OFFICE OF SUSTAINABILITY & INNOVATION

TABLE OF CONTENTS

- THE GUIDING GOALS
- THE (LIVING) PLAN
- FUNDING & NEXT STEPS

THE GUIDING GOALS

- 100% Clean and Renewable Energy Powering Municipal Operations
- 25% Reduction in Community-Wide Emissions by 2025
- 90% Reduction in Community-Wide Emissions by 2050
- One Community: Advancing Racial Equity in Washtenaw County

- **Ann Arbor Is the Most Sustainable and Equitable City in America!**

THE (LIVING) PLAN

- Energy Efficiency
- Renewables
- Education & Engagement
- EVs
- Cross-Cutting

ENERGY EFFICIENCY

Green Rental Housing

Implement a program and associated policy for residential rental properties requiring property owners to meet a minimum efficiency standard before receiving their rental licenses.

Green Rental Housing: By the Numbers

ESTIMATED

Ann Arbor Impacts and Costs

Cost to the City to Implement Over 3 Years	Annual Energy Bill Savings	Annual Energy Savings	Annual CO2 Reductions
			
$331,000	$5.1 - $15.2 million	358 – 1,075 Billion Btus	68.8 – 206.3 million lbs CO2e

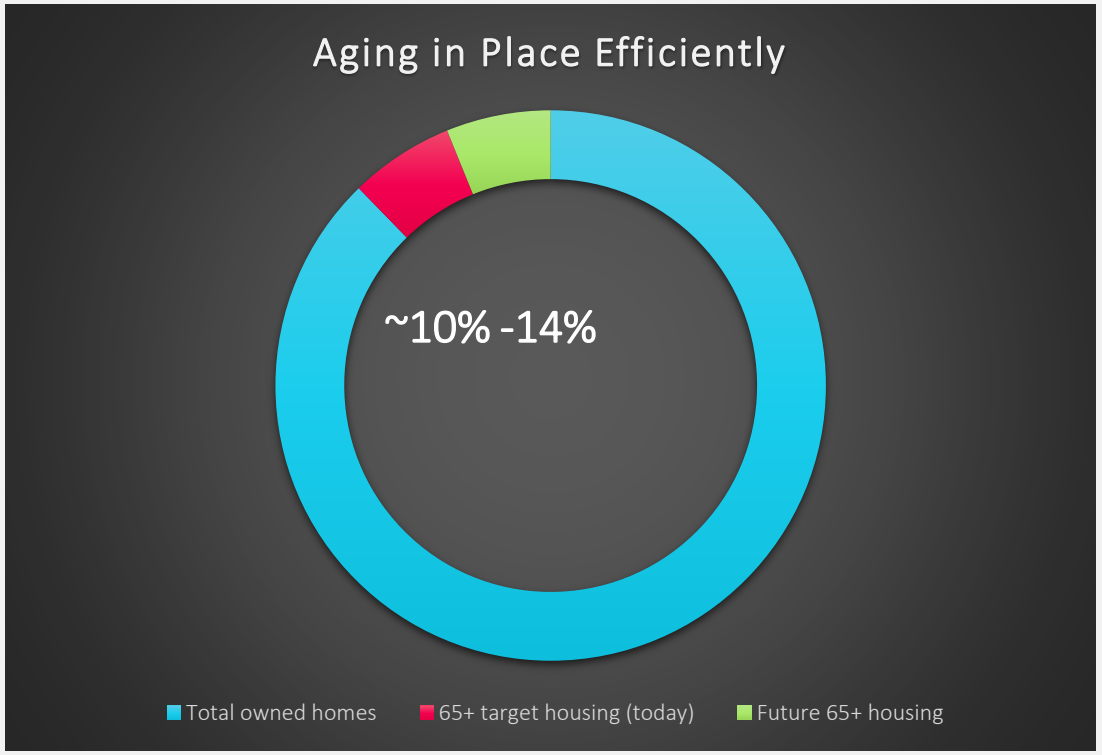
Note: Range is based on 10-30% energy savings assumption over existing conditions

Aging in Place Efficiently

Work with local partners to ensure that residents can age in place in energy efficient, and healthy residences.

Aging in Place Efficiently: By the Numbers

Vital Seniors Program – Ann Arbor Area Community Foundation



Two year pilot program:

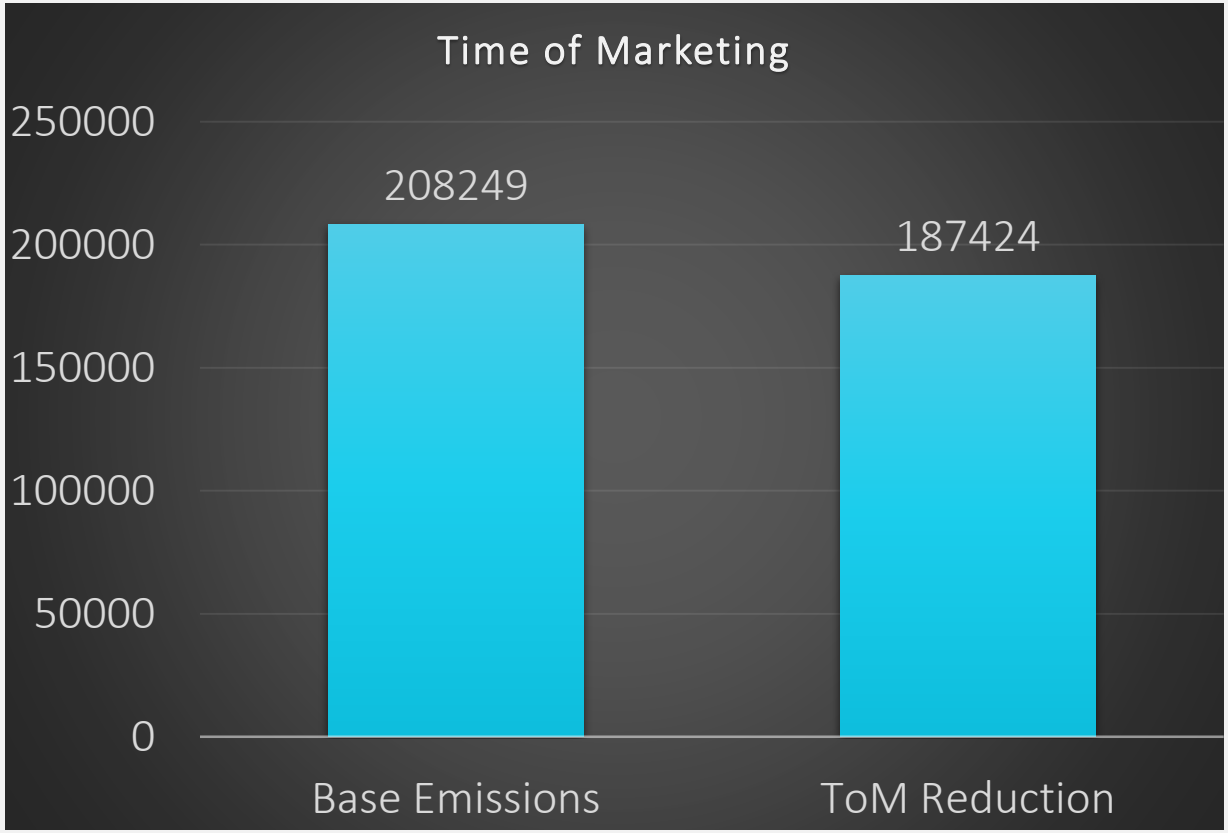
- 15-20% increases in efficiency in senior residences
- Pursuing grants to fund ¾ of the program costs
- Partnership opportunities
- National expansion potential

