NOVEMBER 2026 | ISSUE NO. 51: EXPLORING CARBON OFFSETS

THE CHARGING STATION

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

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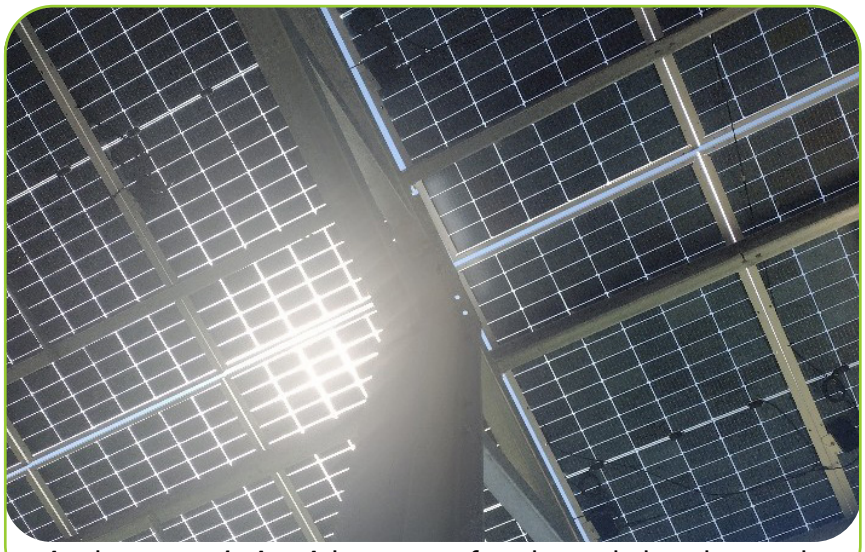
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ABOUT THE AUTHOR



Dr. Missy Stults (she/her) is the Director of the Office of Sustainability and Innovations. In her role, she is responsible for overseeing the community's work to achieve the Council established goal of community-wide carbon neutrality by 2030. In this newsletter, Missy discusses carbon offsets and what they mean for Ann Arbor's carbon neutrality work. Interested in learning more, check out the Carbon Offset Engage A2 page.



A solar carport in Ann Arbor as seen from beneath the solar panels.

WELCOME

Welcome from the City of Ann Arbor's Office of Sustainability and Innovations (OSI). In this issue of the Charging Station, OSI explores the topic of carbon offsets. The phrase "carbon offsets" often elicits strong emotions but what are they, what's their history, and what role could they play in Ann Arbor's work to become carbon neutral? Dive into this issue of the Charging Station to learn more. If you are interested in learning more about any of the organizations featured in this issue and how you can get involved, more detail can be found on our website: www.a2gov.org/sustainability. 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.

WHAT ARE CARBON OFFSETS?

THEIR HISTORY AND THEIR FUTURE

Carbon offsets or carbon offsetting refers to the action of funding projects that remove greenhouse gases from the atmosphere (*removal projects*) or reduce future emissions (*avoidance projects*). Carbon offset projects are projects expected to create carbon credits.

Carbon offsets offer a way to balance emissions that have not yet been eliminated with emissions reductions in other locations. Carbon offsets do not replace the need to reduce emissions in Ann Arbor, but they can provide immediate global greenhouse gas emission reductions while also giving the city time to continue its work to reduce local emissions. That last point is worth reiterating – Ann Arbor is exploring carbon offsets in **addition** to, not as a replacement for, local action.

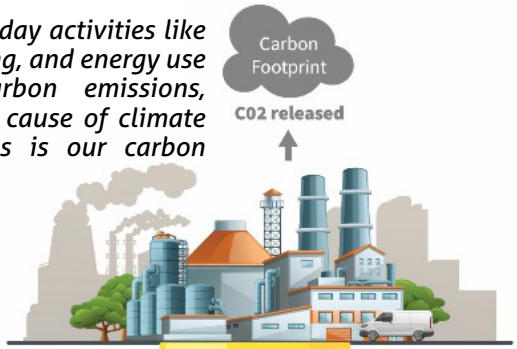
Put simply, by 2030, Ann Arbor will still have furnaces, boilers, fossil gas stoves, gasoline and diesel vehicles, food waste, meat and dairy consumption, airplane travel, and many other activities that emit climate-causing pollution. And while work is underway to reduce emissions as quickly and intentionally as possible, if the City aspires to achieve the goal of community-wide carbon neutrality by 2030, offsets must be part of the equation. This is why carbon offsets have always been included in the City's climate action plan, A²ZERO, adopted by City Council in 2020.

But not all carbon offsets are created equal. The first generation of carbon offsets did not live up to their promise. In many cases, these first-generation projects didn't reduce emissions at the level expected, they didn't last as long as assured, and they weren't always additional to work already being done. This led to a (well-earned) bad rap for carbon offsets.

CARBON OFFSETTING EXPLAINED[1]

PROBLEM

1. Our everyday activities like driving, flying, and energy use produce carbon emissions, the primary cause of climate change. This is our carbon footprint.



While we all work to eliminate carbon emissions over time by using renewable energy or driving electric vehicles, most of us will have remaining emissions for many years due to limited options for sustainable technologies.

SOLUTION

2. We can offset our footprint by purchasing carbon credits that fund verified carbon reduction projects.



Carbon reduction projects help keep our climate goals within reach by lowering global carbon emissions to offset the effect of our footprint. When you buy 1 carbon credit, you purchase the climate benefit of 1 metric ton of CO2e reduced by these projects.

In response to this situation, a series of standards emerged by which to measure the efficacy, integrity, rigor, and impact of carbon offsets. Several organizations were also created during this time to provide third-party verification of carbon offsets, ensuring they achieved what they promised to. Some of these firms, such as The Gold Standard, Climate Action Reserve, and American Carbon Registry, use rigorous standards to certify and verify the integrity of carbon offsets. Additionally, institutions like the University of California Berkeley's Goldman School of Public Policy track carbon offset projects, enhancing transparency and rigor in the marketplace. The Berkeley Carbon Trading Project contains the majority of "carbon offset projects, credit issuances, and credit retirements listed globally by six major voluntary offset project registries – American Carbon Registry (ACR), Architecture for REDD+ Transactions (ART), Climate Action Reserve (CAR), Gold Standard, Isometric (ISO), and Verra (VCS)." According to Berkeley, these six registries generate almost all of the world's voluntary market offsets. Tracking these projects brings transparency and accountability into the dynamic carbon offset marketplace.

