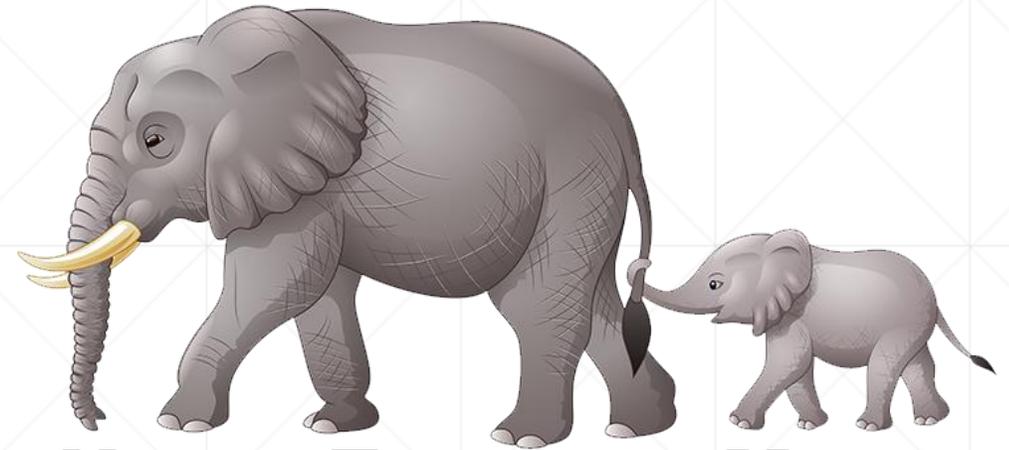


Thursday, May 5, 2022



URBAN ELEPHANT MEDIA

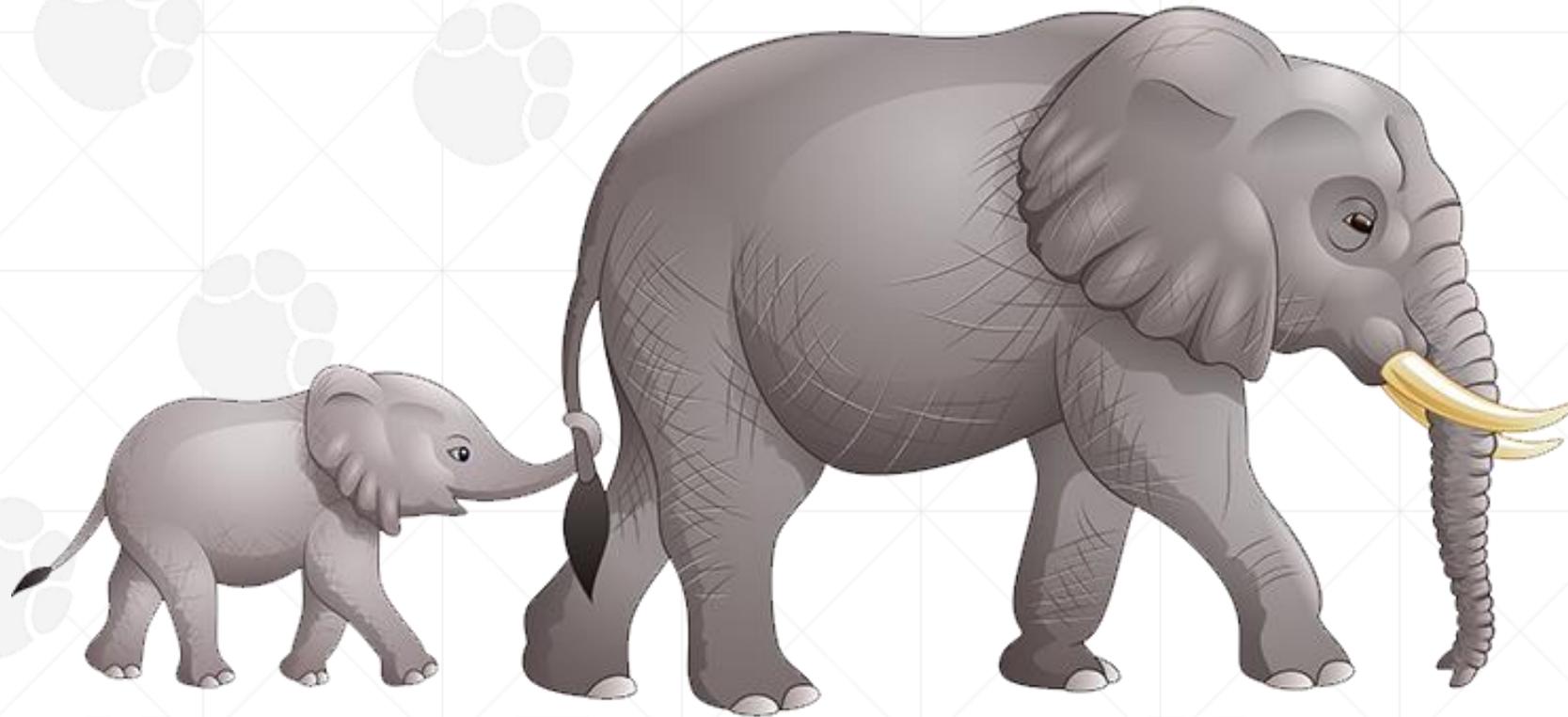
~ PRESENTS ~

Local Climate Action from A to Z

Equitable Climate Action in Ann Arbor via A²ZERO

Featuring Missy Stults, PhD., City of Ann Arbor, Michigan

Sponsored by Pearl's Premium Ultra-Low Maintenance Grass Seed



URBAN ELEPHANT MEDIA

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Sustainability Training for Urban Designers and Policymakers

