

Wheeler Center Solar Park

Presentation to the Energy Commission

April 12, 2022

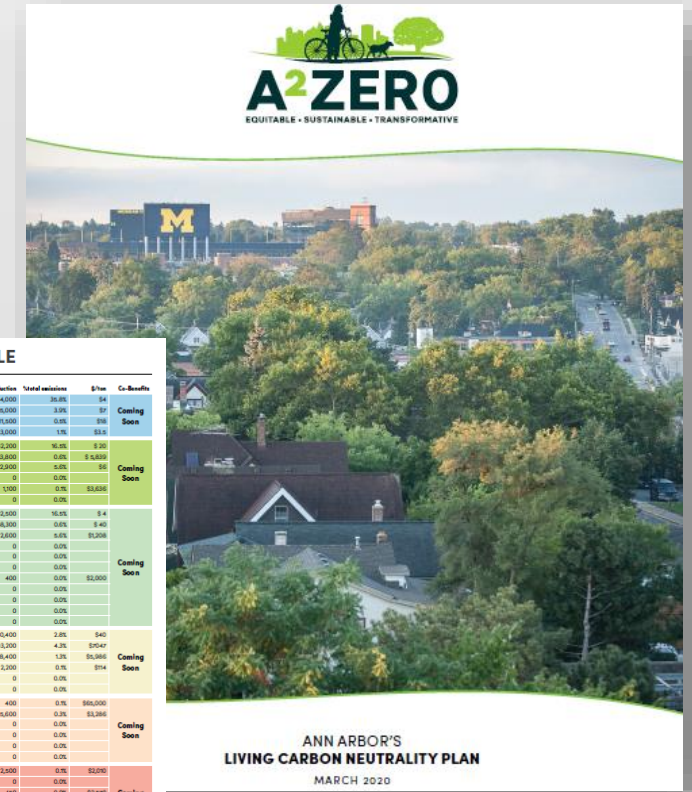
Presentation Outline

- A²ZERO Alignment
- Why Collaborate?
- Project Process
- Project Overview
- Subscriptions
- New Developments



A²ZERO and WCSP

- Strategy 1 – Powering our community with 100% renewable energy
 - Action 4: Landfill solar project
 - Action 3: Community Solar Program



ACTION SUMMARY TABLE

	Total Costs	GHG Reduction	Total Metrics	\$/ton	Co-Benefits
RENEWABLE ENERGY					
Community Choice Aggregation	\$1,245,000	164,000	36.8%	\$4	Coming Soon
Bulk Purchase of Renewables	\$650,000	84,000	3.3%	\$7	Coming Soon
Community Solar Program	\$200,000	10,000	0.1%	\$20	Coming Soon
Landfill Solar Project	\$80,000	2,000	1%	\$40	Coming Soon
ENERGY EFFICIENCY					
Electrification	\$200,000	362,000	16.3%	\$ 20	Coming Soon
Electricity All Sectors	\$80,000,000	10,000	0.0%	\$ 0.800	Coming Soon
Bulk Purchase of EVs	\$700,000	100,000	4.3%	\$4	Coming Soon
Private EV Fleet	\$10,000	0	0.0%		Coming Soon
City EV Fleet	\$4,000,000	1,000	0.1%	\$3,600	Coming Soon
EV Infrastructure	\$420,000	0	0.0%		Coming Soon
ENERGY EFFICIENCY					
Bulk Purchase of Energy Efficiency	\$700,000	142,000	16.3%	\$ 4	Coming Soon
Building Code Requirements	\$80,000,000	48,000	0.8%	\$ 1,667	Coming Soon
LED Lighting	\$700,000	2,000	0.8%	\$1,050	Coming Soon
Weatherstripping	\$100,000	0	0.0%		Coming Soon
Loose Seal Deems	\$4,000,000	0	0.0%		Coming Soon
Energy Counseling & Community Education	\$42,000,000	0	0.0%		Coming Soon
Net-Zero Energy Affordable Housing	\$60,000,000	400	0.1%	\$1,500	Coming Soon
Green Rental Housing Program	\$50,000	0	0.0%		Coming Soon
Green Business Challenge	\$700,000	0	0.0%		Coming Soon
Aging in Place Sustainably	\$100,000	0	0.0%		Coming Soon
Weatherization Expansion	\$1,500,000	0	0.0%		Coming Soon
WASTE REDUCTION					
Non-Materialized Plan	\$1,245,000	60,400	2.8%	\$40	Coming Soon
Expanded Local and Regional Transit	\$600,000	93,200	4.3%	\$1,395	Coming Soon
Park and Ride	\$200,000	38,400	1.8%	\$1,068	Coming Soon
Duplicate/Triples/BCVA	\$80,000	2,300	0.1%	\$114	Coming Soon
Mixed-Use Zoning	\$300,000	0	0.0%		Coming Soon
Parking Reform	\$4,000,000	0	0.0%		Coming Soon
WASTE REDUCTION					
Year Round Composting	\$20,000,000	400	0.1%	\$60,000	Coming Soon
Expanded Commercial Recycling	\$16,400,000	6,600	0.3%	\$1,286	Coming Soon
Suburban Material Use and Reuse	\$200,000	0	0.0%		Coming Soon
Circular Economy	\$200,000	0	0.0%		Coming Soon
Plant-Based Diets	\$208,400	0	0.0%		Coming Soon
Half-gallon Recycling	\$195,400	0	0.0%		Coming Soon
Neighborhood and Youth Ambassadors	\$400,000	2,000	0.1%	\$2,000	Coming Soon
Tree Canopy	\$1,000,000	400	0.0%	\$2,500	Coming Soon
Neighborhood Asset Mapping	\$100,000	0	0.0%		Coming Soon
Emergency Kit	\$300,000	0	0.0%		Coming Soon
Sensors and Data Monitoring	\$300,000	0	0.0%		Coming Soon
WASTE REDUCTION					
Equity Programs	\$200,000	0	0.0%		Coming Soon
SMART Green Program	\$100,000	0	0.0%		Coming Soon
Internal Carbon Tax	\$75,000	0	0.0%		Coming Soon
Others	\$5,440,200	398,000	19.0%	\$12	Coming Soon
TOTAL	\$1,096,432,000	1,708,900	100.0%		

