Compost Outpost

*The New Branch.....9*

## Climate Action Plan ... In Action

*Overview and Analysis .....10*

*A year's overview*

# WHERE WE ARE NOW

This year, like any other, was not without its challenges. However, progress continues at the Auraria Sustainable Campus Program as we forge ahead with our mission to reduce Auraria's reliance on fossil fuels and conserve our resources. Challenges are what make us exceptional at what we do, as they bring out the absolute best in our team of professional staff and students. We have had to elevate our work to expand our impact, and, at this point, we can confidently say we have never had a greater set of projects and programs.

One of the biggest changes for us this year was the unexpected update to the regional rules around composting. These changes severely limited accepted materials, and after spending several years expanding compost offerings on campus, we needed to reassess our approach from top to bottom. At the end of the day, we have pivoted to a completely on-campus approach to the compost stream. Instead of shipping material off to be potentially processed off-site, we now have the ability to haul, sort, and process our compost right here at Auraria. After it is processed, it will be applied as a soil amendment to help improve our vegetation by our Grounds team. Ultimately, this will allow us to do our jobs better and more completely than ever before.

Another sign of progress in collective environmental efforts with our partners at AHEC Facilities and Grounds is a 26% reduction in water use from our baseline in 2013! It is an incredible change to see considering how the campus has grown in that time.

Finally, something I think is representative of our commitment to expanding our projects and programs is that we have seen our team grow to the largest it has ever been. This has allowed us to take on more impactful projects and better engage our student audience to help us realize our environmental goals more quickly.

Our work is never done, but together we get closer every day. Thank you to all students, staff, and faculty who have made our progress possible. Here's to another year.

Chris Herr

**Director of Sustainability**



# OUR MISSION

## Global impact through local action.

The ASCP is a campus-wide program with the explicit mission of reducing the Auraria Campus' ecological impact and dependence on fossil fuels. We work to accomplish this through projects, events, and programs. This annual report for the 2021-2022 Academic school year highlights our accomplishments.

The Values of the ASCP: Three core principles that we make sure to uphold throughout our programs, projects, and work culture.

### Collaborative Action

We do the work that needs to be done by creating buy-in with our constituents through engaging, educating, and executing projects that will foster collaboration and coalition building to maximize our impact. Recognizing our position as global citizens, we commit to dedicating our time here to the shared responsibility of a more prosperous future for all. We will strive to incorporate employee and student perspectives into all projects and lift those on the front lines instead of issuing changes from the top down. We will intentionally include people that may not have been included historically and, in our commitment to DEI, explore diverse perspectives on issues with those that may have differing experiences to our own.

### Social and Environmental Justice For All

While our mission is to reduce the ecological impacts and the greenhouse gas emissions from the Auraria Campus, we acknowledge that looking at only impacting the built environment ignores those affected by social and environmental consequences beyond their control. We take a holistic lens of sustainability and push for social and environmental justice in tandem with our more explicit goals and consider the broader impacts of our projects, programming, and existing conditions.

### Fearless Leadership

We will make the strongest case possible in environmental, social, and fiscal terms so that we may influence a wide and diverse array of leaders, students, staff, faculty, and other stakeholders. The right thing to do will not always be the easy thing to do, but we will not allow barriers to get in our way. Through a factful foundation, strong relationships, and respectful discourse we will overcome adversity in the face of the climate crisis.