Randy Rodgers, Director of Big Ideas
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- **Lush Dark Emerald Green Grass that is barefoot soft**
- **Grows so slow - Mow & Weed-Whack only once a month rather than weekly**
- **Or never mow for a lean over 3-inch high no mow meadow**
- **4-Foot Roots need 75% less water & absorbs more water to lessen run off**
- **Plant right over existing lawn – out-competes most weeds & other grass**
- **Needs no chemicals – safer for children, dogs, elderly & the environment**
- **Stays Green Year Round in spite of extreme heat or cold**
- **Sequesters 10x the carbon to help lessen climate change & extreme weather**
- **For both lawns and green roofs - full sun to deep shade under trees**

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Our Presenter



Dr. Missy Stults

Sustainability & Innovations Director

City of Ann Arbor, Mich.

mstults@a2gov.org

Local Climate Action from A to Z

Equitable Climate Action in Ann Arbor via A²ZERO



Our Journey

- Brief History of Sustainability in A2
- Creation of A²ZERO
- Quick look at Current Activities
- Engagement Techniques
- Question and Discussion

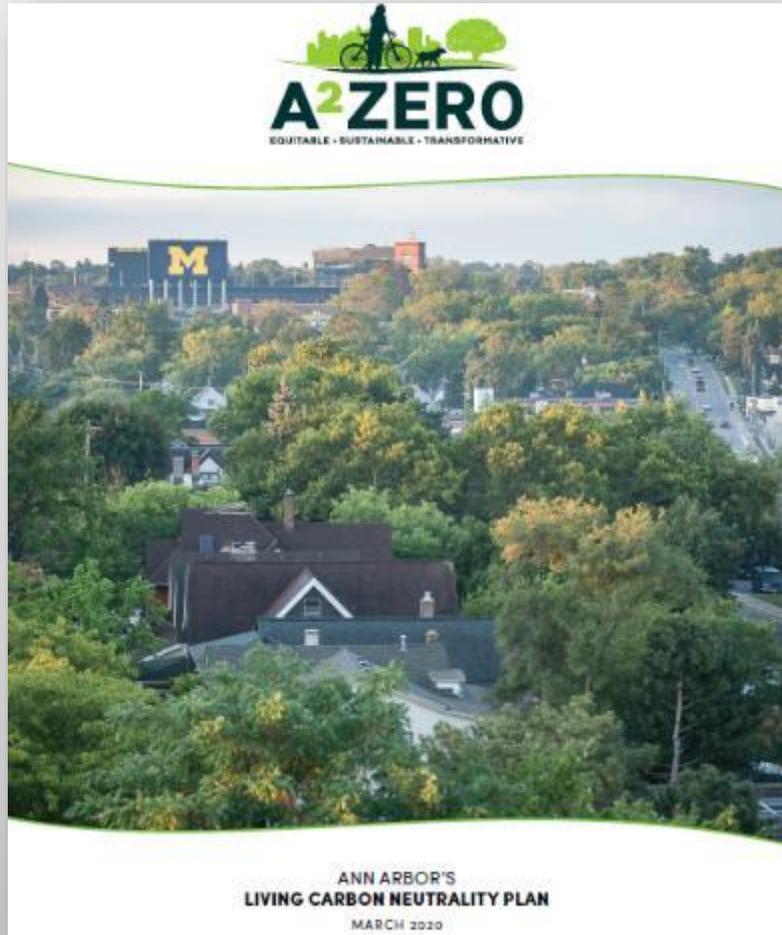


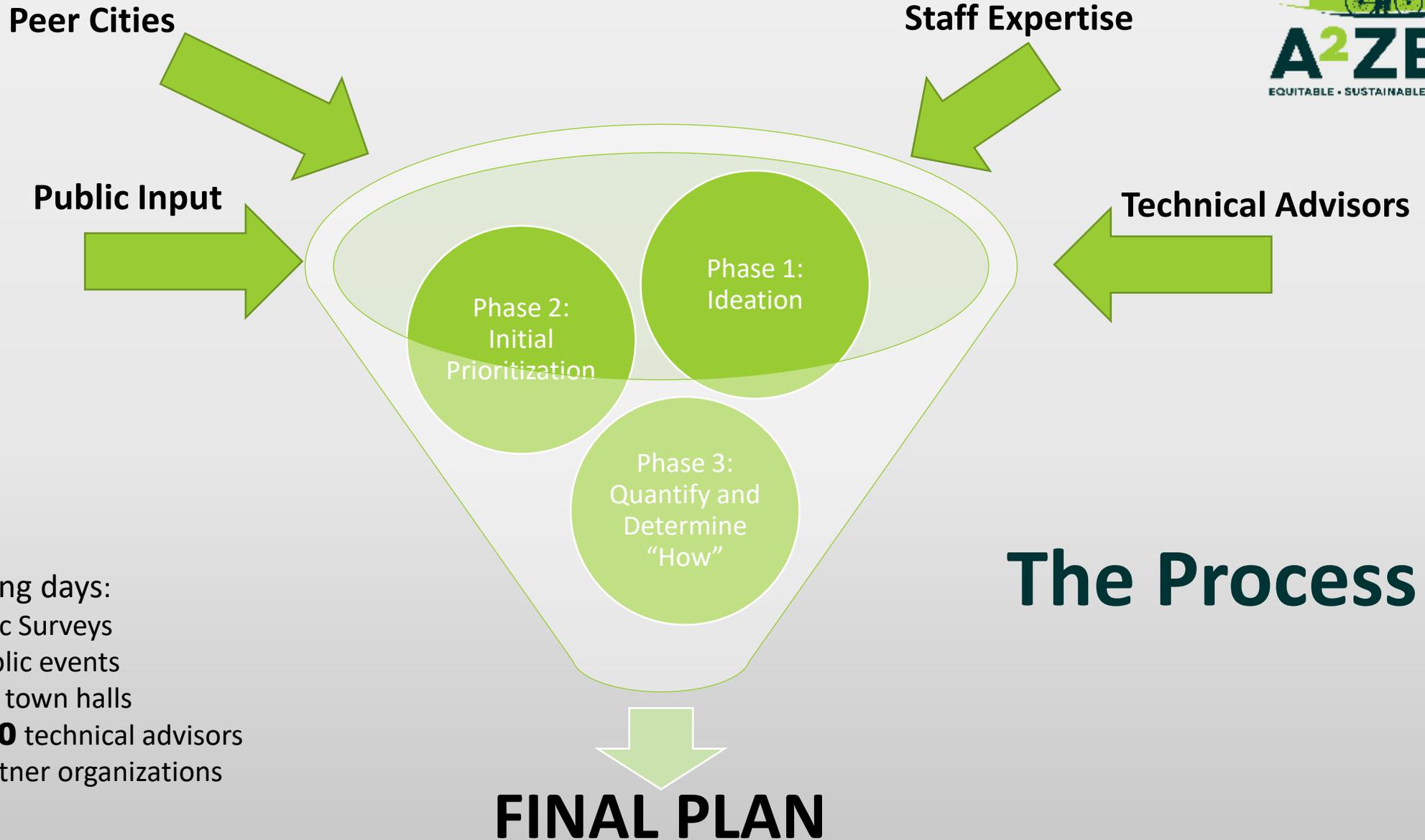


A BRIEF HISTORY OF SUSTAINABILITY ACTIVITIES IN ANN ARBOR



Creation of A²ZERO





The Process

- 82** working days:
- **3** Public Surveys
 - **68** public events
 - **2** large town halls
 - Over **80** technical advisors
 - **66** partner organizations

