

THE CHARGING STATION

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



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ABOUT THE EDITOR



The author for this month's issue on Decarbonization and Affordable Housing is Thea Yagerlener. As a Senior Energy Analyst with OSI, Thea's work primarily focuses on designing, developing, and implementing data-driven energy programs to reduce our community's emissions. To learn more, get in touch with Thea at TYagerlener@a2gov.org.



Inside this issue, you will find updates on decarbonization efforts in affordable housing. Image courtesy of Landon Bone Baker Architects.

WELCOME

Welcome from the City of Ann Arbor's Office of Sustainability and Innovations (OSI). In this issue of the Charging Station, OSI is delighted to share details about decarbonization in affordable housing, work done with the Ann Arbor Housing Commission, and 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.

DECARBONIZATION EFFORTS IN HOUSING

A²ZERO AND THE ANN ARBOR HOUSING COMMISSION

While sustainability work and affordable housing are often thought to be contrary objectives, the City of Ann Arbor is whole-heartedly dedicated to ensuring that these two initiatives support and enhance each other, making Ann Arbor a safer, healthier, and more comfortable city – for everyone.

The Ann Arbor Housing Commission (AAHC) was created by the City to develop, finance, and operate affordable housing projects throughout Ann Arbor. The AAHC manages over 540 affordable housing units and administers 2,200 housing vouchers. In 2020, Ann Arbor residents overwhelmingly voted to support an Affordable Housing Millage which will support the creation of 1,500 additional units of affordable housing for roughly 3,700 residents. The AAHC is managing those funds and projects along with the support of numerous community collaborators.

This article explores how A²ZERO and the AAHC work together to facilitate meaningful projects to help provide healthy, efficient, and comfortable housing for those who need it.

The A²ZERO Plan and the AAHC

The A²ZERO Plan overlaps substantially with the efforts of the AAHC and helps explain the deep collaboration between the AAHC and OSI. For example, Strategy 3 of the A²ZERO Plan focuses on drastically improving the energy efficiency of Ann Arbor's buildings. In support of the goal of transitioning all existing and new affordable housing sites to net zero energy, building energy efficiency is a priority for both existing and new construction.

Strategy 2 of the A²ZERO Plan calls for electrifying Ann Arbor's buildings, including 25% of rental properties. Because natural gas cannot be directly offset using renewables, transitioning to all-electric buildings will avoid the health and safety concerns of combusting fossil fuels in our homes. Along with sustainability, the AAHC prioritizes creating healthy environments for building occupants, many of whom are medically sensitive.

Strategy 1 of the A²ZERO Plan also calls for powering the entire community with 100% renewable energy – inclusive of our AAHC sites, which are making notable advancements in on-site renewable energy generation (more below).

Working together, the AAHC and OSI are pursuing these and numerous other goals and actions outlined in the A²ZERO Plan to ensure we are improving existing affordable housing, building new, sustainable housing, and ensuring the needs of under-served residents are centered in initiatives to expand access to housing while advancing climate action.