[1] *Infographic modified from Terrapass.*

WHAT ARE CARBON OFFSETS?

THEIR HISTORY AND THEIR FUTURE

These programs, among others, have helped to increase the rigor and the quality of today's carbon offset projects. In large part because of standardization and third-party verification, today's carbon offsets can and should do more than just reduce carbon, they can also provide a bevy of co-benefits that help improve quality of life, protect natural systems, enhance resilience, create jobs, protect and enhance water systems, and more.

For Ann Arbor, our first job is to figure out what role we want carbon offsets to play in our decarbonization journey. Then we need to decide what type of carbon offsets will help get us to our goal. The table below demonstrates how these projects can play multiple roles.

CO-BENEFITS OF CARBON OFFSET PROJECTS[2]

	Wildlife & Biodiversity	Water Quality	Soil Health	Air Quality	Resource Access	Disaster Reduction	Jobs & Livelihoods	Education & Skills	Crop Yields & Food Security	Energy Access	Health	Indigenous Rights	Gender Equality	Tourism & Recreation
Renewable Energy				✓			✓	✓		✓	✓			
Community Energy Efficiency				✓	✓		✓	✓		✓	✓		✓	
Industrial Energy Efficiency														
Waste-to-Energy		✓		✓	✓		✓	✓		✓	✓		✓	
Reforestation & Afforestation	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓			✓
Avoided Deforestation	✓	✓	✓		✓		✓	✓	✓		✓	✓	✓	✓
Improved Forest Management	✓	✓	✓		✓		✓							✓
Blue Carbon	✓	✓				✓	✓	✓	✓		✓			✓
Teal Carbon	✓	✓				✓	✓	✓			✓			✓
Waste Disposal		✓					✓				✓			
Industrial Processes														
Agriculture		✓	✓						✓					
Soil Carbon Sequestration			✓											
Biochar		✓	✓				✓		✓					
Direct Air Capture														
Carbon Mineralization			✓											
Enhanced Weathering			✓	✓										

[2] *Infographic modified from Sustainable Travel International.*

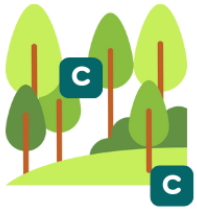
TYPES OF CARBON OFFSET PROJECTS

WHAT THESE PROJECTS CAN REALLY LOOK LIKE[3]

Questions remain about what types of carbon offset projects Ann Arbor is interested in investing in. For example, would the community prefer investing in forestry projects or clean energy projects? Should projects be in Michigan or in a community disproportionately harmed by climate change? Should we focus on projects that avoid future greenhouse gas emissions or projects that immediately reduce emissions? Or, should Ann Arbor change its goal of community-wide carbon neutrality by 2030 to one in the distant future that does not require the use of carbon offsets? Discussions around these core questions are currently unfolding between OSI staff and interested members of the public.

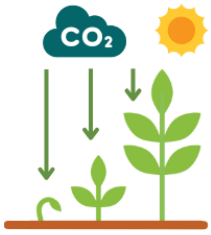
FOREST CARBON OFFSET PROJECTS

Avoided Deforestation
Avoidance



Prevents carbon stored in trees from being released through forest loss.

Reforestation & Afforestation
Removal



Absorbs CO_2 as newly planted tree seedlings grow and photosynthesize.

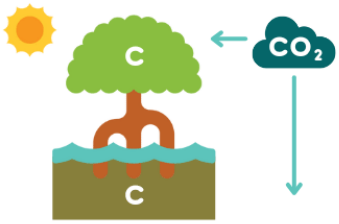
Improved Forest Management
Avoidance/Removal



Avoids emissions by limiting harvest intensity and boosts removal through longer-lived, healthier trees.

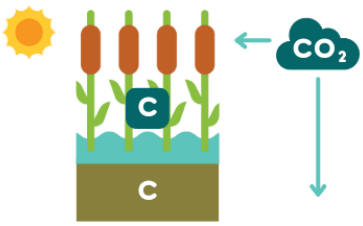
BLUE & TEAL CARBON OFFSET PROJECTS

Blue Carbon
Avoidance/Removal



Sequesters CO_2 through mangrove growth in coastal areas and prevents emissions from ecosystem damage that releases stored carbon.

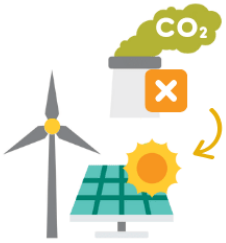
Teal Carbon
Avoidance/Removal



Captures CO_2 through plant growth in freshwater wetlands and avoids emissions by preserving these carbon-dense landscapes.

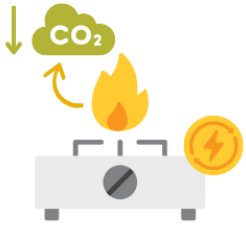
ENERGY CARBON OFFSET PROJECTS

Clean Energy
Avoidance



Prevents greenhouse gases by replacing fossil fuels with clean energy sources.

Energy Efficiency
Avoidance



Lowers emissions by improving energy use in appliances and infrastructure.

Waste-to-Energy
Avoidance

Reduces emissions by capturing methane from waste and replacing fossil fuels with biogas energy.



[3] *Infographic modified from Sustainable Travel International.*

WHAT MAKES A STRONG CARBON OFFSET?

STRENGTHS, WEAKNESSES, AND ALIGNMENT

Thanks to standardization of the marketplace and enhanced transparency, carbon offset projects have evolved significantly over the last decade. Yet, we still know that not all offsets are created equal. The strongest offsets programs follow strict verification standards and are:

Additional

Verifies that the carbon offset project's reductions or removals would not have happened without an investment in that carbon offset credit.



Verifiable

Strong carbon offsets are verified following independent verification standards.



Minimize Leakage

Ensures that projects don't reduce emissions in one area but increase them elsewhere.