The Values



Equitable



Sustainable



Transformative



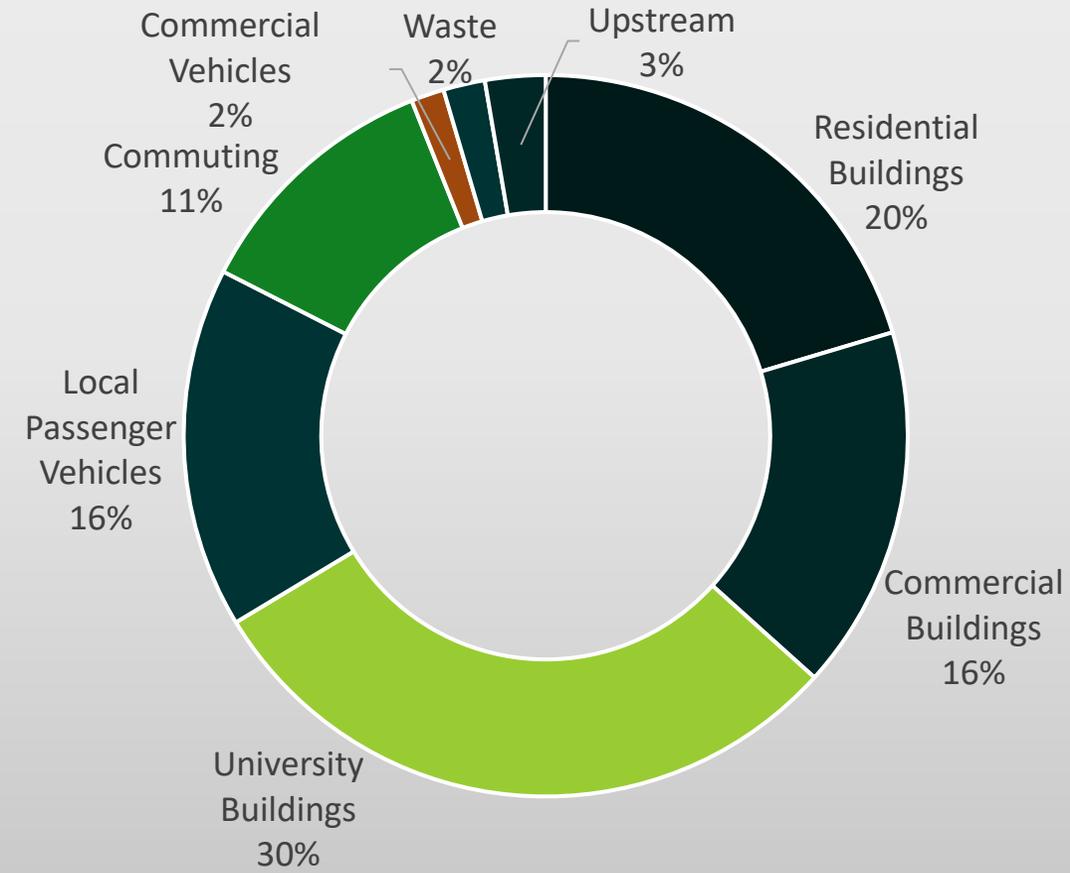
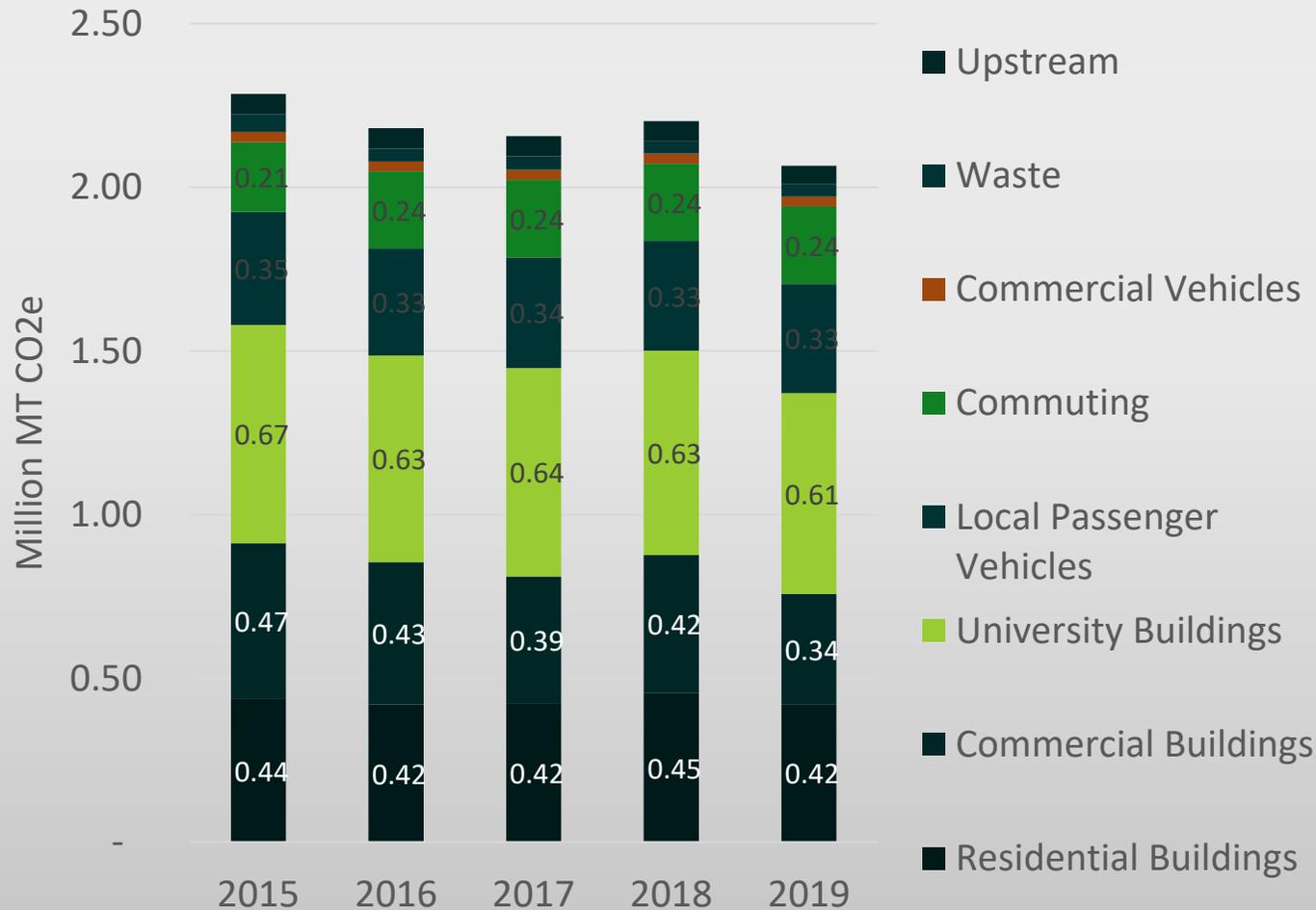
A²ZERO Vision



Together, creating and implementing a just transition to carbon neutrality by the year **2030.**