Time of Marketing

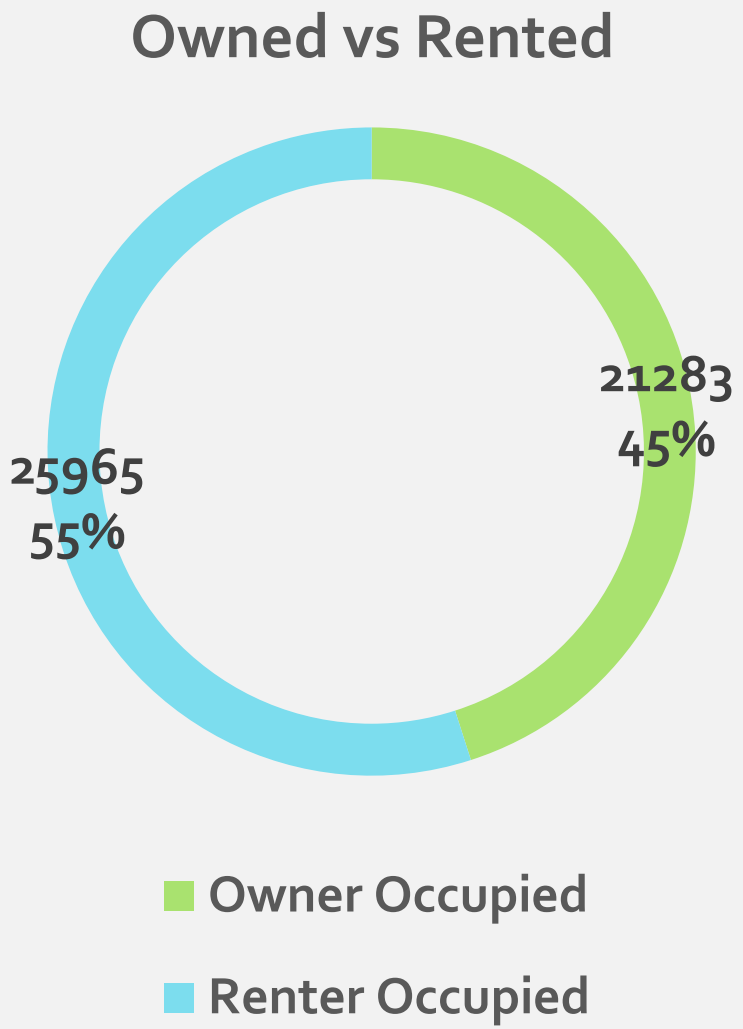
Require sellers of a single-family home to obtain and disclose the findings of a Home Energy Score