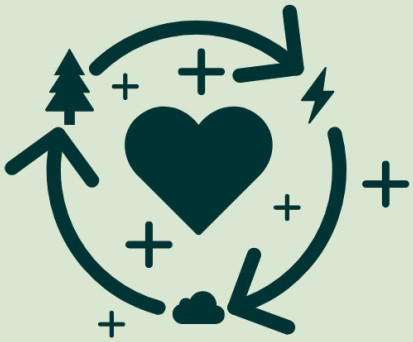
Permanent

Ensures the carbon removed or avoided stays out of the atmosphere for the agreed upon and reasonable lifetime of the project, usually a period between 15 and 100 years.



Provide Co-Benefits

Strong carbon offset projects do more than just reduce emissions, they may lower energy bills for families in need, provide habitat for species, purify the air and water, improve quality of life, minimize soil erosion, buffer against flooding, create jobs in the green economy, address inequities, or provide a myriad of other benefits.



On October 13, Ann Arbor was joined by Lorenzo Curci from Earthly and Phillip Duran from the City of Austin, Texas to discuss carbon offsets. Both speakers shared examples of how they were actively using carbon offsets as well as how other communities and private organizations have been participating in the carbon offset marketplace. View their presentation at this Zoom link, using passcode: Sw@ERqJ7.



NEW SURVEY: OFFSET PROJECT EXAMPLES

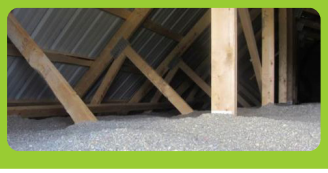
The City of Ann Arbor has launched a new public survey for residents to explore and provide feedback on a variety of examples of carbon offset projects from all around the world. Share your thoughts at:

osi.a2gov.org/offsets









WHAT IS ANN ARBOR LOOKING FOR IN ITS OFFSETS?

COMMUNITY PRIORITIES AND COMMITMENTS

Launched in August of 2026, the Office of Sustainability and Innovations initiated a public engagement process to help shape future City Council recommendations around what type of carbon offsets to invest in. The engagement is structured into four phases:

PHASE 1

Conduct public outreach and education around carbon offsets. This phase took place August - September 2026 and included:

- Launching a public website and Engage Ann Arbor page about offsets
- Hosting a public forum at the Downtown Ann Arbor District Library to gather feedback and insights on carbon offsets
- Gathering public input via a city-wide input survey *(see results below)*

PHASE 2

Gather specific details about possible carbon offset projects. This phase takes place October - November 2026 and includes:

- Using feedback from Phase 1 to research specific carbon offset projects
- Hosting a public forum on carbon offsets with guest speakers that have used offsets and can discuss their benefits and drawbacks.
- Launching a second city-wide survey to gather input on possible carbon offset projects/investments
- Working with City Council to gather additional feedback and input from residents

PHASE 3

Recommend specific carbon offset(s) to City Council in December/January based on input gathered through Phases 1 and 2.

PHASE 4

Implement and track progress and impact of carbon offsets. This phase of work will be ongoing with an anticipated start date in early to mid-2027.

To date, the City has engaged nearly **700 residents** on the topic of carbon offsets. Through public forums and a community survey that was launched in September, hundreds of Ann Arborites shared their opinions on the values the City should be considering when approaching carbon offsets. Thanks to a large response rate, OSI has a strong understanding for what the public wants to see in offsets, and that is either **"cost effective"** offsets or offsets that **"reduce greenhouse gas emissions".** With the remaining values (enhances resilience, grounded in equity and justice, located locally, scalable and transferable, additionality, and rapidly deployable) scoring lower and similarly to each other.

WHAT IS ANN ARBOR LOOKING FOR IN ITS OFFSETS?

COMMUNITY PRIORITIES AND COMMITMENTS

In September, residents of Ann Arbor were presented with the following question:
In 2019, the City established a set of principles to guide how it manages the energy transition. As we move forward with considering offsets, we want to know what matters most to you. Please rank the following eight concepts from most important (1) to least important (8) based on what you believe should drive the city's offset decisions.

Reduce Greenhouse Gas Emissions
Actions that lead to measurable reductions in greenhouse gas emissions.

Additional To What Is Already Being Done
Actions that are happening only because of the City's investment.

Cost Effective
Actions that are as affordable as possible.

Enhance Resilience
Actions that increase the ability of individuals, natural systems, and/or local communities to thrive despite disruptions.

Located Locally
Actions that are in Michigan or the surrounding states.

Rapidly Deployable
Actions that can be deployed fast, and quickly start reducing greenhouse gas emissions.

Scalable & Transferable to Other Locations
Actions other municipalities could replicate, increasing the impact of Ann Arbor's actions.

Grounded in Equity and Justice
Actions that ensure those most impacted by climate change receive the benefits of the implemented actions.

The September survey also asked a series of questions to help OSI understand where the public stands on tough issues such as whether to invest locally or in an environmental justice community. Results from these pairwise comparisons show very few clear mandates:

- **52%** prefer *cost effective* offsets to offsets that are *additional* to what's already being done
- **57%** prefer *cost effective* offsets to offsets grounded in *equity and justice*
- **51%** prefer *using offsets* to keep the City's **A²ZERO** goal of carbon neutrality by 2030
- **55%** prefer *natural systems based* offsets to *renewable energy based* offsets
- **51%** prefer *rapidly deployable* offsets to *local* offsets
- **55%** prefer offsets that *enhance resilience* to *cost effective* offsets
- **60%** prefer *rapidly deployable* offsets to *scalable* offsets
- **52%** prefer *local* offsets to *cost effective* offsets
- **73%** prefer *local* offsets to offsets grounded in *equity and justice*

Information gathered from this survey is being used to shape our next phase of engagement – gathering community feedback on specific types of carbon offset projects the city could pursue. And we want your feedback. Check out the Carbon Offset Engagement Program page to learn more and give us your feedback.

