



Implementing A²ZERO

Year Five (ish) in Review

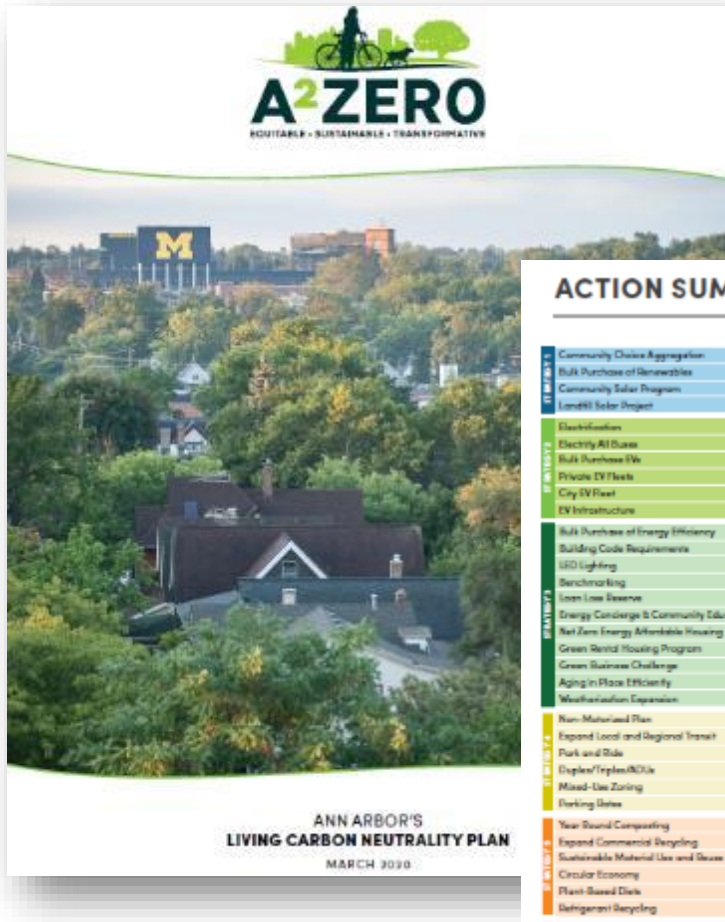
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A Little Context



ACTION SUMMARY TABLE

	Total Costs	CRD Reduction	Total emissions	\$/ton	Co-Benefits
COMMUNITY CHOICES					
Community Choice Aggregation	\$3,245,000	754,000	36.8%	\$4	Coming Soon
Bulk Purchase of Renewables	\$605,000	85,000	3.9%	\$7	
Community Solar Program	\$205,000	15,000	0.6%	\$16	
Local Solar Program	\$80,000	21,000	1.7%	\$3.8	
ENERGY EFFICIENCY					
Electrification	\$270,000	362,000	16.4%	\$70	Coming Soon
Electricity All Sectors	\$90,000,000	10,000	0.0%	\$ 5,000	
Bulk Purchase of EVs	\$700,000	101,000	4.6%	\$6	
Private EV Fleets	\$123,000	0	0.0%		
City EV Fleet	\$4,000,000	1,500	0.7%	\$2,666	
EV Infrastructure	\$42,000,000	0	0.0%		
ENERGY EFFICIENCY					
Bulk Purchase of Energy Efficiency	\$270,000	242,000	16.1%	\$ 4	Coming Soon
Building Code Requirements	\$60,000,000	46,000	0.0%	\$ 40	
LED Lighting	\$700,000	2,600	6.6%	\$1,206	
Benchmarking	\$123,000	0	0.0%		
Green Line Reserve	\$4,000,000	0	0.0%		
Energy Concierge & Community Education	\$42,000,000	0	0.0%		
Net Zero Energy Affordable Housing	\$800,000	400	0.0%	\$2,000	
Green Rental Housing Program	\$200,000	0	0.0%		
Green Business Challenge	\$700,000	0	0.0%		
Aging in Place Efficiency	\$700,000	0	0.0%		
Weatherization Expansion	\$700,000	0	0.0%		
TRANSPORTATION					
Non-Motorized Plan	\$3,245,000	854,000	2.8%	\$40	Coming Soon
Expand Local and Regional Transit	\$605,000	91,000	4.3%	\$7047	
Park and Ride	\$205,000	28,400	1.3%	\$5,086	
Carpool/TripShare/Club	\$80,000	2,300	0.7%	\$714	
Mixed-Use Zoning	\$205,000	0	0.0%		
Parking Deter	\$4,000,000	0	0.0%		Coming Soon
Year Round Composting	\$30,000,000	400	0.7%	\$60,000	
Expand Commercial Recycling	\$18,400,000	5,600	0.3%	\$3,286	
Sustainable Material Use and Source	\$200,000	0	0.0%		
Circular Economy	\$200,000	0	0.0%		
Plant-Based Diet	\$208,400	0	0.0%		Coming Soon
Refrigerant Recycling	\$70,400	0	0.0%		
Resilience Hub	\$1,000,000	3,800	0.7%	\$2,630	
Neighborhood and Youth Ambassadors	\$300,000	0	0.0%		
Tree Canopy	\$1,100,000	460	0.0%	\$2,390	
Neighborhood Asset Mapping	\$300,000	0	0.0%		Coming Soon
Emergency Kit	\$200,000	0	0.0%		
Sensors and Data Monitoring	\$300,000	0	0.0%		
Equity Program	\$200,000	0	0.7%		
SAIT Grant Program	\$1,000,000	0	0.0%		Coming Soon
Internal Carbon Tax	\$70,000	0	0.0%		
Offsets	\$5,440,000	298,000	13.6%	\$32	
TOTAL	\$1,099,400,000	5,100,000	100.0%		