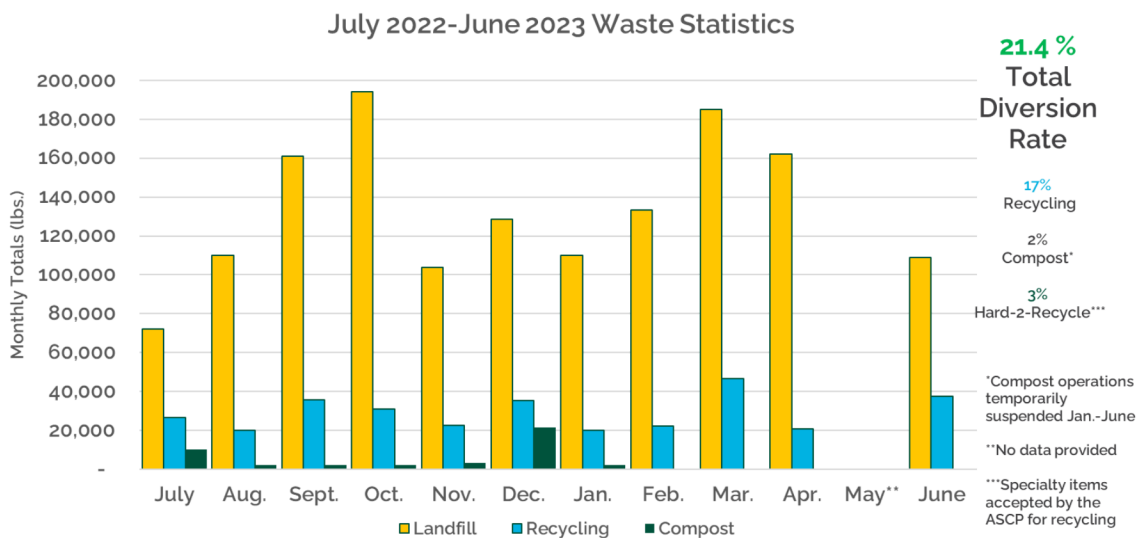
*The ASCP proudly serves three institutions on the Auraria Campus in Denver, Colorado.*



for the 2022-2023 Academic Year

# IMPACT BY METRIC

Auraria Campus' total waste for financial year (FY) 2022-2023 was just under 2 million pounds, excluding construction waste. Of this, the Auraria Sustainable Campus Program (ASCP) diverted 0.4 million pounds from landfills with campus-wide composting, recycling, and specialty recycling (Hard-to-Recycle, or H2R) programs. Thanks to these programs, and campus-wide cooperation, the ASCP's diversion rate for FY 2022-2023 is 21.4% of total waste.



A refuse item can be labeled as "Hard-to-Recycle" if it is not accepted by local curbside recycling programs. The specialty recycling programs offered by the ASCP serve the general campus body with the H2R program as well as the Auraria Higher Education Center (AHEC). The H2R program offers collection and transfer of difficult-to-recycle objects like oral care and beauty products, electronics, batteries, plastic bags, and cigarettes. In addition, the ASCP aids AHEC in the collection and transfer of lightbulbs, metal, and other mixed material waste generated by day-to-day campus management. H2R data is incorporated into the recycling statistics in the graph above.

With the support of the Auraria Campus student body, staff, and faculty, the ASCP is able to reduce the total amount of campus waste sent to the landfill and provide eco-friendly options for the disposal of campus waste.

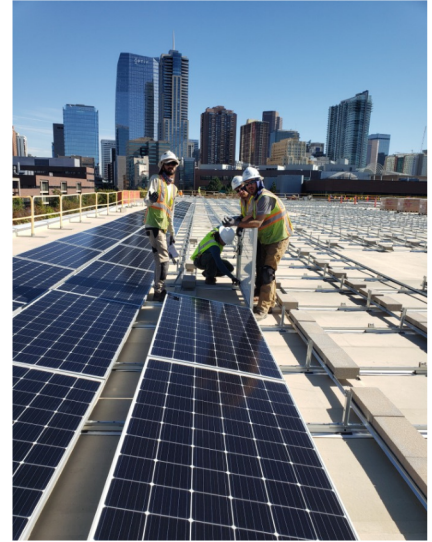
\*Waste statistics are unavailable for May 2023 due to state level changes in compost operations.