A²ZERO CLIMATE ACTION HERO

MASTER RAIN GARDENERS ARE NOVEMBER 2026'S HERO

Beginning this year, the Office of Sustainability and Innovations started recognizing and celebrating Climate Action Heroes operating right here, in our community. These Heroes are individuals who are taking steps to help the community achieve its A²ZERO goal of making a just and equitable transition to community-wide carbon neutrality by the year 2030. The ideal Climate Action Hero is someone who inspires others to make positive change.

Each month, a Hero is selected by the Office of Sustainability and Innovations from all nominated applicants. Selected Climate Action Heroes will be celebrated with a column in the Ann Arbor Observer, as well as in this newsletter and on OSI's social media. All Climate Action Heroes will also be recognized at an awards ceremony during A²ZERO Week.

Individuals are encouraged to celebrate the Climate Action Heroes in their lives by nominating them at OSI.A2GOV.ORG/HERO. Anyone can submit a nomination, but the Hero themself must live or work in Ann Arbor.



MASTER RAIN GARDENERS

Master Rain Gardeners get grubby - to keep the water in the Huron River clean! Every summer, rain gardeners dig gardens that capture and filter rain water before it gets to lakes and streams. On their own dime - in their own yard. Every little bit helps - and as Rain Garden Coordinator Susan Bryan likes to say: "It is more fun than recycling!" Now, the number of rain gardens in our community has surpassed 2,000!

Originally, Susan Bryan was nominated for the award. But when she was contacted to accept the nomination, she insisted she was but a part of a larger whole. She was recognized for inspiring Ann Arbor residents to build rain gardens and improve the water quality of the Huron River. She hosts a series of community-based events such as native plant swaps, pop-up rain garden tours, and of course, the Master Rain Gardener class. Her work connects community members to each other, and empowers them to take care of and take part in their local ecosystems! She was described as caring, dedicated, and a visionary.

The Washtenaw County Water Resources department provides resources for residents to build their own rain gardens, get free plants and supplies, or participate in the Master Rain Gardeners class, where participants design their own rain garden during class. To dive into these resources, become a Master Rain Gardener yourself, or peruse the Master Rain Gardener Handbook, check out washtenaw.org/rain-gardens.

The City of Ann Arbor Office of Sustainability and Innovations is grateful for the impact that Susan Bryan has had as Rain Garden Coordinator, and the impact that all of the Master Rain Gardeners have had taking care of our natural resources. Learn more about building community and tackling climate change with your neighbors at the Office of Sustainability and Innovations website.

Thank you Master Rain Gardeners for being Climate Action Heroes in our community! Submit your Hero at OSI.A2GOV.ORG/HERO

COMMUNITY HIGHLIGHT

BOULDER COUNTY'S CLIMATE WORK AND THE ROLE OF OFFSETS



For this interview, we spoke with Susie Strife, Director of Sustainability with the Boulder County office of Climate Action and Resilience. We asked Susie to tell us a bit about carbon offsets and they role they have played in Boulder County's carbon neutrality work.

WHAT ARE CARBON OFFSETS?

When communities set ambitious carbon-neutrality or net-zero goals, they generally aim to reduce emissions as much as possible within their own community. But there may be a portion of emissions that are very difficult to abate completely. Carbon offsets can be one way to address those remaining emissions by investing in projects elsewhere that reduce, avoid or remove an equivalent amount of greenhouse gas emissions.

For a community, that can mean supporting a project that delivers a climate benefit beyond its own boundaries while continuing to do the harder work of reducing emissions locally.

There are many different types of offsets, and they vary significantly in quality, permanence and environmental and community benefits. Ensuring high-quality carbon offsets has become increasingly important in how we think about carbon offsets in Boulder County.

TELL US A BIT ABOUT YOUR COMMUNITY'S CLIMATE GOALS.

Boulder County's goal is to reduce community-wide greenhouse gas emissions 80% below 2021 levels by 2030 and achieve carbon neutrality by 2035, in alignment with science-based targets to limit warming to 1.5°C. After nearly two decades working on climate and sustainability in Boulder County, I've come to believe that our responsibility extends beyond what shows up in our own emissions inventory. Of course, we need to reduce emissions here at home. But the scale and urgency of the climate crisis requires us to think bigger about where we can have the greatest impact and to work on the systems and policies that shape emissions far beyond our borders.

For example, one of the things I'm most proud of is our work through Communities for Climate Action, a coalition of Colorado local governments working together to advance state climate policy. By bringing our voices and influence together, we can achieve far more than any one community could accomplish on its own.

At the same time, here in Boulder County, we have to prepare for climate impacts that are already here, including wildfire, drought, extreme heat and water stress. So, for me, local climate action has always meant both reducing emissions and building resilience.

HOW, IF AT ALL, ARE CARBON OFFSETS FACTORING INTO MEETING YOUR GOAL?

For Boulder County, purchasing offsets is a small part of our overall climate strategy. Our priority is systems change and reducing emissions through building electrification, renewable energy, energy efficiency, cleaner transportation and other strategies that address the sources of emissions themselves.

In 2021, we experimented with purchasing high-quality carbon removal to address roughly 6,500 metric tons of annual emissions associated with the county's commercial cannabis sector. We ultimately funded a high-quality, verified reforestation project in Alaska that generated carbon revenue while helping protect land from logging.

That experience also taught us something important: our local market for high-quality carbon removal wasn't mature enough. Given our limited resources, we began asking whether we could have greater impact by helping build that market here rather than simply purchasing offsets from projects elsewhere.

CONTINUED ON NEXT PAGE.

COMMUNITY HIGHLIGHT

BOULDER COUNTY'S CLIMATE WORK AND THE ROLE OF OFFSETS

HOW, IF AT ALL, ARE CARBON OFFSETS FACTORING INTO MEETING YOUR GOAL?

(CONTINUED) We shifted from purchasing carbon offsets to catalyzing high-quality carbon removal and restoration projects in our own community and region. In 2022, we created the Climate Innovation Fund to support local carbon removal, landscape resilience and restoration projects. That same thinking helped lead to the 4 Corners Carbon Coalition, and now the CityCDR initiative is creating an exciting new opportunity for local governments to work together to accelerate community-based carbon removal.

