

THE CHARGING STATION

THE OFFICIAL NEWSLETTER OF A²ZERO AND THE ANN ARBOR OFFICE OF SUSTAINABILITY AND INNOVATIONS



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The lead author for this month's feature articles on the circular economy is Sean Reynolds. As a Senior Analyst with OSI, Sean's work primarily focuses on our natural features, enhancing community resilience, and building a circular economy.



WELCOME

Welcome from the City of Ann Arbor's Office of Sustainability and Innovations (OSI)! This month's issue of *The Charging Station* focuses on the circular economy, which is one of seven main strategies for achieving the equitable, healthy, safe, and carbon neutral community envisioned in the A²ZERO Plan. If you are interested in learning more about A²ZERO and our carbon neutrality work, more detail can be found on our website: www.a2gov.org/sustainability. And as always, thank you for your interest in sustainability activities in Ann Arbor!

LAND ACKNOWLEDGEMENT

Equity and justice are at the center of A²ZERO and staff in OSI are continuing to ground our work in these critical principles. In that light, we'd like to take a moment to honor the geographic and historic space we share. We acknowledge that the land the City of Ann Arbor occupies is the ancestral, traditional, and contemporary lands of the Anishinaabe and Wyandot peoples. We further acknowledge that our city stands, like almost all property in the United States, on lands obtained, generally in unconscionable ways, from indigenous peoples. The taking of this land was formalized by the Treaty of Detroit in 1807. Knowing where we live, work, study, and recreate does not change the past, but a thorough understanding of the ongoing consequences of this past can empower us in our work to create a future that supports human flourishing and justice for all individuals.

THE CIRCULAR ECONOMY

HALF THE BATTLE

When we're talking about carbon neutrality, it's not always obvious where the circular economy fits. Here in Ann Arbor, we're actively working on a methodology to more fully understand the benefits of moving towards a more circular economy - but we know that, nationally, roughly 45% of emissions come from producing the cars, clothes, buildings, food, and other products we use every day. Building out a just circular economy is how we tackle the emissions embodied in the things we buy and regularly use.

From a carbon neutrality perspective, the challenge is that most emissions savings are realized in the places where our goods are made, not where they're used. This makes measuring our impact difficult. We touched on this in the [May issue](#), when we discussed consumption-based emissions. But even while we're developing ways to measure the full impact of our purchasing decisions in Ann Arbor, we know that Strategy 5 of A²ZERO (to change the way we use, reuse, and dispose of materials) has a huge role to play in reducing our city's contribution to climate change. In fact, it's probably close to half the battle!

Unlike the traditional linear economy, which follows a "take, make, waste" model, the circular economy aims to create closed-loop systems where resources are continually reused, recycled, and repurposed. The ultimate goal is to minimize waste and pollution, preserving valuable resources and reducing the strain on our human and ecological systems.

The circular economy also addresses crucial equity and resilience issues. Transitioning to a circular model requires reimagining supply chains, encouraging local and small-scale enterprises, and fostering rich community networks to recover resources we currently dispose of. This transformation presents an opportunity to create a more inclusive and just economy in Ann Arbor that is better equipped to handle the challenges of increasingly scarce resources.

Our current linear production and consumption patterns aren't just a driver of emissions, they also account for over 90% of biodiversity loss and water stress, [according to the UN Environmental Programme](#). And we're on track to double material extraction by 2060. The circular economy offers a systematic response to reverse these trends. It addresses the connected climate, environmental justice, and ecological crises through a transformation in the way we "use, reuse, and dispose of" materials.

The vision for a circular Ann Arbor is still taking shape, but it will certainly include a robust sharing economy, a deeply connected network of neighbors, strong reuse infrastructure, and extending the life of products through repair, refurbishment, and recycling. We're committed to working with organizations and residents to curb the need for continuous extraction and production and create a just circular economy. To learn more about this work, please visit www.a2gov.org/circulareconomy.

Circular Economy Metrics

For metrics around reuse, recycling, and composting, the city currently tracks diversion rate, waste generation per capita, and number of swap days held. We capture these metrics in order to have baseline data, to determine the effectiveness of policies and programs, and to help us promote the circular economy; however, our current metrics mostly focus on the end of life for objects. In order to find more proactive metrics, the City completed a literature review in collaboration with the Environmental Commission and a City Council member. This literature review highlighted that most metrics around the circular economy and sustainability as a whole focus on greenhouse gas emissions and overlook human aspects such as equity and resilience.