Why Collaborate?

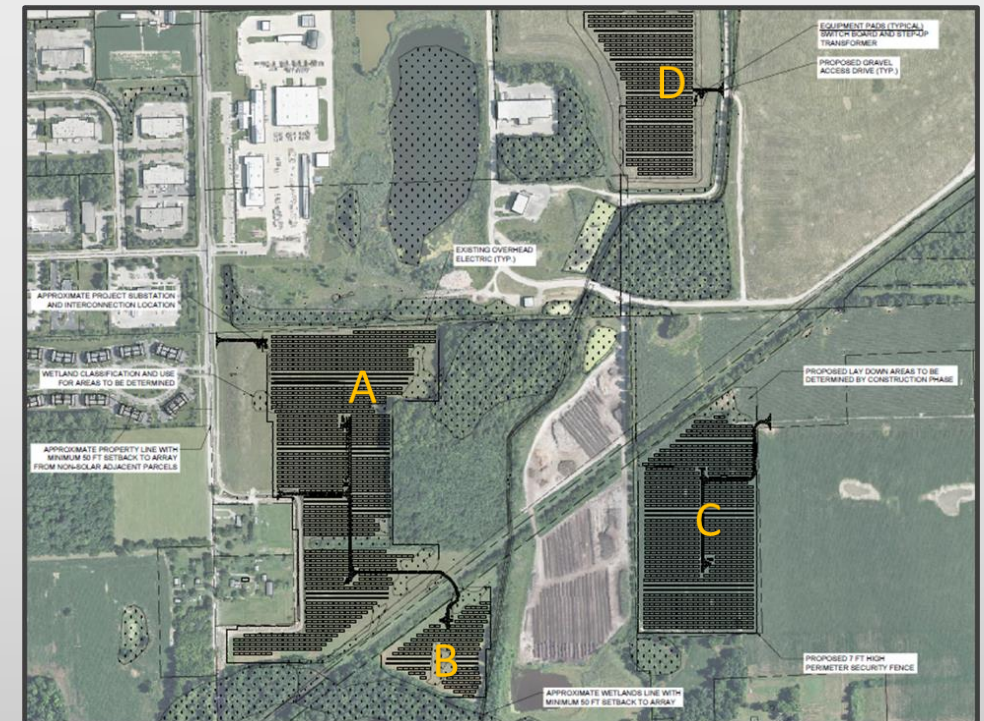
- Complex site
- Desire for community solar
- VGP Agreement
- Connection to DTE distribution lines (not ITC transmission)
 - Faster! Likelihood that energy will be used locally
- Demonstration project
 - Multi-institutional collaboration
 - Low-income solar offering

Project Process

- DTE and Ann Arbor partnered to develop requirements for an engineer, procurement, and construction (EPC) request for proposal (RFP)
- DTE issued the public RFP in October 2021 with a five-week bid period
- 10 responses were received from EPC contractors
 - Bids were evaluated across major categories of pricing, experience, project management, safety, and contract terms and conditions
- Round II reviews down selected to four bids for short-list conversations
- DTE down-selected to a single EPC contractor with agreement from Ann Arbor
- Negotiations are being finalized with the selected EPC contractor

Project Overview

- The Wheeler Center Solar Park is a 20 MW solar park with an estimated 35,000 MWh first year generation.
- Construction is expected to start early 2023 with generation commencing in early 2024.
- Array's A, B and C are located on greenfield sites
- Array D is located on the capped landfill



Subscriptions

- Subscription model – like MIGreenPower
- All subscribers get the same pricing per unit of energy
 - Exception: low-income subscriptions
- Levelized cost of energy minus the market value (capacity credit and locational marginal price for energy)
- DTE is responsible for operating and maintaining the site – if it doesn't produce, they don't get paid

New Development

- The federal government recently opened an investigation into whether tariff penalties of more than 200% should be imposed on 80% of the solar panels slated for the US market.
- S&P is calling this an "existential crisis" for the US solar industry.
- This is causing industry-wide cancellations or large cost increases on many projects. We are still learning about what the impact on this project may be.



Next Steps

- Energy Commission consideration
- City Council consideration
- Public information session
- Filing with Michigan Public Service Commission
- Approval
- Groundbreaking
- Recruitment
- Energy production and emissions reductions!





Thank You

www.a2gov.org/sustainability