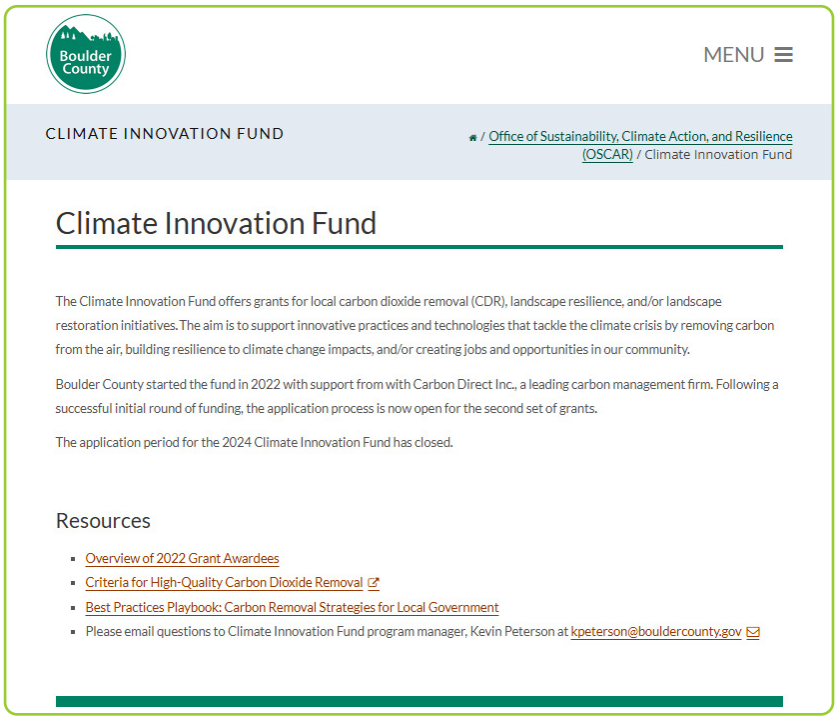
Bottom line: we're particularly interested in projects that connect carbon removal with challenges our communities already need to solve, whether that's restoring landscapes, improving soil health, reducing wildfire risk, creating local economic opportunity or building greater resilience.

WHAT DO YOU WISH PEOPLE KNEW ABOUT OFFSETS?

Not all carbon offsets are created equal. The quality of the project matters, and we need to know that the climate benefit is real, measurable and durable, while also understanding the environmental justice and community impacts.

Our Carbon Removal Playbook captures much of what we've learned. We're still learning, but we're excited about making carbon removal more place-based and connecting it to challenges communities are already trying to solve, from wildfire and forest health to soil health and the built environment.

I also think we need to avoid carbon tunnel vision. Carbon dioxide gets most of the attention, but other powerful super pollutants like methane are important parts of the climate equation too. The goal isn't simply to buy our way to a number. It's to find the most meaningful ways to reduce pollution while addressing the emissions that are hardest to eliminate.



The Boulder Climate Innovation Fund webpage.

> **I also think we need to avoid carbon tunnel vision. Carbon dioxide gets most of the attention, but other powerful super pollutants like methane are important parts of the climate equation too.**



The 4 Corners Carbon Coalition.

COMMUNITY HIGHLIGHT

BOULDER COUNTY'S CLIMATE WORK AND THE ROLE OF OFFSETS

EXAMPLES OF PROJECTS FUNDED BY THE CLIMATE INNOVATION FUND



Biochar Now, Berthoud, CO: Biochar Now will use their grant to mobilize their biochar production equipment, which will allow greater access to remote locations where waste wood is found.



Drylands Agroecology Research (DAR), Longmont, CO: DAR, in partnership with local farms, will transform dry, degraded landscapes into agro-ecosystems with increased biodiversity & improved soil carbon sequestration.



Takachar, Boston, MA: Takachar will work closely with Boulder-area farms to illustrate the technoeconomic and carbon removal feasibility of their small-scale, portable prototype for on-site version of trees killed by the mountain beetle into a higher-value, carbon-negative biochar-based fertilizer blend.

IS THERE ANYTHING ELSE YOU'D LIKE ANN ARBORITES TO KNOW ABOUT YOUR WORK, YOUR GOAL, OR CARBON OFFSETS?

No community is going to solve the climate crisis on its own. Even the most ambitious city or county cannot reach climate stabilization through local action alone. We need strong state and federal policy, transformed energy and transportation systems, changes in markets and infrastructure, and decisions that extend far beyond our jurisdictional boundaries.

So I think the question is bigger than, "How do we get our emissions to net zero?" It is: "What needs to change for communities like ours to reach climate stabilization, and what power do we have to help make that change happen?"

Emissions inventories and targets are important. They help us measure progress and hold ourselves accountable. But if we focus too narrowly on balancing the emissions we can count within our boundaries, we can miss a much bigger opportunity: using our influence to change the systems that determine what is possible in the first place.

That means thinking about policy, procurement, public finance and investment, infrastructure, markets, and how communities can work together to drive change beyond their own boundaries. Our climate goals should be platforms for that kind of collective action, not simply destinations we measure ourselves against.

I see Ann Arbor already thinking this way. We really admire the city's innovative Sustainable Energy Utility as an example of a local government creating new capacity and rethinking how it can accelerate change. That kind of systems innovation is exactly what I hope we see more of.

> **"So I'd encourage Ann Arbor to think of its 2030 goal not just as a target to meet, but as a platform for changing what is possible."**

The opportunity is to move beyond every community trying to solve its own emissions problem and toward communities using their collective influence to change the systems that constrain all of us.

That, to me, is a much bigger ambition than getting one community to net zero—and much closer to what low carbon future actually requires.