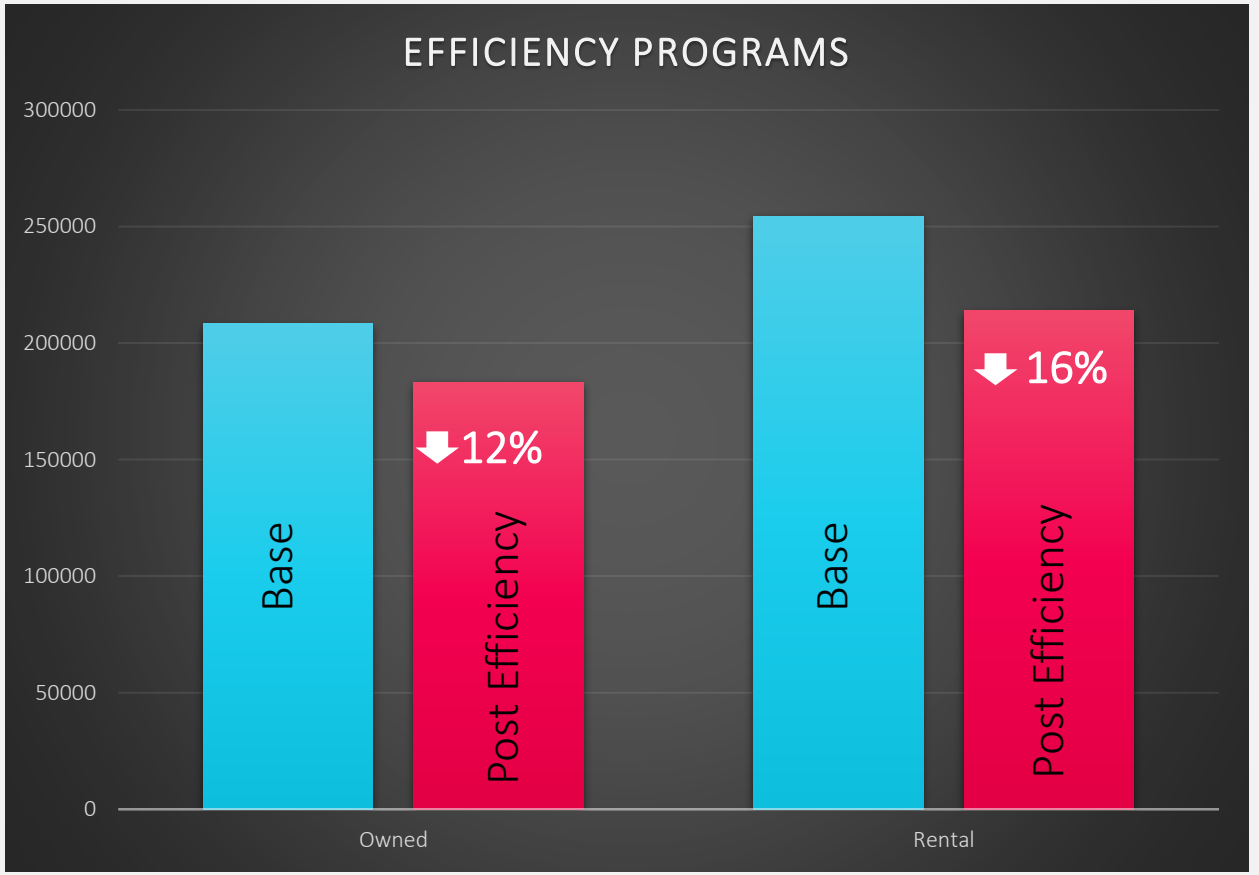
Time of Marketing: By the Numbers

Through disclosure and access to efficiency upgrade opportunities, including financing options, this program could achieve a 10% energy reduction.



Efficiency Programs: By the Numbers





RENEWABLE ENERGY

Net Zero Affordable Housing

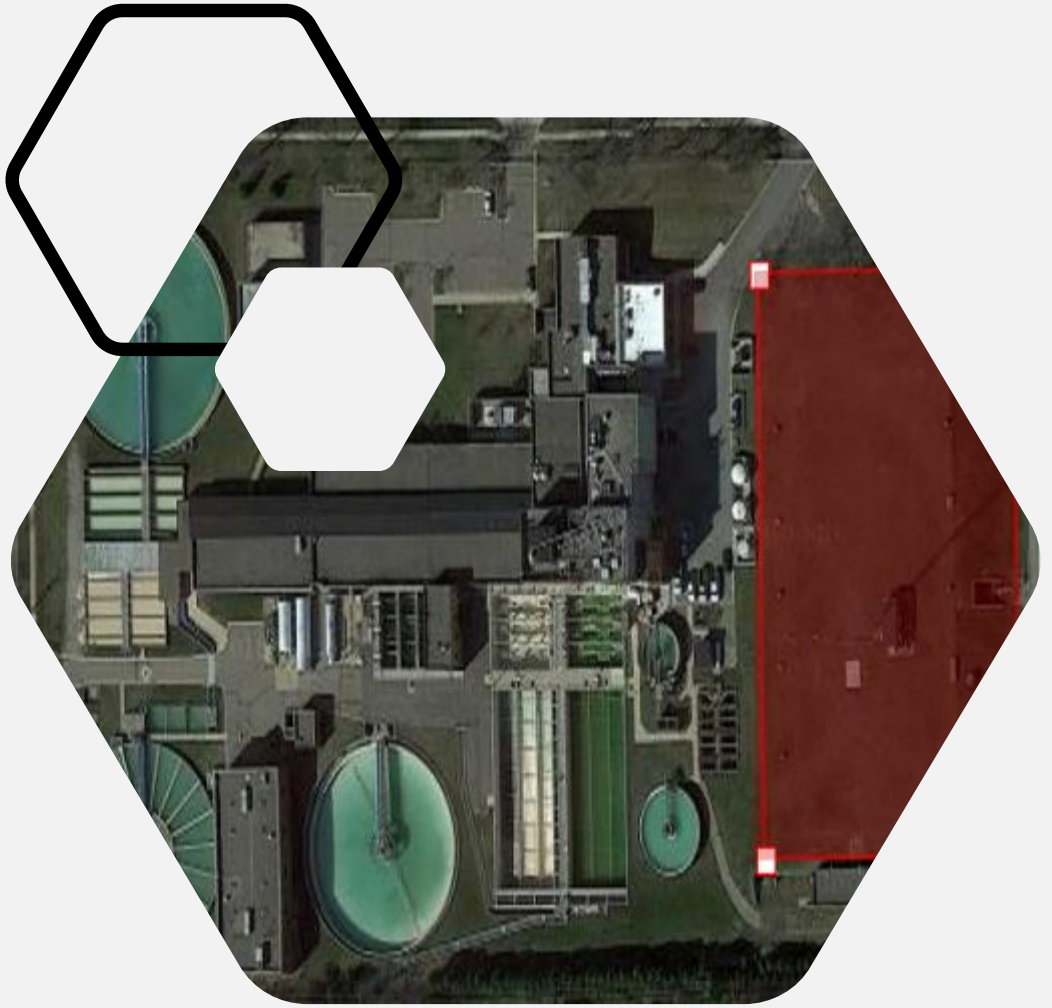
Use a combination of solar systems and energy efficiency to reduce GHG emissions of our affordable housing units to 0

DRAFT

LOCATION	SOLAR CAPACITY
Broadway Terrace	45
Green Baxter Court	57
Hikone	47
Hillside Manor	17
Lower Platt	13
Maple Meadows	49
West Arbor	100
Oakwood	6
South Seventh	18
Upper Platt (Colonial Square)	20
West Washington	5
White/State/Henry	45
TOTAL	**422 kW**

100% Clean & Renewable Municipal Operations

Clean & Renewable Energy = Energy whose generation is associated with little to no pollution and is generated from an unlimited source