Emissions by Sector





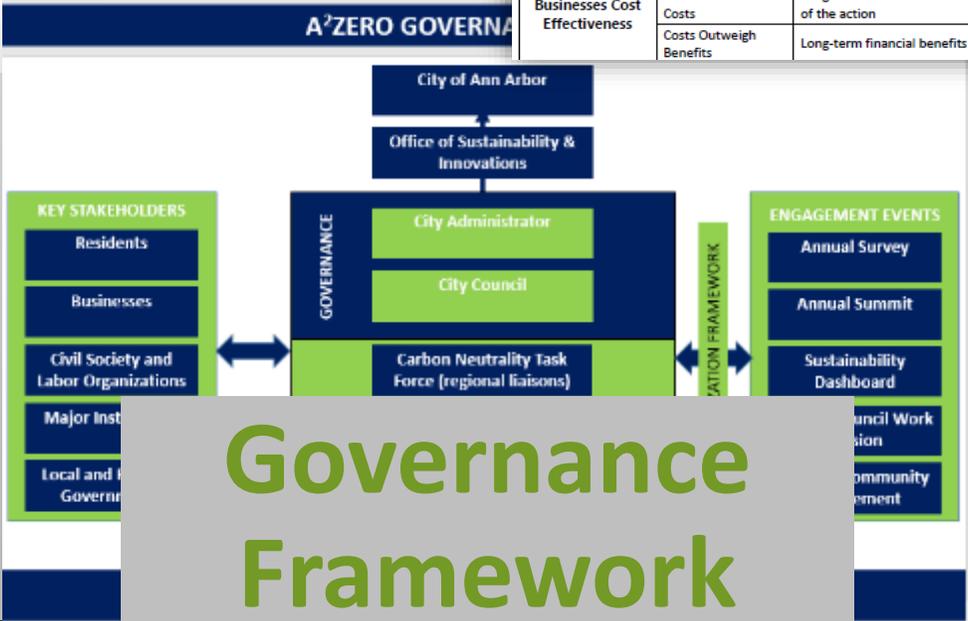
The Plan



ANN ARBOR'S
LIVING CARBON NEUTRALITY PLAN
MARCH 2020

PRIORITIZATION FRAMEWORK			
GHG MITIGATION CRITERIA			Scoring
High Long-Term GHG Reduction Potential	High Long-Term	The action has a high (over 5%) community greenhouse gas emissions reduction potential past 2030	6
	Medium Long-Term	The action has a medium (between 3%-5%) community-wide greenhouse gas reduction potential past 2030	4
	Small Long-Term	The action has a small (between 0%-2%) community greenhouse gas reduction potential past 2030	2
High Short-Term GHG Reduction Potential			6
			4
			2
City Cost Effectiveness			2
			1
			0
	Benefits	Implementation costs slightly outweigh the long-term financial benefits	-1
	Costs Significantly Outweigh Benefits	Implementation costs significantly outweigh the long-term financial benefits	-2
City Relative Cost (Capital)	None	The City can pursue without a major capital investment	2
	<\$5M	The City can pursue with a modest capital investment OR don't know what kind of capital investment is needed	1
	>\$5M	The City requires a major capital investment to pursue this action	0
City Relative Cost (Operation)	Decreases Costs	Action will minimize operating costs for the City (i.e., staffing, maintenance)	2
	No Impact	Action will have no impact on operating cost for the City OR don't know the relative operating costs	0
	Increases Costs	Action will not minimize and may increase operating costs (i.e., staffing, maintenance) for the City	-2
Residential and Businesses Cost Effectiveness	Benefits Outweigh Costs	Long-term financial benefits outweigh implementation costs	
	Benefits Match Costs	Long-term financial benefits match implementation costs OR don't know the overall cost of the action	
	Costs Outweigh Benefits	Long-term financial benefits do not outweigh implementation costs	

Prioritization Framework



Governance Framework

A2Zero Investment Plan

OVERVIEW
This document outlines an investment approach for the A2Zero Carbon Neutrality Plan. It includes an alternative framing around our community's commitment to carbon neutrality, a look at the historical impact of our community's greenhouse gas emissions, and a projected investment scenario, highlighting investments and costs specific to actions identified as falling under the responsibility of the City of Ann Arbor, and a presentation of the cost of inaction. As there is no way to know exactly what the funding landscape will look like 10 or 11 years into the future, the investment scenario should be viewed as directional and only one possible scenario of what the future may look like. Many things will inform what resources are actually available to do this work and staff will continue to aggressively pursue funding opportunities, collaborations, and innovative financing mechanisms to lower the upfront cost to the city and our residents.

FRAMING
To-date, the financial conversation around A2Zero has focused on the costs to implement the plan. While there will be costs, nearly all actions are investments. What this means is that investing in nearly all of the actions return benefits to the City, to our residents, to our businesses, or to society as a whole. As illustration, data shows that \$1 invested in energy scenarios for how the A2Zero Plan could be funded so the attached document should be viewed as one possible scenario, amongst many. Additionally, the scenario should be considered directional as it is impossible to know what types of federal, state, or philanthropic grants, or public-private partnership may exist for all 7 strategies identified in the Plan over the next 10 years. Moreover, costs for the plan were modeled using today's dollars. It is highly likely, however, that advancements in technology will help lower some of the costs within the plan.