COMMUNITY HIGHLIGHT

THE CITY OF AUSTIN, TEXAS TACKLES OFFSETS

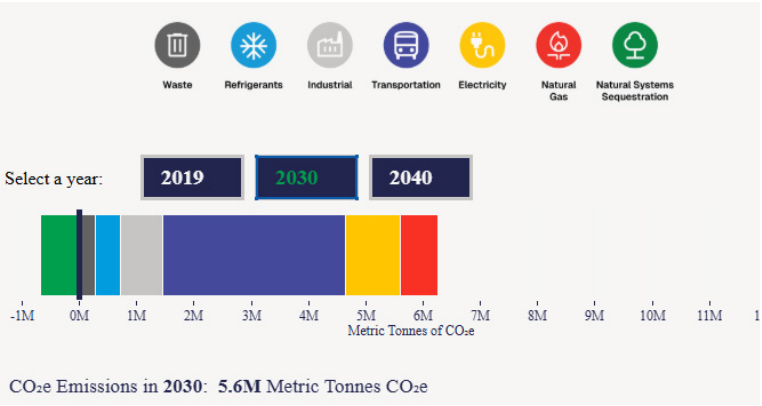
We spoke with Phillip Duran, Senior Climate Analyst from the Austin Climate Action and Resilience Office to understand how this peer community is approaching offsets.

WHAT ARE CARBON OFFSETS?

Being in Texas, the City of Austin has historically participated in what is called the voluntary carbon market—meaning when we buy offsets, we're choosing to do so of our own volition to meet our own targets, rather than being mandated by state or federal policy. At its simplest level, one carbon offset equates to one metric ton of carbon avoided or captured elsewhere. When done correctly, it is a market mechanism to support good projects that might not otherwise happen by improving their economics. These can be technology-based solutions (like renewables, methane capture, or direct air capture) or nature-based solutions (like tree planting, land conservation, or soil carbon improvements). To ensure they are done correctly, we do our diligence, rely on high-quality registries and standards, and invest in the best offsets possible.

TELL US ABOUT AUSTIN'S CLIMATE GOALS.

Our guiding document is the Austin Climate Equity Plan, which was adopted in September 2021. It's a comprehensive plan featuring 5 sections, 17 goals, and 75 strategies, with the ultimate target of achieving community-wide net-zero greenhouse gas emissions by 2040. Prior to that, the City Council passed a resolution in 2007 to make all City operations carbon neutral by 2020. This initiative prompted individual departments to rigorously evaluate their carbon footprints and established the foundation for our ongoing climate efforts. Today our organization has dramatically decreased its carbon footprint and nearly every aspect of the Climate Equity Plan is under active implementation throughout the community. A complete snapshot of our progress can be found at the Climate Equity Plan Implementation Dashboard (below).





HOW, IF AT ALL, ARE CARBON OFFSETS FACTORING IN TO MEETING YOUR GOAL?

First and foremost, our absolute top priority is to reduce emissions first—offsets are only considered for emissions that are incredibly difficult to reduce. In fact, our Climate Equity Plan dictates that offsets shouldn't account for more than 10% of our community-wide carbon footprint.

Operationally, we use offsets to attain the highest levels of sustainability certification for City facilities. For example, building to LEED, Austin Energy Green Building, SITES, WELL, or Envision standards. Purchasing offsets for a set number of years is often a required step to get to that next level of certification or accreditation.

IF RELEVANT, WHAT KINDS OF CARBON OFFSETS ARE YOU INVESTING IN?

The Austin Climate Equity Plan outlines strict guiding principles for procurement: offsets should be as close to Austin as possible, come from projects that create additional environmental and equity benefits, and prioritize negative emissions over avoided emissions.

Several City of Austin departments participate in the voluntary carbon market, each with their own motivation & approach. **CONTINUED ON NEXT PAGE.**

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IF RELEVANT, WHAT KINDS OF CARBON OFFSETS ARE YOU INVESTING IN?

(CONTINUED) The Austin-Bergstrom International Airport procures Green-e certified offsets to maintain its high-level Airport Carbon Accreditation, and facilities like our new Austin Energy Headquarters and the Austin Convention Center purchase offsets to achieve LEED certifications and become net-zero facilities.

My personal favorite investments are our local ones: for several years, Austin Climate Action and Resilience purchased City Forest Credits developed locally by our nonprofit partners at TreeFolks. These offsets create a whole host of local environmental and equity benefits, like ecosystem services and increased biodiversity, improved water quality and riparian restoration, localized cooling impacts, and enhanced green space access for our residents.

WHAT DO YOU WISH PEOPLE KNEW ABOUT OFFSETS?

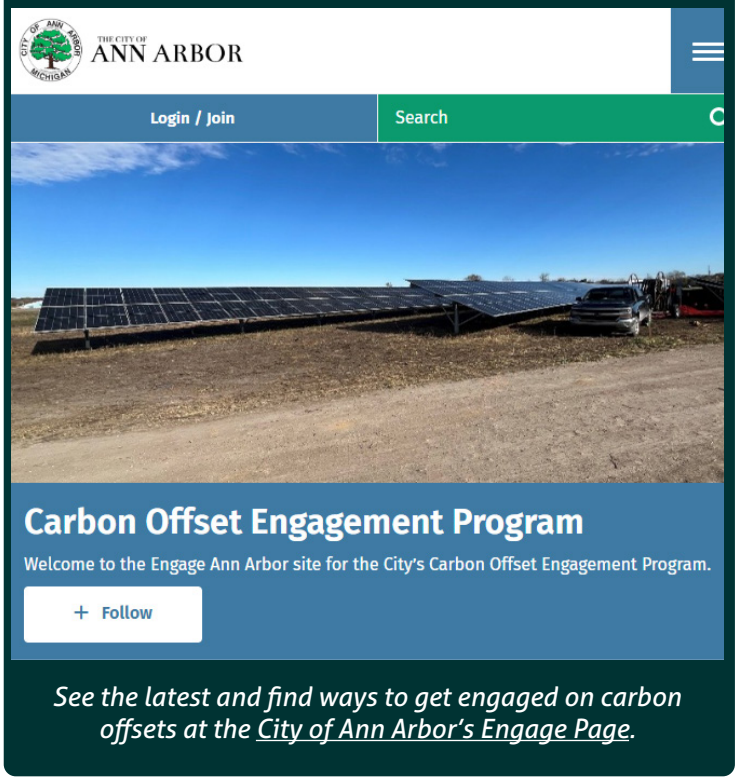
I wish more people understood the "typology" and pricing tiers of the offset market. They generally fall into three buckets. First, there are really old, inexpensive offsets (sometimes called "zombie offsets") that cost around $1 per ton and were created before strict standards and verifications existed; these are low quality. On the other end, there is emerging technology, like direct air capture, which can cost upwards of $1,000 per ton. The middle tier—ranging from $15 to $30, and up to $100 per ton—is the sweet spot for quality and value. These are established technology and nature-based solutions, and this is where the City of Austin chooses to participate.