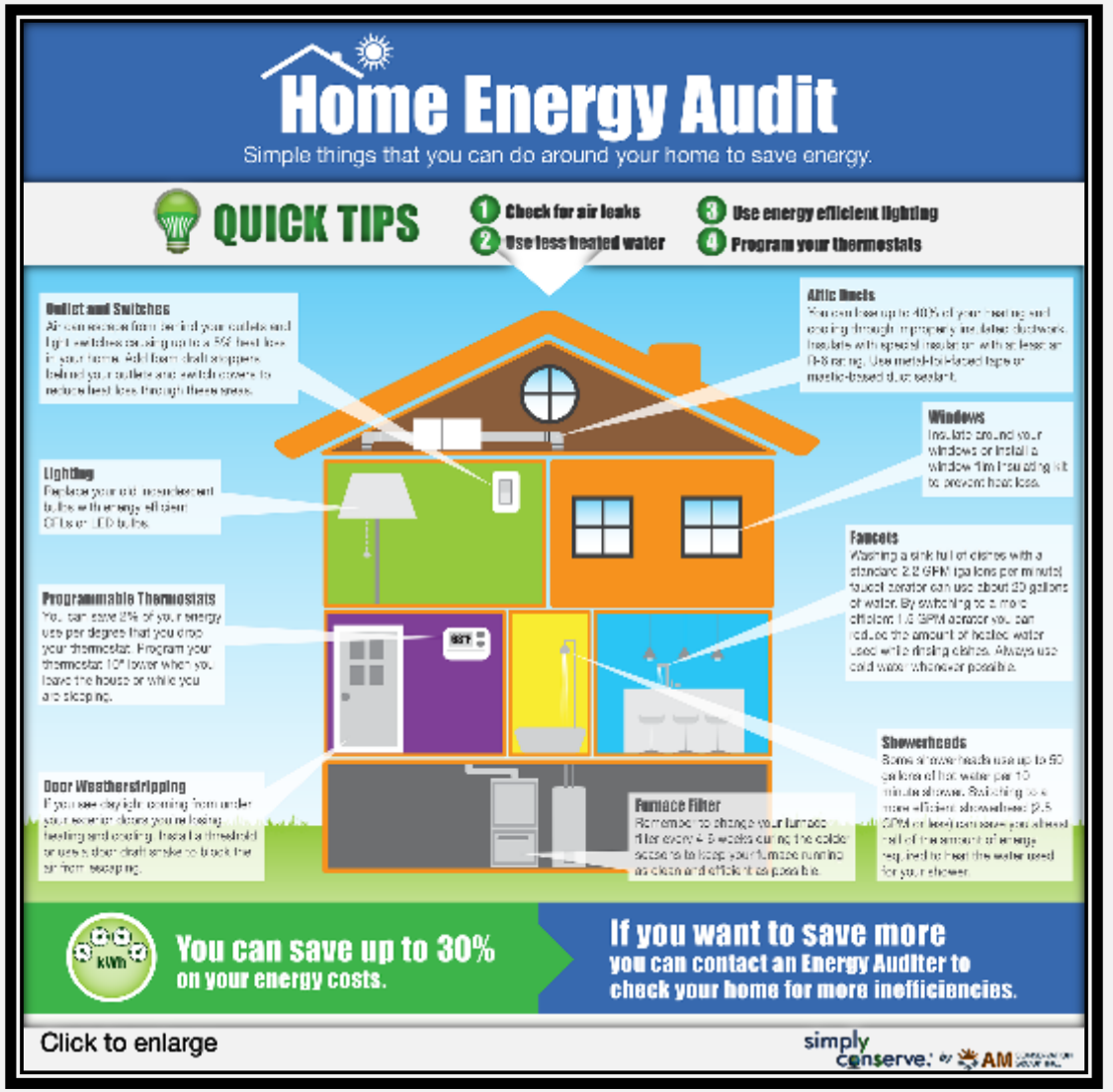
- Energy Efficiency Upgrades
- Electrifying Equipment where possible
- Use electricity generated from renewable sources onsite and offsite
- Greening the City fleets
- Changing criteria for how we invest & budget

Solar Faithful

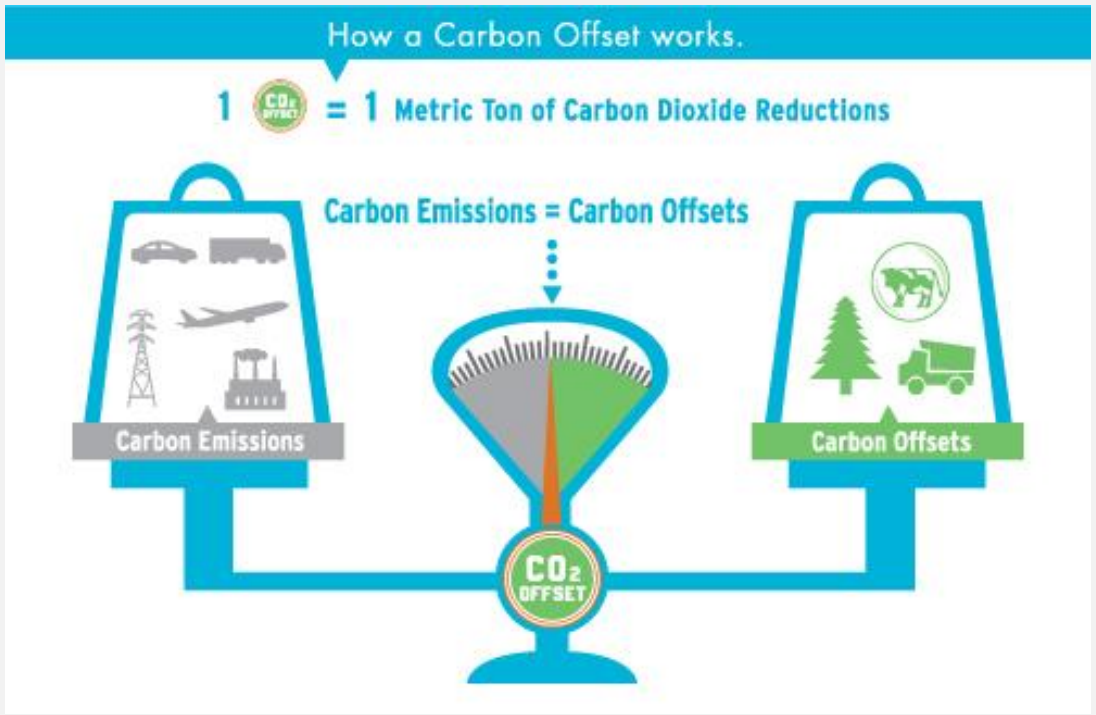
- US Department of Energy program promotes solar on non-profits.
- The City partnered with Michigan Interfaith Power & Light for outreach
- Goal = 25 kw of solar on Houses of Worship
- Long term goal = promote adoption of solar on non-profits & schools
  - We used Power Purchase Agreement
- Grand prize of $100,000 to continue program