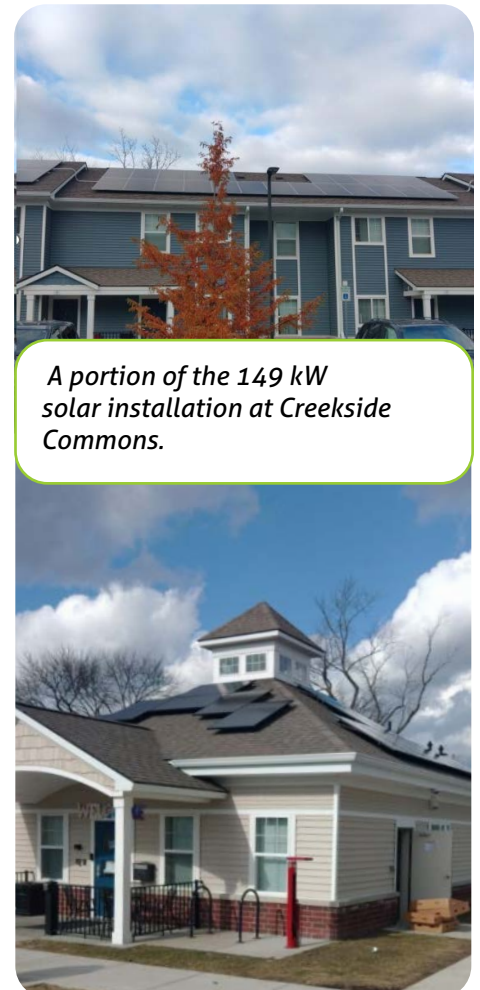
As an illustration of this collaboration, in 2022, the AAHC and OSI jointly applied for and received \$3 million in federal funds to help transition affordable housing sites to net zero energy sites that ensure safe, healthy, comfortable, and accessible housing for residents in need. That funding is helping pave the way for solar installations, energy efficiency improvements, and energy storage (batteries) to facilitate resilience when feasible. In total, ten properties are slated to receive an estimated total of 1 megawatt (MW) of solar. These improvements will benefit residents by making the housing safer, healthier, and more comfortable.

Renewable Energy Installations

The AAHC is actively working to integrate renewable energy installations into their ongoing operations. This includes prioritizing

the addition of renewables to the AAHC's two newest properties, Creekside Court and State Crossing. A 74 kW installation was recently completed at State Crossing.

CONTINUED ON PAGE 3



A portion of the 149 kW solar installation at Creekside Commons.

DECARBONIZATION EFFORTS IN HOUSING

A²ZERO AND THE ANN ARBOR HOUSING COMMISSION

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Creekside Court, built in 2021, features an energy efficient design including: a high-performance building envelope, programmable thermostats, occupancy sensors, and energy efficient appliances. A 149 kW solar installation was completed at Creekside Court, along with a 16 kWh battery to help the site function as a resilience hub during power outages, helping keep cell phones charged, Wi-Fi running, and medicine refrigerated. The Creekside Court site also features accessible apartments, with first-floor units with no-step entries and accessible bathrooms.



16 kW of battery storage that was installed at Creekside Commons.

Community Center Improvements

OSI and the AAHC also collaborated on a State of Michigan Community Center Grant to make energy efficiency, accessibility, renewable energy, and energy storage improvements at all AAHC sites that host a community center. While the team was not successful with this grant, the collaboration laid the foundation to continue seeking funding resources to implement these improvements. The team continues to pursue funding opportunities to support AAHC's with these transitions, increase the resilience for AAHC residents, and ensure that affordable housing and climate action are working

together to advance our goal of a just transition to community-wide carbon neutrality by 2030.

"I love working with OSI because we have mutually supportive goals. Increasing building performance and saving energy helps the environment and our operating costs," said Jennifer Hall, Executive Director of the AAHC.

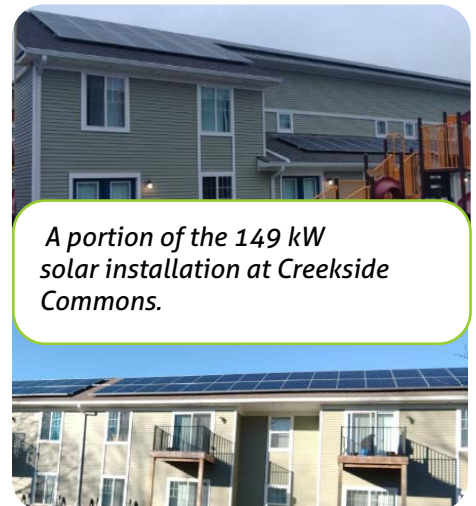
Future Projects

As Ann Arbor continues to invest in more housing, exciting new opportunities are revealing possibilities for creating non-toxic, highly accessible, and highly efficient living spaces. One real-time example of this work in action is the 121 Catherine Street Project, where the AAHC is developing a surface parking lot in the Kerrytown neighborhood into an affordable housing site with 63 units and a community and cultural space. Funding from the 2022 Community Climate Action Millage enables the project to include energy efficient appliances, windows, and lighting, EV charging and car-share, water saving features, and a geothermal heating and cooling system. The property will be solar-ready, and solar will be installed as soon as funding is secured.