Investment Scenario

A²ZERO Strategies



STRATEGY 1:

Power Our Electrical Grid with 100% Renewable Energy

STRATEGY 3:

Significantly Improve the Energy Efficiency in our Homes, Businesses, Schools, Places of Worship, Recreational Sites, and Government Facilities

STRATEGY 5:

Change the Way We Use, Reuse, and Dispose of Materials

STRATEGY 2:

Switch our Appliances and Vehicles from Gasoline, Diesel, Propane, Coal, and Natural Gas to Electric

STRATEGY 4:

Reduce the Miles we Travel in our Vehicles by at least 50%

STRATEGY 6:

Enhance the Resilience of Our People and Our Place

OTHER STRATEGIES:

This strategy covers the remaining programs and activities that don't fit into other areas. It also includes greenhouse gas emissions offsets to close out any

THE ACTIONS



1. Community Choice Aggregation
2. On-Site Renewable Energy Generation with Battery Storage (Bulk Buys)
3. Community Solar Program
4. Landfill Solar Project
5. Home and Business Electrification Policies and Support
6. Electrify Buses
7. Support Community Electric Vehicle and Solar Bulk Buys
8. Electrify City Fleet
9. Electrify Private Fleet
10. Expansion of Electric Vehicle Charging Infrastructure
11. Support Transition to More Energy Efficient Homes and Businesses
12. Update Building Codes
13. LED Powered Streetlights and Traffic Signals
14. Energy Disclosure / Benchmarking
15. Loan Loss Reserve

16. Energy Concierge and Community Education
17. Net Zero Energy Affordable Housing
18. Green Business Challenge
19. Green Rental Housing Program
20. Aging in Place Program
21. Expansion of Shared Mobility Program
22. Implement a Transit Plan
23. Expand and Enhance Local Transit
24. Increase Transit Ridership
25. Increase Transit Safety
26. Increase Transit Accessibility
27. Mix of Transit Modes
28. Tie Transit to Other Services
29. Expand Composting Program
30. Expansion of Commercial Recycling
31. Require Sustainable Materials in New and Existing Developments

32. Move Toward a Circular Economy
33. Support a Plant Rich Diet
34. Enhance Refrigerant Recycling and Reuse Program
35. Invest in Resilience Hubs
36. Foster Neighborhood and Youth Ambassadors
37. Preserve & Enhance Local Tree Canopy
38. Conduct Asset and Needs Mapping of Neighborhoods
39. Assist in Assembling and Disseminating Emergency Preparedness Kits
40. Implement Sensors to Monitor Heat, Air Quality, Waterways, and Flooding
41. Equity Programs
42. Sustaining Ann Arbor Together Grant Program
43. Internal Carbon Price
44. Greenhouse Gas Emissions Offsets

35+

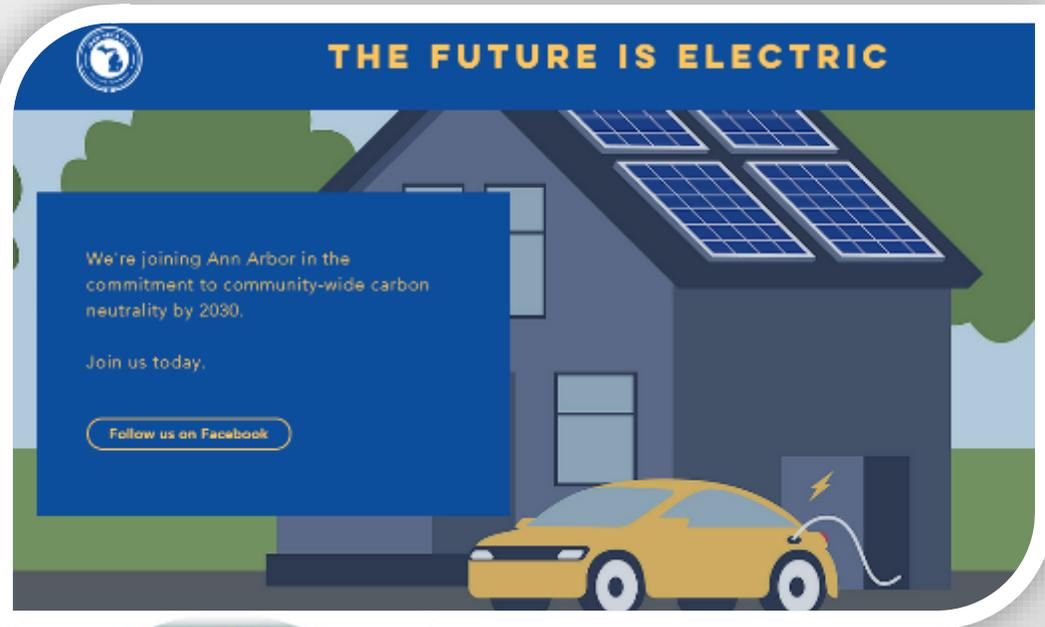
A Quick Look at A²ZERO Today

Renewable Energy

- Designed over **4.5MW** of solar at City facilities
- Over **3MW** of solar installed through Solarize***
- Landfill solar: 20MW of solar; PUD amendment approved; community solar commitment***
- Began exploration of a Sustainable Energy Utility***
- Intervenor in rate cases***
- Exploring vPPA and vPRA