for the 2022-2023 Academic Year

# IMPACT BY METRIC

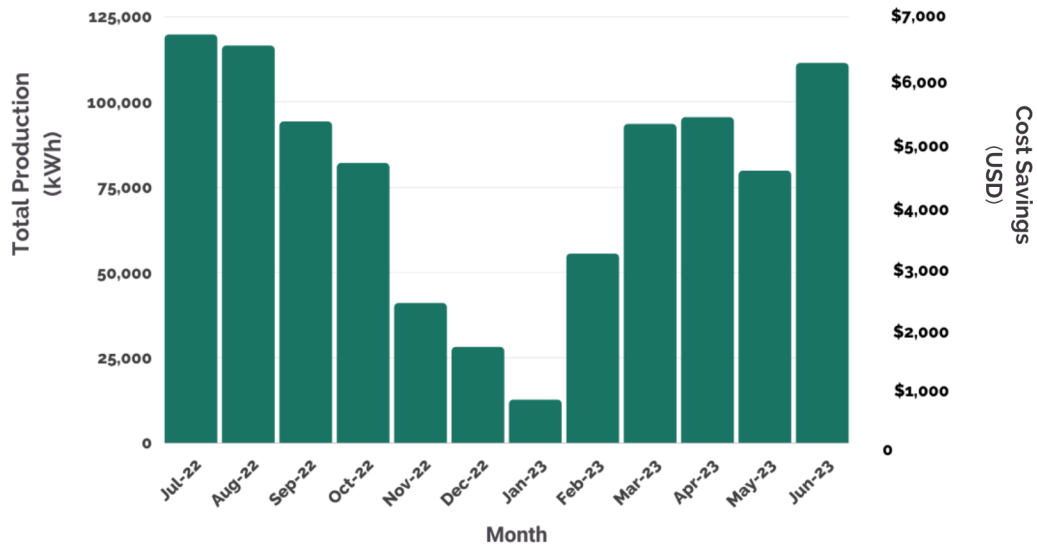


The completed solar array under the Denver skyline



Solar workers install the first panels on the Auraria library

**Library Solar Array 2022-2023  
Production (kWh) and Cost Savings (USD)**



The ASCP installed the largest solar array in downtown Denver on the Auraria library during 2019-2020. The panels and installation was entirely student funded, and is an award-winning array. Over the 2022-2023 academic year, it produced 1,044,857 kilowatts per hour of electricity that saved the Auraria campus \$83,906.75 in energy costs.

# MAJOR PROJECT HIGHLIGHTS

Our mission in action.

## Share Meals App

Share Meals is a phone and web application that notifies students, staff, or faculty of any agency or institution on the Auraria Campus when leftover food from an event is available. This app is a huge victory for cutting back on our food waste and for getting food to folks that may not otherwise be able to afford it. So far, we have just under 600 app users after only six months of use and have connected users with at least 300 meals that would have ended up in the landfill. Thank you to our dedicated, tri-institutional coalition that worked so hard to make this a reality and improve food access here on Auraria.



Sharemeals Logo

## ASCP Free Store

In an effort to reduce the amount of waste headed to the landfills when students move out of the Residence Halls and connect students and staff that are in need, our Waste Diversion team has established a campus Free Store! At move out (and some other select times throughout the year) we collect all compliant items such as clothes, non-perishable food, housewares, etc., and then make these items available for anyone who wants or needs them.



Amanda Dian organizing the ASCP's free store in Tivoli 346



## Tivoli Lighting Upgrade

Reducing our greenhouse gas emissions is always a top priority for the ASCP, and while renewable proved to be a little too pricey to pursue this year, we were able to upgrade the Tivoli Student Union lighting from fluorescent and incandescent to all LED. This will save between 10% and 20% of annual energy use for the building and reduce campus emissions by over 50 Metric Tons of CO<sub>2</sub>e annually. We expect to pursue larger and more comprehensive lighting replacements in the near future that will make a huge impact on our greenhouse gas emissions and get us closer to our climate goals.