"New construction provides opportunities to thoughtfully design not just environmentally sustainable but operationally sustainable buildings at rents that are far below market rents," said Hall. "The design [of 121 Catherine] includes durable materials like tile in apartments and wainscoting in common areas. The architect used trauma-informed design and exceeded accessibility requirements to meet the needs of future residents."

This work with the AAHC is just one example of the types of

Transitioning existing affordable housing sites can prove to be a technical and financial challenge. The AAHC is evaluating where changes can be made while keeping operating costs low enough to continue to provide services to many households. The AAHC's energy efficiency standards and upcoming solar installations can help lower costs of electrifying and serve as a real-world demonstration of what decarbonization looks like in practice.



A portion of the 149 kW solar installation at Creekside Commons.

transformative collaborations that help ensure we are meeting our A²ZERO goals without sacrificing other community priorities, such as providing affordable housing. Much more is coming soon – including a grant proposal to decarbonize hundreds of rental units throughout Washtenaw County under the operational lead of non-profit housing providers, supporting the transition of Green Baxter Court to a resilience hub, and collaborating to unlock as much federal funding (including Direct Pay Provisions funding offered through the Inflation Reduction Act) to help the AAHC and the City of Ann Arbor achieve our climate, housing, and equity goals.

AVALON HOUSING SPOTLIGHT

A LEADER IN AFFORDABLE AND SUSTAINABLE HOUSING

Avalon Housing is Washtenaw County's leading non-profit provider of affordable, long-term housing with built-in care and support services for residents exiting homelessness. Avalon develops, owns and manages supportive housing for 834 of Washtenaw County's lowest-income residents, including 180 children. Avalon is currently developing four new properties that will add an additional 173 units of affordable housing. One of those projects is the 121 Catherine Street project, which is being co-developed in partnership with the AAHC.

"At Avalon Housing, we know that incorporating sustainable building practices in affordable housing not only helps protect our environment but also ensures that marginalized communities, who have historically borne the brunt of environmental harm, can live in healthier, more resilient homes," said Scott Ellis, Director of Mission Advancement at Avalon Housing.

In 2023, \$150,000 in funding from OSI helped Avalon Housing increase the home comfort, energy efficiency, and affordability of 22 units across four different buildings. The units received highly efficient, triple pane windows and information on other energy-saving opportunities that could be implemented in the future, as more resources become available.

"Funding from this grant has helped a crucial affordable housing provider save on their utility bills, which they pay for their residents. This helps ensure affordable housing can be preserved in Ann Arbor while tackling our climate crisis," said Henry Love, Vice President of Strategy at Elevate, who administered the project.

CONNECT WITH THE OFFICE OF SUSTAINABILITY AND INNOVATIONS



A2ZERO.ORG | EMAIL | YOUTUBE
JOIN OUR MAILING LIST!

Questions? Email Thea at
TYagerlener@a2gov.org

Share your upcoming sustainability events by contacting Grace Franke, Communications Coordinator at OSI, by emailing GFranke@a2gov.org.