Beneficial Electrification



- Drafted and started to implement whole-home A²ZERO assessment***
- Sticker replacement campaigns***
- Contractor training and badging program***
- Designing an all-electric campaign
- EV Readiness Ordinance***
- First Fast Chargers and tripling of L2 chargers in system
- City fleet is 20% electric...and growing
- Exploring electrification collaboration with climate vanguard communities***



Efficiency / Energy Waste Reduction



- Passed Benchmarking ordinance; city buildings reported***
- Rental Efficiency Standard initiated***
- Home Energy Reporting Disclosure Drafted***
- Working with A2 Housing Commission on net zero energy housing sites & EV charging
- Completed first **15** homes for Aging in Place Efficiently; waitlist full; fundraising now
- Pushing for adoption of updated Building and Energy Codes***
- Applied for WAP E&I grant to get ~**30** low-income homes to net zero
- Collaboration with 2030 District and lots of community engagement



Mobility



- Supported development and implementation of Vision Zero and tie to zero emissions
- Supported federal applications for transit expansion locally and regionally
- Bicycle discount programs
- Establishing telecommuting project



Circular Economy



- Launched education series on plant-rich diets; moving forward more sustainable food options for City facilities
- Returnable container program (A²R³)* **
- Launched zero waste challenge: Resident Race to Zero***
- Applied for grants to advance circular economy locally
- Moved to year-round composting
- Developing circular economy strategy
- Electronics takeback events
- Fix-It Clinics.



Natural Systems



- Launched **10,000** Trees Initiative; **3,000** trees planted***
- Launched community tree planting program***
- Developed soil carbon tool with UM students
- Developed tree maintenance and care app
- Undergoing Master Rain Gardener training to help residents with rain gardens
- Purchased air quality monitors***
- Pollinator habitat expansion***
- Fertilizer management***

Resilience



- Distributed over **200** emergency kits***
- Supported Emergency Relief Station
- **3rd** cohort of A²ZERO Ambassadors***
- Holistically integrating climate change into MHMP update***
- Relaunching neighborhood-based work***
- Working on second and third resilience hubs***



EMERGENCY PREPAREDNESS



MAKE A PLAN **BUILD A KIT** **BE INFORMED**

Community Engagement***



- Equitable Engagement Steering Committee
- Climate, Coffee, Conversation
- A²ZERO Sustainability Forums
- Food and Emergency Kit Distribution
- Meals on Wheels and Energy kits
- Earth Day
- Arbor Day
- **A²ZERO Week**
- A²ZERO Collaborators
- Neighborhood Meetings
- Summerfest Tabling
- Scavenger Hunt
- AAPS Collaboration
- Observer, CTN
- The Ann Arbor Distilling Company

New Initiatives



Net Zero Energy Fire Station

- First east of the Mississippi



First Decarbonized Neighborhood in Midwest

- Bryant – community engagement
- Fundraising
- Co-design strategies
- Transformation

Engagement Techniques



Volunteer



Co-Hosting an Event



Share Your Feedback



The City of Ann Arbor is seeking feedback on the creation of the Ann Arbor

SUSTAINABLE ENERGY UTILITY (SEU)

A utility designed to provide reliable, 100% clean, affordable, locally built, and community-owned power.

Please provide feedback and learn more at:
www.a2gov.org/a2seu



Submit Comments
by April 15th

GREEN RENTAL HOUSING

Brought to you by the Ann Arbor Office of Sustainability and Innovations

We want your input on a set of policy recommendations designed to improve the safety, comfort, health, and energy efficiency of rentals in Ann Arbor.

Learn more and submit comments here:
www.a2gov.org/sustainability/GreenRentalHousing