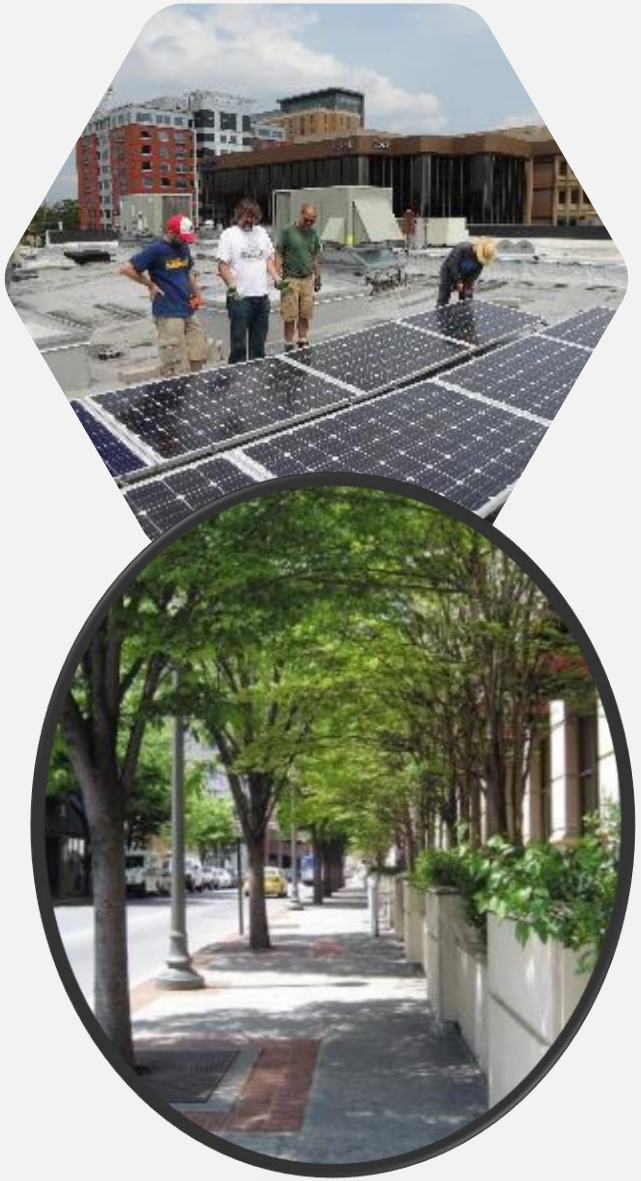
Efficiency & Solar in the Community

- Work with Energy & Community Solar providers to:
  - Educate
  - Reduce regulatory challenges
  - Navigate the landscape
  - Support installation
- Refine City's role
  - Education (yes)
  - Fundraiser (sometimes)
  - Collaborate (yes)
  - Concierge (not sure)
  - Other?



Local Offset Program





EDUCATION & ENGAGEMENT

Sustaining Ann Arbor Together

SA2T neighborhood grant program promotes and supports community-based activities in support of the goals of the City's Sustainability Framework, especially equity. The City has budgeted $100,000 annually for this program.

Community Outreach

Conducting sustainability-related outreach and educational activities with Ann Arbor residents and businesses.

- 8th year of Sustainability Forums in partnership with AADL (4 Forums in Jan-April 2019)
- Continuing outreach at events (Green Fair, Earth Day, Scouts Badge day, etc.)
- GovDelivery email blasts (2,050 subscribers)
- Sustainability Corner in A2 Newsletter for residents
- Educating City employees (Lunch and Learns, A2 News and Notes, etc.)
- Public Coffee Hours
- Commission Support

