



# A<sup>2</sup>ZERO

EQUITABLE • SUSTAINABLE • TRANSFORMATIVE

# A<sup>2</sup>ZERO Vision

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





ANN ARBOR'S  
LIVING CARBON NEUTRALITY PLAN  
MARCH 2020

# The Plan

## ACTION SUMMARY TABLE

	Total Costs	GHG Reduction	%total emissions	\$/ton	Co-Benefits	
<b>STRATEGY 1</b>	Community Choice Aggregation	\$3,245,000	784,000	35.8%	\$4	<b>Coming Soon</b>
	Bulk Purchase of Renewables	\$605,000	85,000	3.9%	\$7	
	Community Solar Program	\$205,000	11,500	0.5%	\$18	
	Landfill Solar Project	\$80,000	23,000	1.1%	\$3.5	
<b>STRATEGY 2</b>	Electrification	\$7,100,000	362,200	16.5%	\$20	<b>Coming Soon</b>
	Electrify All Buses	\$80,575,000	13,800	0.6%	\$5,839	
	Bulk Purchase EVs	\$700,000	122,900	5.6%	\$6	
	Private EV Fleets	\$123,000	0	0.0%		
	City EV Fleet	\$4,000,000	1,100	0.1%	\$3,636	
EV Infrastructure	\$42,000,000	0	0.0%			
<b>STRATEGY 3</b>	Bulk Purchase of Energy Efficiency	\$7,100,000	242,500	16.5%	\$4	<b>Coming Soon</b>
	Building Code Requirements	\$80,575,000	48,300	0.6%	\$40	
	LED Lighting	\$700,000	2,600	5.6%	\$1,208	
	Benchmarking	\$123,000	0	0.0%		
	Loan Loss 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	\$530,000	0	0.0%		
	Green Business Challenge	\$700,000	0	0.0%		
	Aging in Place Efficiently	\$150,000	0	0.0%		
Weatherization Expansion	\$1,550,000	0	0.0%			
<b>STRATEGY 4</b>	Non-Motorized Plan	\$3,245,000	60,400	2.8%	\$40	<b>Coming Soon</b>
	Expand Local and Regional Transit	\$605,000	93,200	4.3%	\$7047	
	Park and Ride	\$205,000	28,400	1.3%	\$5,986	
	Duplex/Triplex/ADUs	\$80,000	2,200	0.1%	\$114	
	Mixed-Use Zoning	\$365,000	0	0.0%		
Parking Rates	\$4,500,000	0	0.0%			
<b>STRATEGY 5</b>	Year Round Composting	\$26,000,000	400	0.1%	\$65,000	<b>Coming Soon</b>
	Expand Commercial Recycling	\$18,400,000	5,600	0.3%	\$3,286	
	Sustainable Material Use and Reuse	\$270,000	0	0.0%		
	Circular Economy	\$270,000	0	0.0%		
	Plant-Based Diets	\$208,400	0	0.0%		
Refrigerant Recycling	\$179,400	0	0.0%			
<b>STRATEGY 6</b>	Resilience Hubs	\$5,025,000	2,500	0.1%	\$2,010	<b>Coming Soon</b>
	Neighborhood and Youth Ambassadors	\$350,000	0	0.0%		
	Tree Canopy	\$1,160,000	450	0.0%	\$2,578	
	Neighborhood Asset Mapping	\$300,000	0	0.0%		
<b>STRATEGY 7</b>	Emergency Kits	\$350,000	0	0.0%		<b>Coming Soon</b>
	Emergency Data Monitoring	\$300,000	0	0.0%		
	Emergency Preparedness	\$200,000	0	0.1%		
	Emergency Preparedness	\$1,000,000	0	0.0%		
	Internal Communications	\$75,000	0	0.0%		
	Offices	\$9,440,000	298,500	13.6%	\$32	
	Offices	\$9,440,000	298,500	13.6%	\$32	
<b>Total</b>	<b>\$1,056,403,800</b>	<b>2,168,950</b>	<b>100.0%</b>			

# A<sup>2</sup>ZERO 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 Efficiently
21. Expansion of Weatherization Program
22. Implement Non-Motorized Plan
23. Expand and Improve Local Transit
24. Expand and Improve Regional Transit
25. Increase Number of Park and Rides and Ensure Seamless Connection to Transit
26. Increase Housing Opportunity
27. Mixed-Use Neighborhoods
28. Tiered 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

# Solar at City Facilities

- RFP for solar at **13** City facilities – looking at **16-17** now!
- **12** parks
- Rooftop, ground mounted, carports, golf sheds all being considered



# Solar at City Facilities

## Process

- Finalize designs and costing – summer / fall
- Seek approval from Council to install fall
- **Installations begin – fall through spring/early summer 2022**





**Thank You**  
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