Join Listserv and Stay Up To Date

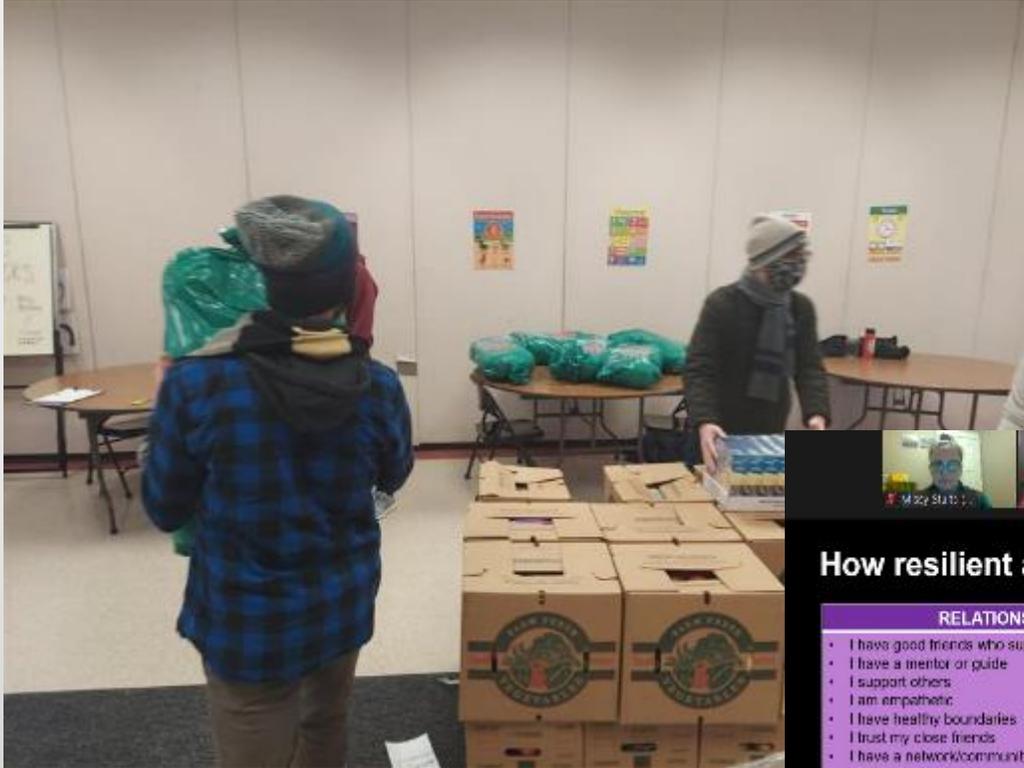


The screenshot shows the 'Newsletter & Events' page on the City of Ann Arbor website. At the top, there are navigation tabs for 'ENJOY ANN ARBOR', 'BUSINESS IN ANN ARBOR', and 'DEMOCRACY IN ANN ARBOR', along with 'SERVICES' and 'DEPARTMENTS'. A search bar is also present. The main heading is 'Newsletter & Events Home'. Below this, there is a section for 'Keep up to date with what's happening at the Office of Sustainability and Innovations!' with a sub-heading 'A2ZERO' logo. A calendar for April 2022 is displayed, with the 28th highlighted. To the right, there is a list of 'OSI Community Engagement Specialists' with contact information for Galen Hardy and Zach Wolk. At the bottom, there is a 'Newsletter' section with a brief description of the quarterly newsletter.

The screenshot shows the 'Ann Arbor Update' email sign-up form. The header features the City of Ann Arbor logo and the text 'City of Ann Arbor Update'. The form is titled 'Email Updates' and includes the instruction: 'To sign up for updates or to access your subscriber preferences, please enter your contact information below'. There are two main input fields: 'Subscription Type' with a dropdown menu showing 'Email' selected, and 'Email Address' with a red asterisk indicating it is required. Below the form are 'Submit' and 'Cancel' buttons.



A²ZERO Ambassadors



How resilient are you today? A personal resilience quiz

<p>RELATIONSHIPS</p> <ul style="list-style-type: none"> • I have good friends who support me • I have a mentor or guide • I support others • I am empathetic • I have healthy boundaries • I trust my close friends • I have a network/community that I identify with and can turn to for support 	<p>INTERNAL BELIEFS</p> <ul style="list-style-type: none"> • Being of service is important to me • I know my personal strengths • I am creative • I have strong beliefs and values • I am hopeful about the future and practice active hope • I have a clear sense of purpose in life • I maintain a positive attitude during difficult situations • I can sit with uncertainty and sadness • I feel lovable
<p>INITIATIVE</p> <ul style="list-style-type: none"> • I communicate effectively • I try different ways to solve a problem • I have regular, healthy hobbies • I seek out new knowledge and perspectives • I am open to new ideas • I laugh often • I am able to say "no" • I can ask for help • I have skills to help me relax and manage stress 	<p>SELF-CONTROL</p> <ul style="list-style-type: none"> • I express my emotions and can label my feelings • I set limits for myself • I am flexible • I can calm myself down • I know how to turn stress into positive energy • I practice self-care and have healthy outlets and routines

A²ZERO Collaborator

About

Vision and Mission

Our Team

A2ZERO Community Collaborators

Sustainability-Related Boards and Commissions

Employment Opportunities

A2ZERO Community Collaborators

[Home](#) » [Departments](#) » [Sustainability and Innovations](#) » [About](#) » **A2ZERO Community Collaborators**



To fully realize the A²ZERO plan, the Office of Sustainability and Innovations collaborates with organizations and businesses all over town. Our work wouldn't be possible without the help of these important community members. If you are interested in becoming an A²ZERO Collaborator, please email us at sustainability@a2go.org.

Residential Neighborhood Groups/Citizens at Large

- [Forest Hills Cooperative](#)
- [Glacier Highlands Neighborhood Association](#)
- [Ann Arbor Community Commons](#)
- [Old Forth Ward Historic Neighborhood Association](#)
- [Ann Arbor Public Power](#)

Student Organizations

- [UM College Democrats](#)
- [Students for Clean Energy](#)
- [Citizen's Climate Lobby - UM Student Chapter](#)
- [Ross Energy Group](#)
- [UM Climate Action Network](#)
- [Environmental Consulting Organization at the University of Michigan](#)
- [StudentSustainability Coalition](#)

City Units

- [City Administrator](#)
- [Communications](#)
- [Parks and Recreation, including NAR, parks planning, Greenbelt](#)
- [Public Works](#)
- [Sustainability and Innovation](#)
- [Systems Planning](#)
- [Transportation](#)

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Sustaining Ann Arbor Together Grant





Thank You

www.a2gov.org/sustainability