Resilience

Fostering Resilience One Neighborhood At A Time

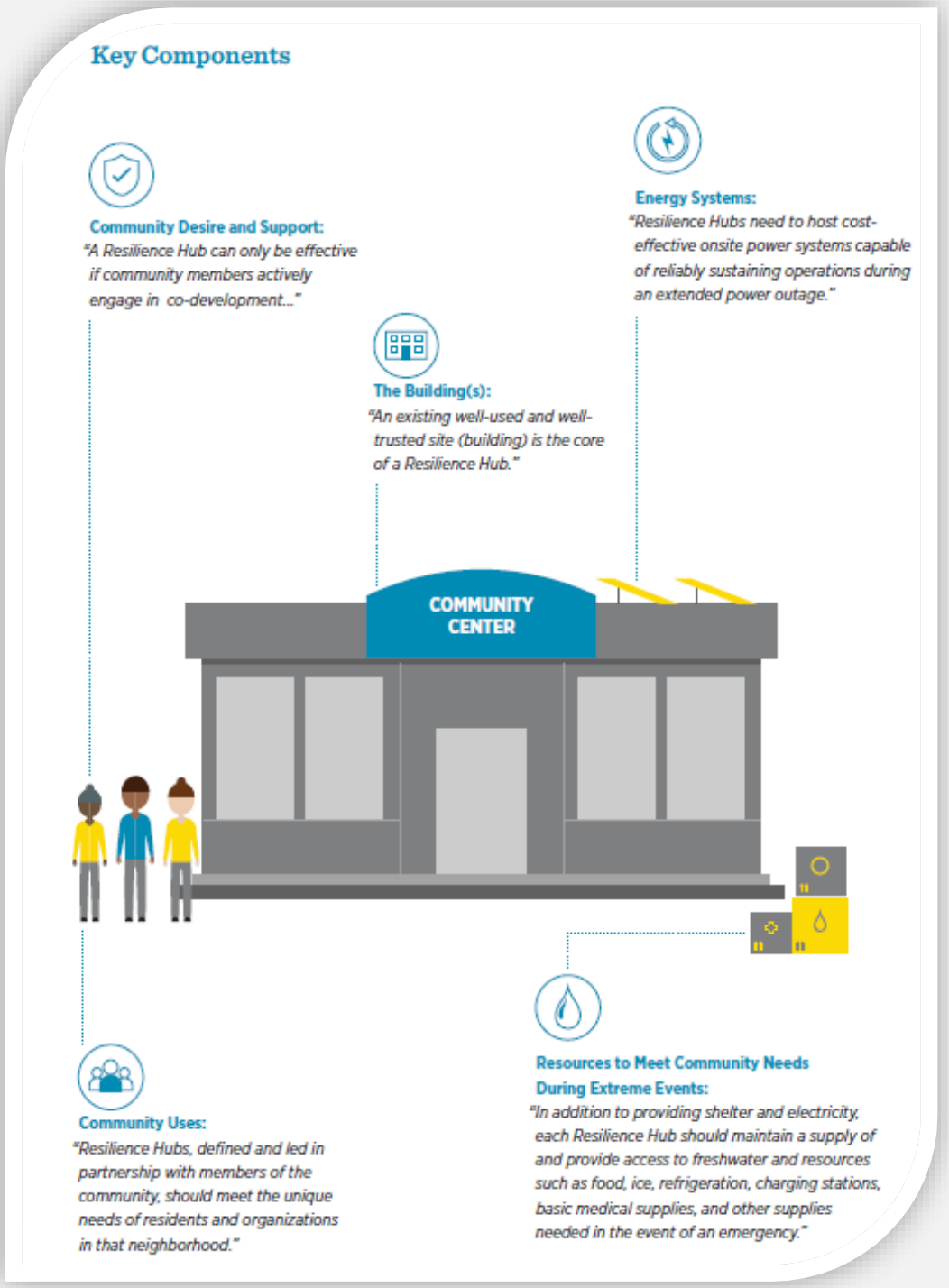
Resilience Hubs

- Neighborhood-based locations that support existing community needs while also fostering resilience in the face of a disaster.
- Being piloted around the nation.
- Partnership with community and community-based organizations
  - Community driven and supported
- Seeking grant funding

Rain Ready

- Help reduce local flood risk
- Done in tandem with Stormwater

USDN urban sustainability directors network



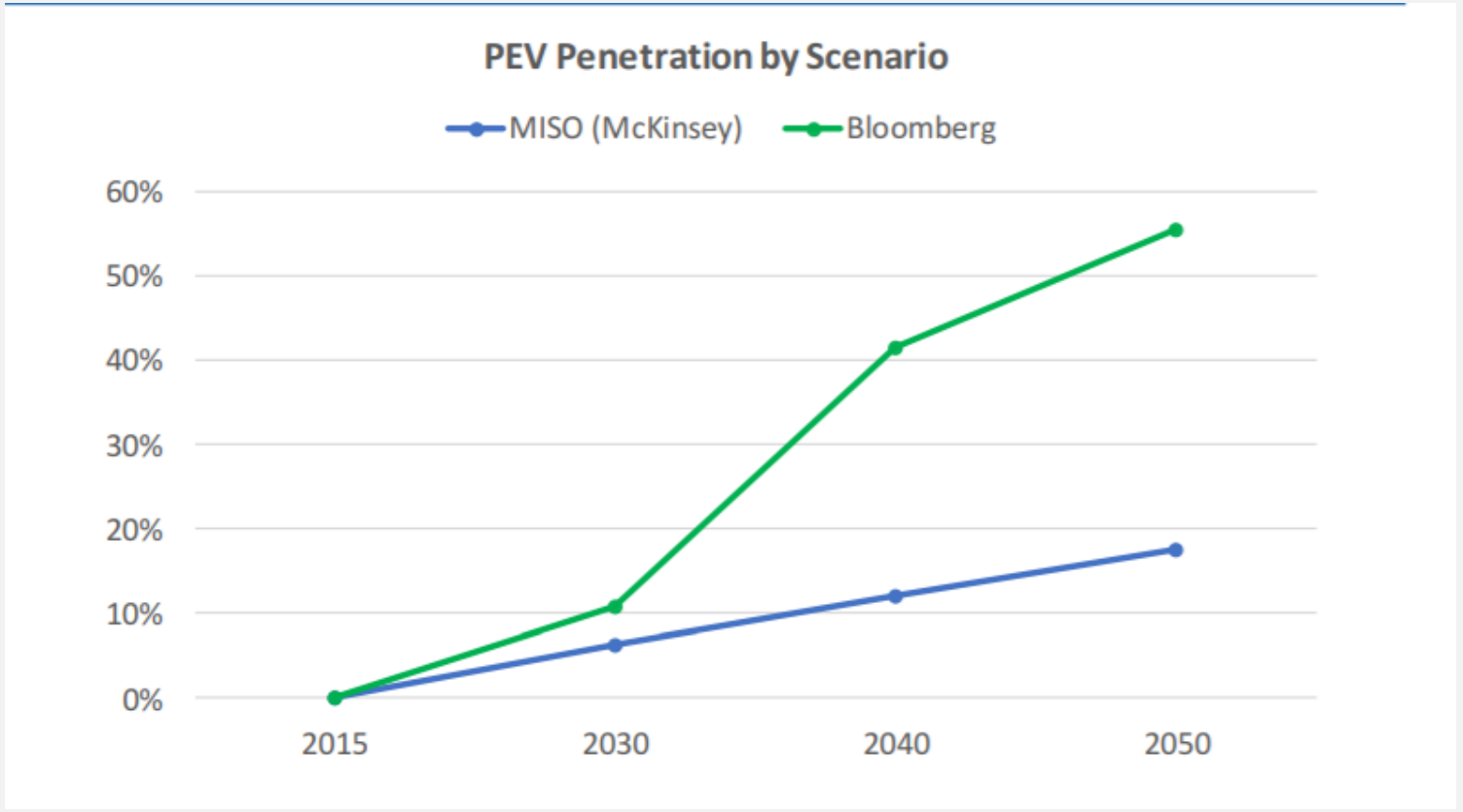
ELECTRIC VEHICLES

OVERVIEW

Promote the adoption of electric vehicles by residents, businesses, organizations, and the City:

- Investigate an EV car sharing program for A2 Housing Commission residents.
- Workplace Charging Challenge
- Help multifamily housing install EV charging
- Investigate new and off-lease EV group buy
- Add EVs to the City fleet through Green Fleets Policy
- Encourage new EV charging in parking garages and lots
- Outreach to the general public

Electric Vehicles: By the Numbers



EVs in City Fleet → EV Readiness Ordinance → EV Strategy → EV Promotional Work

CROSS-CUTTING

Internal Coordination

Safety

Human Resources

Communication

Clerk's Office

Sustainability

Public Safety

Public Services

Community Services

Financial Services

Strategic Engagement: Internally

Budgeting and CIP integration

Transportation

- Integrating GHG emissions and potential reductions into planning & decision making
- Idling abatement
- Electrification of systems
- Efficient lighting for pedestrian safety

Planning

- Smart land use planning and TOD
- Onsite storm water management

- Lighting Ordinance

Strategic Engagement: Community

Work with local non-profits, philanthropy, and other local governments to design sustainability programs that work for Ann Arbor and the broader region (e.g., Aging in Place Efficiently)

Leverage student and faculty expertise and interests to create practical sustainability initiatives that further city goals while supporting students and faculty development. (e.g., a City Studio)

Strategic Engagement: Utility

- Share city data to help DTE implement core programs and new pilots (e.g., efficiency upgrades in rental units)
- Collaborate on renewable energy construction and purchasing (possible renewable installations in A2)
- Continue to put pressure on the market to move the needle on renewable installations

Strategic Engagement: Peer Communities

- Work with peer communities to develop new urban sustainability strategies, benchmark our progress, and scale promising practices in our and other communities
- MI-MAUI – Tracking MPSC and rate case intervention opportunities

STAR COMMUNITIES | Sustainability Tools for Assessing & Rating Communities

Great Lakes Network

michigan municipal league

MICHIGAN green COMMUNITIES

THE AMERICAN SOCIETY OF ADAPTATION PROFESSIONALS

USDN | urban sustainability directors network

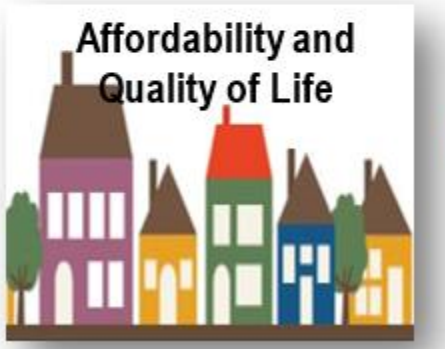
Innovation

How do we work with private partners, the university, non-profits, and others to create a true innovation hub?

How do we make Ann Arbor a test bed for innovation?

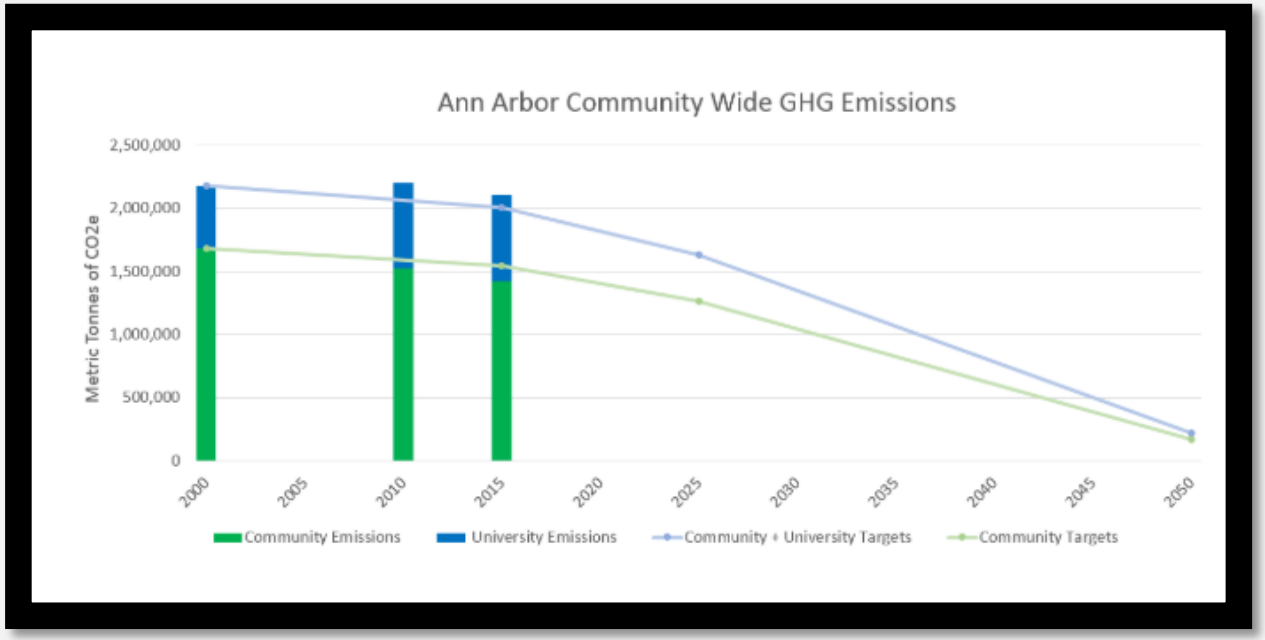
The Sustainability Grand Challenge

5 Years; 5 Challenges Facing Southeastern Michigan



Metrics

- SMART Metrics
  - S = Specific: Who, What, When, Where, Why
  - M = Measurable
  - A = Attainable
  - R = Realistic
  - T = Time-bound
- Lagging and leading indicators
  - Progress is tracked on a regular basis with an eye towards corrective action where needed and changes to metrics where appropriate
- Metric Specific Endeavors
  - STAR, Sustainability Dashboard



FUNDING


Revolving Energy Fund
City Budget
Extended Payback Program
Sustainability & Innovation
Local Offset Program
Millage Funds
Grants / Investments