Beyond pricing, there is an inherent tension between global climate impacts and local investments. Because climate change is a global issue, a metric ton of carbon avoided or captured anywhere in the world benefits everyone. However, there are real complications when it comes to using local taxpayer dollars to fund projects outside of your jurisdiction. While the carbon reduction is global, these projects often generate significant local economic and environmental co-benefits—like improved air quality, enhanced green spaces, or green jobs. Taxpayers understandably want to see those tangible benefits in their own communities.



Austin residents enjoying public transit and bike lanes.

JOIN ANN ARBOR'S CARBON OFFSETS CONVERSATION



See the latest and find ways to get engaged on carbon offsets at the City of Ann Arbor's Engage Page.

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Austin community members planting trees.

WHAT ADVICE, IF ANY, WOULD YOU OFFER TO ANN ARBOR AS WE LOOK TO MEET OUR 2030 COMMUNITY-WIDE CARBON NEUTRALITY GOAL?

My first piece of advice is to recognize that carbon offsets aren't always the right tool for the job. They should never be viewed as a "get out of jail free" card or a substitute for doing the hard work of actual emission reductions.

When looking at your budget, it is always worth unpacking whether purchasing an offset is truly the most impactful use of funds, or if there are other creative solutions to incentivize local climate action and behavior change. Ask yourself: could the money spent on an out-of-state offset be better deployed locally to fund sustainable transit incentives, energy efficiency programs, or initiatives that directly shift community behavior?

When you do decide that offsets are necessary for those hard-to-abate emissions, don't just rely on the standard accreditations or registries, even the good ones. Always get as much detail on a purchase as possible, do your own desk research, and convene a purchasing group to confirm that the projects match your community's values. Creating a carbon offset purely for the purpose of carbon accounting is much less important than ensuring you are aligning multiple positive outcomes whenever you spend those dollars.

IS THERE ANYTHING ELSE YOU'D LIKE ANN ARBORITES TO KNOW ABOUT YOUR WORK, YOUR GOAL, OR CARBON OFFSETS?

We are constantly trying to find creative ways to drive local innovation. For example, our sustainable commuting program, GetThereATX, recently partnered with CarbonCred to use carbon offsets as a mechanism to actually compensate and incentivize people for making sustainable commuting choices, like taking the bus instead of driving a single-occupancy vehicle. We are also exploring the feasibility of a local refrigerant capture and destruction program that could generate local carbon offsets, making the practice more economically attractive.

Ultimately, the transition to a net-zero future is a massive undertaking, but it is also an incredible opportunity to build healthier, more equitable, and more resilient communities. Seeing cities like Ann Arbor set such ambitious 2030 goals is hugely inspiring to us down here in Austin. My call to action for everyone reading this is to get actively involved in your local climate initiatives. Whether it's changing how you commute, participating in local energy efficiency programs, or advocating for sustainable policies at city hall, your everyday choices matter. Lean in, engage with Ann Arbor's climate plan, and be an active part of the solution today!

MICHIGAN 50-MILE APPLE PIE



From the Kitchen of: Janice Leach, Owner, Why Not Pie

Preparation Time: 1 hour | **Cook Time:** 40-50 minutes | **Yield:** 8 slices
Common Allergens: Wheat, Milk

"As written, this classic pie recipe makes the most of wonderful local ingredients, decreasing transportation costs and waste. The recipe is flexible in that ingredients on hand may be substituted and modified, according to preferences and dietary needs and sensitivities," according to Janice.

Janice shares, "Pies were important in my family's holiday celebrations when I was a child. My Grandma Minnie was a gifted baker, and her pies always held a central place in Thanksgiving and Christmas menus. I've been a serious baker for 40 years, and I love making family favorite recipes like Apple Pie, as well as exploring new pie recipes from around the world."

INGREDIENTS:

FOR THE PASTRY:

- 2 cups Westwind Milling Company pastry flour, plus more for rolling
- 1 teaspoon salt
- 3/4 cup butter from Calder Dairy, cold, cut into 1/2 inch pieces
- 6 Tablespoons water

FOR THE FILLING:

- 4 apples from Kapnick Orchards, peeled, cored, and sliced
- 1/4 cup honey from Bobilin Honey
- 3 Tablespoons Westwind Milling Company pastry flour
- 1 teaspoon homemade vanilla extract (or good quality store-bought vanilla extract)
- 1 Tablespoon butter from Calder Dairy, softened

"I buy apple seconds from Kapnick Orchards at the Ann Arbor Farmers Market!"

INSTRUCTIONS:

- Preheat oven to 400° F.
- In a large bowl, mix the flour and salt.
- Cut in butter pieces with a pastry cutter, and work until the dough resembles pea-sized crumbles.
- Add the water one tablespoon at a time, stirring the mixture with a fork after each addition.
- When the dough comes together, gather it with your hand, then knead it 4 or 5 times and divide the dough into 2 balls.
- Generously sprinkle a surface with flour and roll out 1 ball of the pastry. Use enough flour to keep your pastry from sticking.
- Line the bottom of a 9 or 10-inch pie pan with the dough and cut excess. Now is also a good time to roll out the second ball for your top crust and leave it while you work on the filling. If you need countertop space to work, you can carefully fold your crust in half and set it to one side.
- Peel, core and slice the apples, and place them in a large bowl.
- Add the honey, flour, and vanilla, and mix well until all apple slices are coated. Turn the apple mixture into the pastry and arrange so they are evenly distributed. Dot the top with 1 tablespoon of butter.
- Use small cookie cutters carefully to make a design on the top pastry which also allows the cooking fruit to vent. If you prefer simplicity, cut 3 or 4 slashes instead.

ANNOUNCEMENTS

NEW Survey on Carbon Offsets
Participate in the newly-launched survey as part of the multi-month engagement process around carbon offsets – a key component of meeting the community's 2030 carbon neutrality goals – at osi.a2gov.org/offsets.