In order to explore circular economy metrics for equity and resilience, the City collaborated with a team of masters students enrolled in the University of Michigan School for Environment and Sustainability (SEAS) to complete three case studies and a survey of 13 circular economy businesses and non-profits. The results indicate that equity and resilience data is hard to aggregate, as it is not consistent across organizations. Moving forward, the City is examining which metrics can be normalized across organizations and are also scalable, replicable, and attainable. For details on this metrics work and other circular economy work that the SEAS students worked on, please see their report [here](#).



RETURNABLES IN ANN ARBOR

BUILDING A REUSE SYSTEM FOR FOOD TAKEOUT

Imagine receiving your to-go coffee in a durable cup that keeps the coffee warm until the last drop. When you're done, you toss the borrowed cup into one of many conveniently placed collection bins around town, where it is picked up, washed, and sanitized, to be used again and again.



Reusable foodware programs like the one envisioned above can offer a better and healthier eating and drinking experience, reduce waste and litter, create local jobs, keep more money in the local economy, reduce the toxic emissions associated with extraction, transportation, and manufacturing of single-use plastics, and deliver reductions in net greenhouse gas emissions.

Ann Arbor has the potential to become one of the first cities in the world to establish a city-wide reuse system for food takeout containers. The Office of Sustainability and Innovations and the Public Works department, together with local non-profits [Zerowaste.org](https://zerowaste.org) and

[Recycle Ann Arbor](https://recycleannarbor.org) and the reuse experts at non-profit [Perpetual](https://perpetual.org), are exploring the potential for such a city-wide reusable foodware program in our community. This work is building on the existing Ann Arbor Reduce, Reuse, Return (A2R3) program, through which you can get your food in reusable containers from four local restaurants: [Cinnaholic](https://cinnaholic.com), [El Harissa](https://elharissa.com), [Ginger Deli](https://gingerdeli.com), and [Zingerman's Next Door Café](https://zingerman.com). A plan for the city-wide reuse system is currently being developed, and will undergo review processes with local businesses, community members, and more. Stay tuned for more information and check out <https://zerowaste.org/ann-arbor/returnables/> for updates. We hope you will join us for a journey into the reuse landscape!

CIRCULAR ECONOMY ENGAGEMENT STRATEGY

A critical component of A²ZERO involves changing the way we use, reuse, and dispose of consumer goods and other material resources by re-learning how to maintain, repair, and generally practice stewardship of things and places. OSI recognizes the circular economy as an opportunity for trust-building that acknowledges the harm that City policies and programs have caused to members of the community, especially Black, Indigenous, and People of Color (BIPOC) residents, including disrupting grassroots networks that foster practices of maintenance, repair, and stewardship. As such, the city is working with a consultant to create a community engagement strategy that will guide engagement activities central to the creation of a future city-wide circular economy plan. The consultant and City staff worked directly with frontline communities over the course of three engagement meetings, in order to ensure that equity and justice are the foundation upon which the engagement strategy is built. Frontline communities include our BIPOC communities; our communities with lower access to opportunities, as defined by the Washtenaw County Opportunity Index; and low-income communities. Advisors from these communities used descriptions for circularity that include words like mutual aid, regeneration, survive, thrift, and health. Building on this work, the City will be further engaging with frontline communities in the near future. Stay tuned!

COLLABORATOR SPOTLIGHT

ZEROWASTE.ORG

In this edition, we shine the spotlight on [ZeroWaste.Org](https://zerowaste.org), a local organization that has been making strides promoting the circular economy in Ann Arbor. Founded by a pair of siblings who grew up in Ann Arbor and attended the University of Michigan, ZeroWaste.Org has been helping highlight and grow Ann Arbor's circular economy and encouraging zero waste practices.

Over the past 18 months, they have conducted three zero waste challenges, engaging more than 1300 residents and students in week-long "zero waste bootcamps." These challenges have fostered a culture of waste reduction, empowering individuals and businesses to take meaningful steps towards building a circular economy.

In addition to the zero waste challenges, ZeroWaste.Org has taken on a lead role in coordinating a citywide reuse system. This pioneering effort aims to reduce single-use plastic waste from takeout containers and cups. Along with City staff, Recycle Ann Arbor, reuse experts at non-profit Perpetual, and local restaurants Zingerman's and El Harissa, they have charted a course for Ann Arbor to become the first city with reuse infrastructure that would enable any restaurant to offer reusable takeout containers. For more on this work, see "Returnables in Ann Arbor" on page 3.