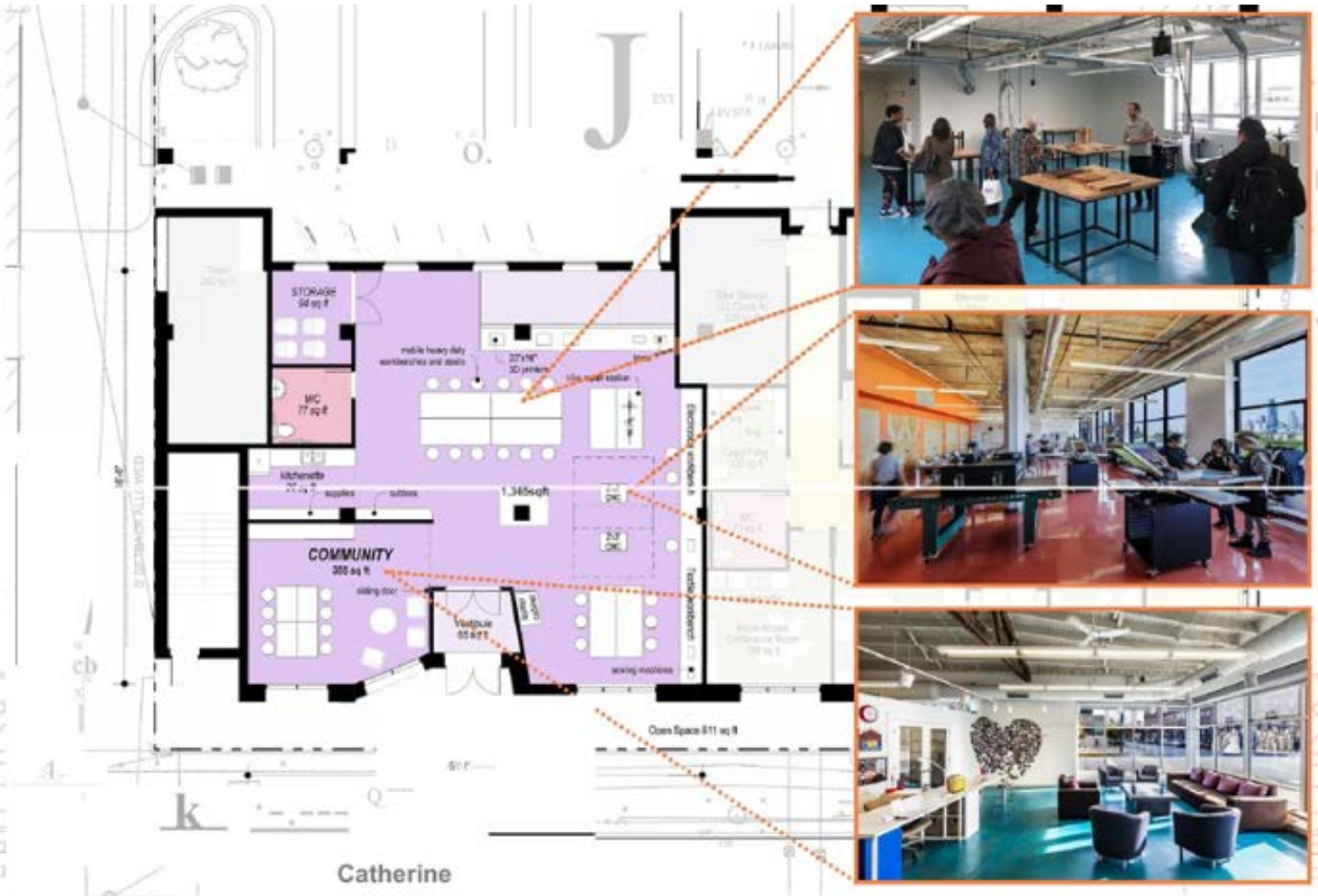
THE 121 CATHERINE STREET PROJECT

Avalon Housing is the co-developer of this 64,529 square foot project, made up of 1-bedroom and 2-bedroom units. These apartments will be **affordable to households with incomes at or below 60% of Area Median Income (AMI)**. Half of the apartments will be targeted as supportive housing for households with incomes at or below 30% AMI. The remaining apartments will include a preference for low-income households who are involved in artistic or literary activities. Additionally, the development team has been working with a Community Leadership Council (CLC), a group of local Black residents, both current and previous residents, as well as young artists to design a community and cultural space on the ground floor to honor the neighborhood's Black history and the people who worked, lived and organized here.