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

A Little Context



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%

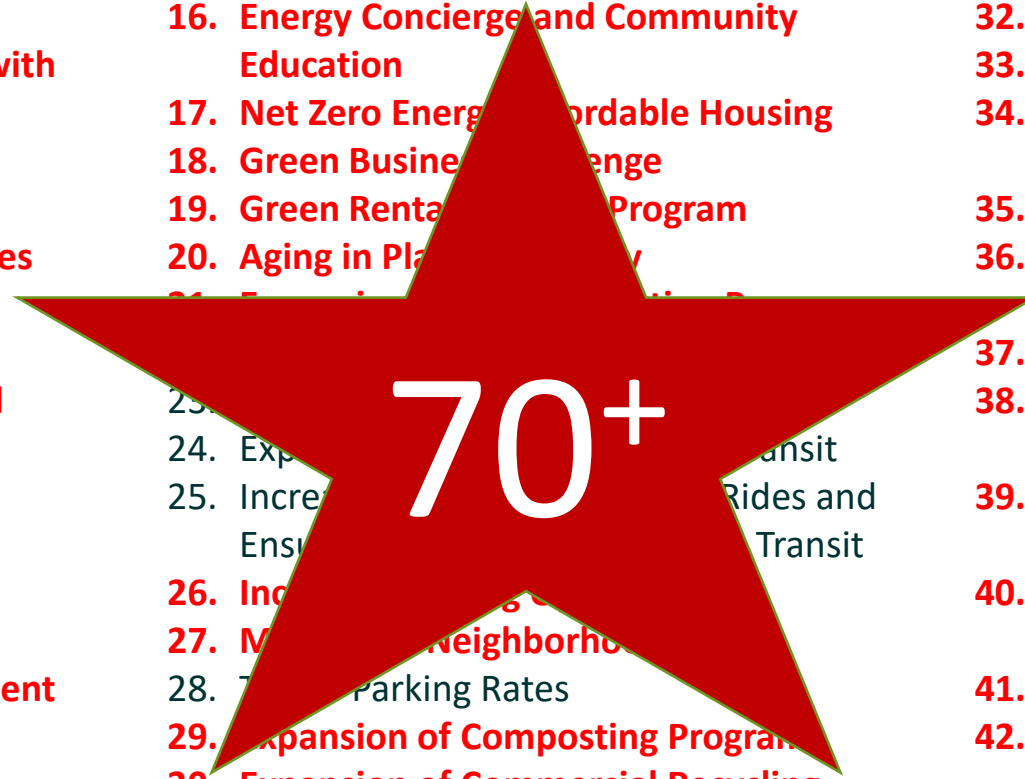
STRATEGY 6:

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

A Little Context



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 Program
20. Aging in Place Program
21. Energy Efficiency Program
22. Expand Transit
23. Expand Transit
24. Expand Transit
25. Increase Transit Rides and Ensure Transit
26. Increase Transit
27. Move Toward Neighborhood
28. Increase Parking Rates
29. Expansion of 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

A Little Context



18/44 Actions will be complete or near complete in 2025!