ZeroWaste.Org has set ambitious, data-driven goals to engage a significant portion of the city's population in their circular economy efforts. Harvard research on social change suggests that when 3.5% of a population actively participates in a movement, it can bring about transformative systemic change. ZeroWaste.Org has embraced this principle and aims to mobilize and involve 4,200 Ann Arbor residents in their mission over the next 2 years in order to foster a widespread culture of sustainability and waste reduction in service of broad-scale systemic shifts toward a circular economy.

They will also help host the third annual Trash Talk Tour on October 15th, which is a family-friendly event to learn about zero waste and the circular economy. Learn more at www.trashtalktour.org.

COMPOSTABLES: UPDATED GUIDELINES

The City's contracted compost site operator, WeCare Denali, has announced an upcoming change to the types of manufactured compostable items that will be accepted at the site. Starting January 1st, 2024, the compost facility will no longer accept BPI-only certified material or compostable plastics of any kind. The only manufactured compostable items that will be accepted are those that have received the Compost Manufacturing Alliance – Windrow (CMA-W) certification and are made of only fiber (e.g., paper or wood) materials. In addition, bamboo and palm products will not be accepted, as they do not degrade within the timeframes of other materials. Our [CMA-W switch website](#) has resources - including a list of accepted materials, a webinar recording and slide deck detailing the change, and a list of potential distributors to ease the transition. The resources are currently designed to help commercial businesses begin finding new products, with more resources for residents coming this fall.

Why this change? Compostable plastics can be nearly indistinguishable from traditional petroleum-based plastics – which can lead to traditional plastics entering the compost stream and compostable materials entering the recycling stream. The science and real-world experiences with compostable plastics have revealed that they cause confusion, contamination, and litter - leading to poor-quality compost as well as a degraded environment. Additionally, BPI certification is based solely on lab testing and not in-the-field processing. The Compost Manufacturing Alliance (CMA) was formed in 2017 to begin researching and field testing manufactured compostable products. CMA now offers a certification process for manufacturers of compostable items to test their products on a rolling basis for compostability in different compost technologies. The City and WeCare Denali will work with CMA to add new products to the acceptable list as they become available.

AMBASSADORS SPOTLIGHT

COMMUNITY SWAP DAYS

A²ZERO Ambassadors support projects that span all seven A²ZERO strategies, including the circular economy. A recent project group - consisting of Ambassadors Husnu Kaplan, Alexandria Galens, and Elaine Ezekiel - worked with the Office of Sustainability and Innovations and the Public Works department to hold two neighborhood swap days and create a replication guide for residents in Ann Arbor to implement a swap day in their community.

Swap days are opportunities for community members to come together, offer items for free, and exchange goods. Think clothes, books, decor, small appliances, etc. It's a perfect way to give your unwanted items a new home, instead of sending them to the landfill – and to spend time with your neighbors, new and old! At the Kerrytown and Fox Fire swap days organized by the Ambassador group, neighbors catching up with one another and meeting new neighbors was a common sight as folks explored what items were up for reuse and repurposing.

Between the two Ambassador-hosted swap days, approximately 40 households participated and between 100-200 people visited and collected items. After the events ended, 5 carloads of donations went to thrift stores.

When participating households were asked what they liked most about their swap day, answers included:

“Getting rid of things [which] I was no longer using by passing them on, not throwing them away. The amount of waste is so crazy, and most of the time the items would be useful to someone else.”

“I got to meet neighbors and get some nice free stuff. It was less stressful than planning and setting up a yard sale. It was also great that remaining items were picked up at the end of the event.”

“It was so easy. [...] We put our items out, many were picked up by people during the swap hours and the remainder were collected by volunteers.”

Our Ambassadors proved that participating in the circular economy does more than just keep waste out of landfills – it can also bring communities together! To host a swap day in your neighborhood, check out the six simple steps in our [how-to guide](#). Learn more about swap days and see upcoming swaps at <https://osi.a2gov.org/swapdays>.



The A²ZERO Ambassador Program provides an opportunity for interested individuals to dive deeply into pathways for advancing local sustainability initiatives, resilience, and carbon neutrality. Ambassadors participate in a 12-session training program that brings together 15-20 community members to explore what it takes to equitably transition Ann Arbor to a carbon neutral community. A²ZERO Ambassadors pledge to complete a small team sustainability project and volunteer for at least 20 hours on community sustainability efforts. To learn more about the program, please contact Bryce Frohlich at BFrohlich@a2gov.org.