Throughout the development process, OSI has been collaborating with the AAHC to help ensure this development supports the City's sustainability goals stated in the A²ZERO Plan. Development plans currently include **significant green infrastructure, including energy efficiency applications, indoor environmental quality technology, lot design that meets green building standards, electric vehicle charging stations, a pedestrian pathway through the site to the Farmers Market and local businesses, and an electric vehicle car-share for residents.** However, to truly move towards carbon neutrality, renewable energy systems for the building are necessary. The Climate Action Millage funds dedicated by OSI will specifically support the installation of these systems, including solar readiness and on-site geothermal.

AVALON HOUSING SPOTLIGHT

A LEADER IN AFFORDABLE AND SUSTAINABLE HOUSING



The plans for the community and cultural space of the 121 Catherine Street project. Image courtesy of Landon Bone Baker Architects.



The street view of the 121 Catherine Street project. Image courtesy of Landon Bone Baker Architects.

UPDATES FROM THE CITY OF ANN ARBOR

JOINING THE "HERD" AND MORE!

JOIN THE "HERD"

As part of the A²ZERO Plan, OSI continues to work on policies, initiatives, and programs to help our community reduce the carbon emissions from buildings. The latest of these policies prioritizes single family homes and was unanimously passed by City Council on September 5, 2023 and takes effect **March 12, 2024!** Known as the Home Energy Rating Disclosure (HERD) Ordinance, this policy will provide consumer protections for home buyers by helping them understand the energy efficiency of the homes on the market in Ann Arbor. This will be accomplished by requiring a simple Home Energy Score (HES) assessment to be conducted before the home lists for sale. HERD makes a home's energy use easy to understand, like a miles-per-gallon/charge rating for a vehicle.

The HERD program utilizes the U.S. Department of Energy's Home Energy Score (HES). The Home Energy Score rates homes on a simple 1–10 scale, with 10 being the most efficient. It comes with a report that suggests ways a homeowner can increase their score and decrease their utility bills, and is useful for buyers who want to compare credible information about home energy costs.

When preparing to list a home, homeowners or real estate agents should schedule a HES Assessment with a certified assessor. The City of Ann Arbor provides this service for free. Home sellers can also hire their own certified assessor. Once complete, homeowners will receive the HES and accompanying report.

Click to schedule a free Home Energy Score Assessment!

ACTION OPPORTUNITY

In late February, OSI along with Community Action Network applied to a Michigan Public Service Commission grant to advance efforts to decarbonize the Bryant neighborhood. This proposal, along with all other proposals submitted as part of this opportunity are now open for public comment. If you'd like to share your thoughts, please go to the **Renewable Energy and Electrification Infrastructure Enhancement and Development (RE-EIED) Grant Proposals Page** by April 14th.

**EQUITABLE
SUSTAINABLE
AFFORDABLE
VIBRANT**

A2 DOWNTOWN PLANNING PUBLIC WORKSHOPS

**WE WANT TO HEAR FROM YOU!
JOIN US AT THE DOWNTOWN LIBRARY**

TUESDAY MARCH 12 4:00pm - 7:30pm <i>Presentation at 6:00pm</i>	WEDNESDAY MARCH 13 10:30am - 2:00pm	THURSDAY MARCH 14 10:30am - 1:00pm 4:00pm - 7:30pm <i>Presentation at 6:00pm</i>
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 **Details and RSVP**
bit.ly/downtowna2

To learn more about the Comprehensive Plan visit us at the link below:
plan.a2gov.org/plan24

THREE projects in one workshop!

- Comprehensive Plan for the City
- Downtown Area Circulation Study
- DDA Development & TIF Plan

Community members are invited to learn about and share input for future land use and transportation initiatives in downtown Ann Arbor. Public workshops will take place Tuesday–Thursday, March 12–14, at the Ann Arbor District Library Downtown Branch to provide information and seek perspectives about both the Ann Arbor Comprehensive Plan and the Downtown Area Circulation Study. Learn more about this under Upcoming Events on the next page.