Michigan's First Net-Zero Fire Station Celebrates Grand Opening!
On October 30, community members gathered to celebrate the opening of this groundbreaking facility that uses solar power, geothermal heating and cooling, and other energy efficiency measures to be the state's first net-zero fire station. Learn more at Fire Station 4's webpage.

OSI and the Ann Arbor Farmers Market collaborated with Detroit-based IonDynamics to host the first ever generator-free Food Truck Rally!
Patrons and food truck operators alike enjoyed not only a beautiful evening of delicious food, but a quieter, more comfortable, and more sustainable event thanks to the help of two mobile batteries that replaced all generators.

As of Oct. 1, 2026, 1144 properties are in compliance with Green Rental Housing.
71% are compliant through the Checklist Pathway and 29% are compliant through the HERS pathway. As of Oct. 1, 2026 494 properties were in progress and working towards compliance.

OSI staff published 4 new resources to support City staff in making sustainable food choices
These resources will help staff purchasing food for City-sponsored meetings and events, and City-operated facilities.

Fire Station 3 re-purposed solar goes online
This 11kW system was relocated from the solar carport that was at 4th and Catherine lot that is now the site of Dunbar Tower. See its usage on the A²ZERO Dashboard.

New HERS rater rented & returned blower door kit
OSI has available for rent to complete several HERS assessments for landlords working to come into compliance with the Green Rental Housing Ordinance. This kit is available for those who might not be ready to purchase their own system, helping lower the bar to more people becoming HERS raters.

$30,000+ total awarded to two food businesses for more sustainable refrigeration systems.
The first two businesses to participate in the Refrigerant Management Technical Assistance & Grant Program have been awarded funding to upgrade to refrigerants systems that offer a 99.8% comparative reduction in emissions.

Food scrap drop off program launched for multifamily residents
Sign up and get a free starter kit, complete with a compost caddy, compostable caddy liners, and eat first stickers to help prevent food waste at the Food Scrap Drop-Off Bins webpage.

The City of Ann Arbor Revamps its Circular Economy Map, Highlighting Over 120 Organizations
The City of Ann Arbor has released an updated Ann Arbor area circular economy map, which now includes over 120 organizations that are part of the local movement to center reuse, repair, and regeneration. Community members interested in participating in a more sustainability-centered economy can use the map to find spots where they can thrift, donate, and repair items in addition to many other circular economy actions.

A²ZERO Home Energy Rebates have funded work that has generated emissions reductions equivalent to getting rid of 43 million miles driven by a gas car since the program started in 2024. 43 million miles is the amount that 4,000 gas cars drive in one year, OR, driving a gas car to the moon and back five times.

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

UPCOMING EVENTS

CINEMA & SUSTAINABILITY SERIES: A PLACE AT THE TABLE | *Nov. 5, 7 PM | Michigan Theater*
In collaboration with Marquee Arts, OSI is sponsoring the return of the free Cinema and Sustainability Film Series, which explores sustainability, environmental stewardship, and the collective actions shaping a green future. The first film in the series, *A Place at the Table*, will screen Thursday, November 5, 2026, at 7:00 p.m. at the Michigan Theater, and tickets can be reserved for free online at marquee-arts.org/cinema-and-sustainability. The series will run through March, 2027.

HEALTHY HOMES WORKSHOP | *Nov. 12, 12 - 4 PM Larcom City Hall, Council Chambers*
Learn how landlords and tenants can work together to maintain safe, healthy homes. This workshop covers common household hazards, property maintenance, indoor air quality, and every day safety practices. This workshop is FREE, does not require registration, and will provide chips and light refreshments.

PLANT-BASED DINNER MEETUP WITH VEGMICHIGAN *Nov. 12, 6 - 8 PM | The Stubborn Brother Pizza Bar, 405 S Main St, Unit A, Ann Arbor*
Join OSI and VegMichigan for a plant-based dinner meetup at The Stubborn Brother PIzza! Dine on delicious, plant-based pizzas and connect with fellow Ann Arborites interested in sustainable eating. RSVP at vegmichan.org/events.

A²ZERO EATS! X WASHTENAW FOOD HUB SUSTAINABLE FOOD TOUR | *Nov. 18, 12 PM Washtenaw Food Hub*
Join us for a behind-the-scenes tour of the Washtenaw Food Hub to explore the people, places, and processes shaping our local food system. Get an inside look into the Sunflower Farm Market, tour the Hub's shared use commissary kitchens, and meet the farmers behind Tantre Farm to learn how the Food Hub is creating new opportunities for local farmers and entrepreneurs to grow their business and bring more local food to our community. Along the way, discover how you can get more connected to the local food system, build practical skills for incorporating sustainable foods into your everyday life, and get involved. Register at a2zeroeats.eventbrite.com.

MONTHLY CLOTHING SWAP | *Nov. 19, 4 - 7 PM | Larcom City Hall, Council Chambers*
Join our monthly A²ZERO clothing swaps on the third Thursday of each month! Swaps are an opportunity to refresh your wardrobe, without buying new. Swaps are also a chance to gift your gently used clothes to members of your community, without contributing to the 92 million tons of textile waste generated globally each year. These are completely free events. Learn more at lu.ma/a2zeroclothingswaps.

A²ZERO TREEDUCATION SERIES: TREES & ART | *Nov. 20, 6 - 7:30 PM | Leslie Science & Nature Center, Energy House*
Join OSI and the Leslie Science & Nature Center for our new A²ZERO TREEducation Series! This month, we will be focused on the intersection of trees and art - join us for a hands-on workshop where you'll learn about the influence of trees on art and have a chance to create your own tree-inspired art, followed by a (weather permitting) guided night hike in Leslie Park.

PARK WORKDAY | *Nov. 20, 3 - 5 PM | Bicentennial Park*
Show some love to Bicentennial Park! Whether you're a longtime volunteer or joining us for the first time, this is a great opportunity to spend time outdoors, connect with community members, and make a visible impact in a community park. No prior experience is necessary—staff will provide all tools, supplies, training, and guidance throughout the event. Sign up at the City's Volunteer Hub.

CONNECT WITH A²ZERO