1. LED Powered Streetlights and Traffic Signals
2. Energy Disclosure / Benchmarking
3. Energy Concierge and Community Education
4. Green Business Challenge
5. Aging in Place Efficiently
6. Building Code Requirements
7. Green Rental Housing Ordinance
8. Net Zero Energy Affordable Housing
9. Weatherization Expansion
10. Implement Non-Motorized Plan
11. Mixed-Use Neighborhoods
12. Commercial Recycling
13. Refrigerant Recycling
14. Foster Neighborhood and Youth Ambassadors
15. Preserve & Enhance Local Tree Canopy
16. Implement Sensors to Monitor Heat, Air Quality, Waterways, and Flooding
17. Equity Programs
18. Sustaining Ann Arbor Together Grant Program



A Look Back – Renewable Energy



- Voter authorization of the Sustainable Energy Utility! SEU design and launch underway.
- Installed over 600kw of rooftop and ground mounted solar at City facilities
 - Lots more in design or nearing construction
- Solarize nearing 5.5MW!
- Geothermal installed at Bryant
- Initiated Citywide geothermal study
- Won award to construct a networked geothermal system in Bryant
- Achieved 70% renewable electricity at City facilities
- Submitted testimony in multiple cases before MPSC
 - Saved ratepayers over \$1,000,000,000 through interventions



A Look Back - Electrification

Signed the nation's first heating franchise to include a climate commitment

Nearing 40% electrification of City's light duty fleet

Launched A²ZERO Heat Pump Concierge

Launched local home energy rebate program

Launched electric lawn care rebate program

Launched EV charger discount program for multi-family sites

Supported Avalon Housing with electrification of two sites

Supported zero emissions propulsion study and successful grant application at TheRide

Installed geothermal at Bryant Community Center

Hosted 3rd annual electrification expo



A Look Back - Efficiency

- Bringing forward Green Rental Housing ordinance
- Supported the adoption of Michigan building and energy codes
- Launched Green Business Challenge
- Continued scaling Home Energy Advisor (concierge)
- Implementation of energy and water benchmarking ordinance
- Over 700 homes completed HES scores through HERD
- Supported weatherization expansion programming with County
- Collaboration with 2030 District!
- Increased rebate amounts for Home Energy Rebate program
- Significant advancements of energy efficiency work in the Bryant neighborhood



A Look Back – Mobility



- Funded more bike lanes and sidewalks



Implementing A²ZERO

- Supporting Comprehensive Land Use Plan update

**Ann Arbor Comprehensive Plan
OPEN HOUSES!**

The Open Houses will include information about the city and suburban to get your opinion on how it should change in the future. Each event will have the same material – choose the day and location that works best for you. Snacks and light refreshments will be available. If you or someone you know would benefit from translation assistance please contact: planning@a2gov.org

TUESDAY APRIL 23 4 - 7pm	WEDNESDAY APRIL 24 4 - 7pm	FRIDAY APRIL 26 4 - 7pm
Ann Arbor District Library Traverse Road 2375 Traverwood Dr	Ann Arbor District Library Westgate 2375 Traverwood Dr	Ann Arbor District Library Madeline Creek 1300 E. Eastman Street

Come share ideas for your neighborhood!

Visit the project site for more info:
a2gov.org/planning

- Supported re-introduction of bike share and borrow a cargo bike



A Look Back – Circular Economy

Hosted 3rd annual Local Food Fest

A2ZERO Food waste challenge helped over 540 Ann Arborites fight household food waste

Sustained and grew Sustainable Food Business Coalition

Reached over 1,7000 residents through collaboration with VegMichigan

Completed draft of a Ann Arbor Sustainable Food Framework

About to launch A2ZERO Community Cookbook

Launching circular economy planning initiative

Won grant for refrigerant recycling and replacement program

Launched electronic takeback events

Neighborhood swap days continue to grow and scale

Expanded commercial recycling – working on composting



A Look Back – Resilience

11,000 trees distributed!

Purchased Sesame Solar unit

Won \$1,000,000 USFS grant for tree planting in underserved areas

Initiated tree survival study

Air quality monitoring goal met

Pollinator-Aware Yard Care

Designing fourth and fifth resilience hubs

Emergency kid distribution and planning

Collaborated with Avalon on emergency preparedness working group

Senior Center is City's third resilience hub

Graduated 6th A²ZERO cohort – 100 Ambassadors. In 7th cohort

Joined heat resilience cohort

Cohosting Washtenaw Resilience Network

Won \$1,000,000 for regional resilience network



A Look Back – Engagement

Continued grants through Sustaining Ann Arbor Together program

Won national AmeriCorps program

Sponsored and hosted first Cinema and Sustainability film series

Held over 200 public events

Grew the A2ZERO Collaborators Networked

Held 4th annual A²ZERO Week

Green Fair, Summerfest and more!



A Look Forward



- Sustainable Energy Utility initiation
- Green Rental Housing ordinance
- Circular Economy strategy
- Sustainable Food strategy
- Returnable Container work – circularity commons?
- Emergency preparedness planning and support
- 2 more resilience hubs
- So much more!



A²ZERO and You!





THANK YOU

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