UPCOMING EVENTS

ANN ARBOR SOLAR STORIES | *March 7, 7PM | Virtual*

This one-hour, online event is hosted by the GLREA. Hear from Ann Arborites who have gone solar and ask them all your questions! Register in advance to receive a confirmation email containing information to join the meeting.

24TH ANNUAL BICYCLE FILM FESTIVAL | *March 9, 6:30PM | State Theater*

A celebration of bicycles and bike culture through art, film and music! Purchase your tickets here. Stop by Blom Meadworks for Bicycle Film Festival Happy Hour at 5PM before heading over to the screening!

DISTRICT AND BUILDING WASTE WATER ENERGY RECOVERY SYSTEMS | *March 12, 12 – 1PM | Virtual*

The 2030 District Ann Arbor/Washtenaw invites you to the March webinar in the Implementing A²ZERO Lunch and Learn series. Registration required.

ANN ARBOR DOWNTOWN PLANNING WORKSHOP | *March 12 – 14 | Ann Arbor District Library, Downtown*

The City of Ann Arbor's Downtown Development Authority (DDA) and Planning and Transportation Departments invite you to public workshops on three planning efforts: Ann Arbor Comprehensive Plan, Downtown Area Circulation Plan, DDA Development & TIF Plan. The workshop week will include several public open houses where you can learn more about all three projects and share your input. They will all be held in the basement of the Downtown Ann Arbor District Library, 343 S. 5th Ave. To help plan, RSVP is encouraged but not required.

- Tuesday, March 12, 4-7pm: Public open house & kickoff (presentation at 6pm)
- Wednesday, March 13, 10:30am-2pm: Public open house
- Thursday, March 14, 11am-12:30pm: Public open house
- Thursday, March 14, 4-7pm: Public open house and wrap-up (presentation at 6pm)

UM STUDENT ZERO WASTE CHALLENGE | *March 17-23*

ZeroWaste.org is hosting a zero waste challenge for University of Michigan students, faculty and staff, March 17-23rd! The challenge is a chance to learn how to live a lifestyle that doesn't create waste and supports the circular economy (repair, refill, reuse). Sign up at zerowaste.org/umich. Sign up by March 1 to qualify for an extra entry in the prize drawing.

UM CLOTHING SWAP DAY | *March 18th, 11am-3pm | University of Michigan Union (530 S State St)*

Supported by ZeroWaste.Org, EcoUM will be holding a swap day on March 18th from 11am to 3pm at the UM Union. Stop by to donate gently used clothing you no longer need and browse through items others have brought! There will also be a repair table where you can bring clothing that you'd like to fix! Items leftover at the end of the event will be donated to Eco Threads. For more information, contact Lydia at lydia@zerowaste.org.

2024 SUSTAINABILITY SERIES: WIRED FOR SUSTAINABILITY | *March 27, 6 – 7:30PM | Ann Arbor District Library, Downtown*

OSI is bringing the Sustainability Series back in 2024 for another season at the downtown branch of the Ann Arbor District Library! Attend these public events to learn more and ask questions about exciting new programs, initiatives, and updates from our office and our amazing community collaborators. Session topics are below. Please register for the virtual sessions - registration is not required for in-person attendance.

SPRING 2024 FREETREE GIVEAWAY | *April 28th, 10am-5:30pm | Tappan and Clague Middle Schools*

The 10,000 Trees Initiative will be holding our annual Spring FreeTree Giveaway on April 28th at both Tappan and Clague Middle Schools. Residents of Washtenaw County are eligible to register to receive up to four free trees to take home and plant on their property! Learn more and register by visiting <https://osi.a2gov.org/spring24freetree>. Registration opens March 30th at 8am.

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