Piper Malczewski swaps out a mercury light rod for an LED light rod

## Water Savings

The Auraria Campus consumes a blend of well, augmented, and potable/non-potable from Denver Water. A core value of the ASCP work is being good stewards of this precious resource. The ASCP, Auraria Higher Education Center (AHEC), and the One World One Water Center (OWOW) have partnered on water savings projects including irrigation system audits, leak detection, and fixture replacements. These efforts have resulted in a +12% reduction of consumption from 2017 (73,000 Kgal) to 2022 (60,410 Kgal)!



Cassy Cadwallader and friends embark on a water irrigation tour of the Auraria Campus

## Hard-to-Recycle Program Expansion

Here at the ASCP, we are always looking for ways to increase the amount of material sent to recyclers or composters instead of ending up in the landfill. This was a big year for our Hard-to-Recycle programs as we expanded from just electronic waste to add soft plastic film (like grocery bags), pens and markers, bulk metal, beauty supplies, and ink cartridges! We also celebrated reaching 100,000 pounds of Hard-to-Recycle collection items! This will help us keep reaching for a higher rate of diversion and decrease Auraria's ecological impacts.



Amy Nash poses with one of our first soft-plastics Hard-to-Recycle bins.

# AURARIA COMPOST OUTPOST

## THE INNOVATIVE NEW BRANCH OF THE ASCP



The Auraria Higher Education Campus and our partner institutions, MSU (Metropolitan State University), CCD (Community College of Denver), and CUD (University of Colorado Denver), are diligently working to advance our waste initiatives on campus. Together, we are committed to achieving a 35% diversion rate by 2024, in alignment with the community-supported Climate Action Plan. To meet this target, students and the Student Advisory Committee have approved a \$3 increase in student fees to support waste diversion efforts, encompassing the comprehensive handling of organic waste collection and processing on campus. With an annual waste generation of 2.5 million pounds and an average diversion rate of 28.8%, the newly established compost operation, led by the ASCP (Auraria Sustainable Campus Program), aims to process between 200,000 to 300,000 pounds annually. This initiative is fortified by a \$123,000 grant from CDPHE (Colorado Department of Public Health and Environment). The project encompasses expanding compost receptacles, mandating certified compostable to-go ware for food vendors, implementing rigorous compost sorting procedures, utilizing a state-of-the-art in-vessel composter for processing, and returning the nutrient-rich compost to nourish campus trees and plants. We extend our gratitude to all the key departments involved, including the ASCP, Planning, Grounds, Facilities, and Finance, for their contributions in bringing this initiative to fruition. The combined efforts of the ASCP, our partner institutions, and the wider community will result in an efficient, sustainable, and cost-effective organic waste management system.

# CLIMATE ACTION PLAN ... IN ACTION

## OVERVIEW & ANALYSIS

*Overall GHG Emissions Target: Reduce emissions 50% below 2007 baseline by 2030, 90% by 2040 and achieve climate neutrality by 2050.*

The ASCP is proud to recognize that the Auraria Campus has met its 2020 goal of reducing its carbon dioxide emissions by 20%, relative to 2008! We thank everyone for their collaboration in order to reach this landmark goal.

Our greenhouse gas reduction goals have not been officially updated since 2007, and the world has changed quite a bit since then. It's time to get serious and put more resources into reducing our emissions much more quickly and align our goals with the scientific targets put forth by the Intergovernmental Panel on Climate Change, the state of Colorado, and the City of Denver. That is why we have proposed reducing GHG emissions by 50% from our 2008 baseline by 2030, 90% by 2040, and 100% by 2050. We can hit these marks through a variety of strategies including an Energy Performance Contract, expanding renewable energy on campus, HVAC changes, and several other approaches. These goals are aggressive, but that's what the science says is necessary to limit the worst impacts of a changing climate.

The next five to ten years will be defining for the issue of climate change. The manner in which our Auraria campus conducts itself over that time frame—as a higher education institution embracing and symbolizing a spirit of ingenuity—will have a lasting impact on the planet we all share.