UPCOMING EVENTS

2nd Annual Home Electrification Expo

Friday, August 11th | 5:00-9:00pm | Ann Arbor Farmers Market

The City of Ann Arbor's Office of Sustainability and Innovations invites you to join us for the second annual Home Electrification Expo! Come learn about home electrification and how you can reduce your carbon footprint and increase the efficiency and health of your home. Chat with industry experts on ways to make your home cleaner, greener, and safer; watch induction cooktop demos; see efficient heat pump water heaters & space heating/cooling systems; talk with local residents who are electrifying their homes; meet local contractors installing all-electric appliances; enjoy a meal from a local food truck; and listen to some live music! Learn more and RSVP at www.a2gov.org/expo.

Bryant Neighborhood Swap Day

Saturday, August 19th | 9:00am-3:00pm | Bryant Community Center

Swap days are opportunities for community members to come together and exchange goods for free. Think clothes, books, decor, small appliances, etc. It's a great way to give your unwanted items a new home instead of sending them to the landfill, and an excellent opportunity to find items you've been looking for without having to buy them! Learn more at <https://osi.a2gov.org/swapdays>.

2023 A²ZERO Green Fair

Friday, September 22nd | 5:00-8:00pm | Downtown Main Street & Library Lane Lot

Stroll local exhibits and learn innovative ways to live sustainably and take climate action. Dozens of nonprofit, governmental, and other exhibitors will be on hand to answer your questions. Enjoy a wide variety of interactive demonstrations, see the latest in tech innovations, and enjoy great music! Bring an upcycled t-shirt or tote bag to use at the sustainable screen printing station, get ready to answer trivia questions and win fun prizes, and join the bike parade for the planet. Plus, stop by the Library Lane Lot, 343 S. Fifth Ave, from 2:00-6:00pm to learn about a variety of alternate forms of transportation. Learn more at www.a2gov.org/greenfair.



Home ELECTRIFICATION EXPO

Make your home greener, cleaner, and safer!

- 50+ Industry Pros on site
- Meet others who have electrified their homes
- Learn about financing and rebates
- Live music, food trucks, & prize drawings

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Richmond
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a2gov.org/EXPO

Electric
Lawn Company

FREE!
Owners
& Renters
Welcome

A²ZERO
City of Ann Arbor

August 11
5-9pm
Ann Arbor
Farmers Market

ASK ME ABOUT MY ELECTRIC HOME

Are you comfortable in the winter?
What if I love cooking?
Where do I start?
This sounds complicated - how long did it take?

For more information on our upcoming events, please visit www.a2gov.org/sustainability/events.

ANNOUNCEMENTS

Oxford Cos. and A&H Lawn Service Partner on Electrifying Lawn Care Equipment

Ann Arbor real estate firm Oxford Cos. has partnered with Saline-based A&H Lawn Service to introduce all-electric lawn equipment for use on Oxford-owned commercial properties. This partnership aims to be fully electric by 2025. Learn more by reading the article here: <https://www.dbusiness.com/daily-news/oxford-cos-in-ann-arbor-partners-to-debut-electric-lawn-services-at-its-properties/>.

Apply to be an Ann Arbor Energy or Environmental Commissioner

Are you interested in getting more involved with energy or environmental policies and programs in Ann Arbor? Then consider applying to be a member of the [Ann Arbor Energy Commission](#) or [Environmental Commission](#). Both commissions have both adult and youth (ages 16-25) positions, so we encourage everyone to apply. All those interested can [fill out an application online](#). If you have any questions about the commissions or what the responsibilities of a commissioner are, reach out to Joe Lange at JLange@a2gov.org (Energy Commission) or Sean Reynolds at SReynolds@a2gov.org (Environmental Commission).

City's Second Resilience Hub Activated

In June, the Bryant Community Center, operated by Community Action Network (CAN), officially became the City's second resilience hub! Thanks to solar and battery storage, the Community Center will be able to continue providing community services when the grid is down, while also realizing energy savings during day-to-day operations. [Learn more about resilience hubs](#).

New Policy Change: Items on Lawns

On June 20th, City Council voted to change the policy regarding leaving household items by the curb for others to take and put to good use. In support of our Circular Economy strategy, Ann Arbor residents are now able to, once per week for up to 48 hours, place in front of their home items that are in good condition and are intended for reuse by others. Learn more by reading the article here: <https://www.mlive.com/news/ann-arbor/2023/06/putting-household-items-at-curb-for-others-to-take-no-longer-illegal-in-ann-arbor.html?outputType=amp>.

Outage Feedback for Michigan Attorney General

Michigan Attorney General Dana Nessel wants to learn more about the impact outages have on Michigan residents. If you are interested in providing feedback on your experience with outages, please complete [this form](#). Those with both residential and business accounts are encouraged to fill the form out twice.

Interested in having announcements posted in *The Charging Station*? Contact Sheronda at SGloster@a2gov.org.

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