Summary

- Energy Efficiency
- Renewables
- Education & Engagement
- EVs
- Cross-Cutting

	Council Priorities				
Programs	100% Clean & Renewable	90% Community GHG Reduction	One Community	Affordable Housing	Timeframe
Green Rental Housing		X	X		Medium
Aging in Place Efficiently		X	X		Medium
Time of Marketing		X			Medium
Net Zero Affordable Housing		X	X	X	Short
100% Clean and Renewable	X				Medium
Solar Faithful		X			Short
Efficiency & Solar in Community		X			Medium
Local Offset Program		X	X		Medium
Sustaining A2 Together		X	X		Short
Community Outreach		X			Ongoing
Resilience		X	X	X	Medium
Evs in City Fleet	X				Short
EV Readiness Ordinance	X	X	X		Medium
EV Promotional Work		X			Ongoing
Internal Coordination	X				Short
Community Engagement		X	X		Ongoing
Utility Engagement		X			Medium
Peer Community Engagement		X			Ongoing
Innovation	X	X	X	X	Long-Term
Sustainability Grand Challenge	X	X	X		Medium

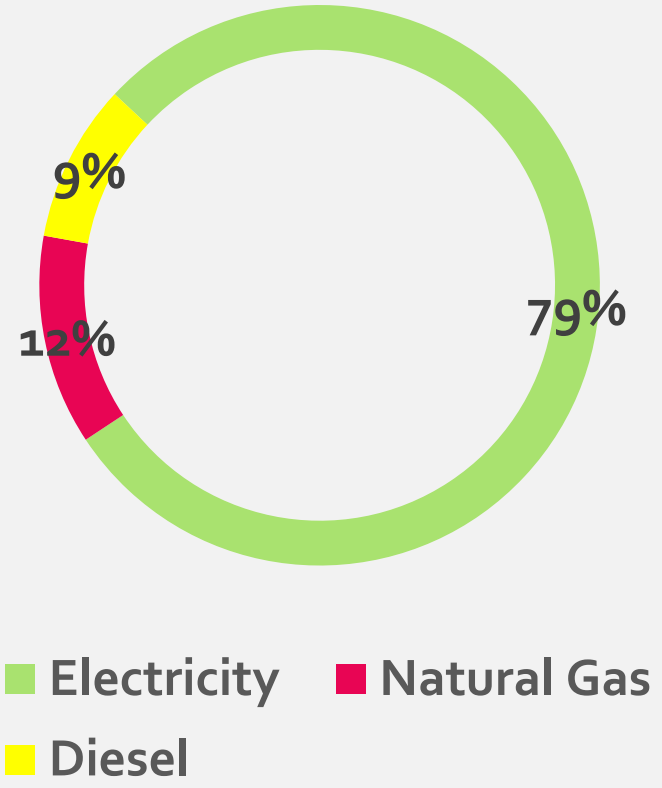
Your Thoughts

ThankYou

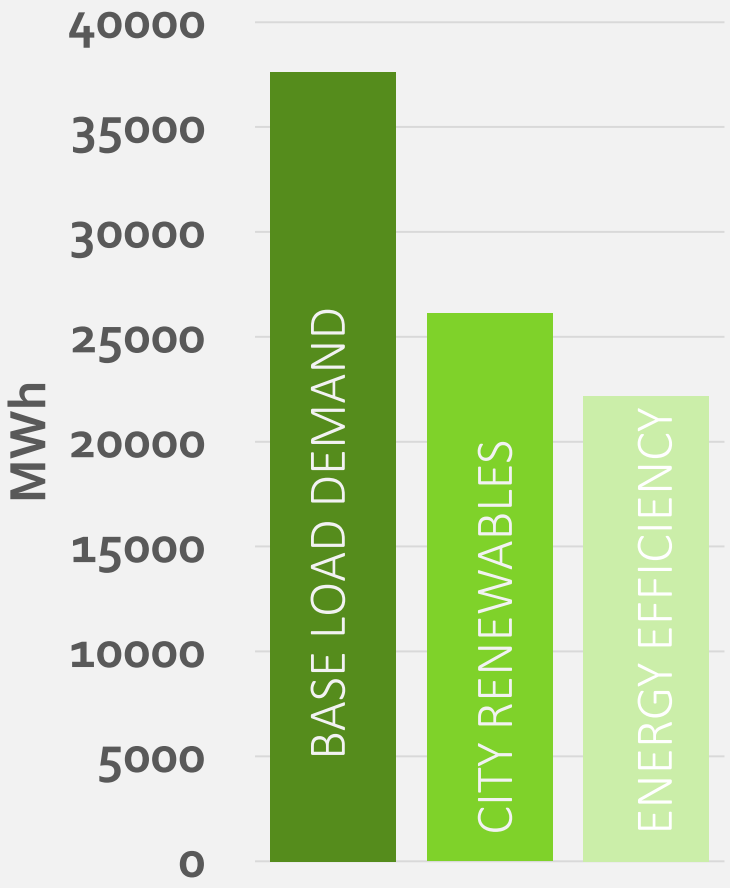

ANN ARBOR
by the numbers
#1
"Top 10 College Towns"
Forbes Magazine • 2010
#2
"10 Great Cities for Raising Families"
Kiplinger • 2010
#2
"Most Educated Cities in US"
American Community Survey • 2010
#2
"Most E-Literate Cities in the America"
TheAtlantic.com • 2012
#4
"Most Creative Cities"
The Daily Beast • 2012
#5
"Happiest Cities in America"
The Daily Beast • 2012
#3
"Best Places for Recent College Grads"
Forbes.com • 2010
#10
"Greatest Main Street in America"
TravelandLeisure.com • 2012
#4
"Most Well-Read Cities in America"
Amazon.com • 2011
#4
"25 Smartest College Towns in US"
Daily Beast • 2011
#6
"Top Digital Cities"
Center for Digital Government • 2010
#2
"75 Best College Towns and Cities"
American Institute for Economic Research • 2010
#7
"Best Cities in America to Find a Job"
US News • 2012
#1
"Best College Sports Town"
Forbes • 2010
#1
"Educational Attainment in Communities with 100,000+ Residents"
Business Journals "On Numbers" • 2011
#6 midsize cities
"Top Art Destinations"
American Style Magazine • 2011
PENNY W. STAMPS
SCHOOL OF ART & DESIGN

100% Clean and Renewable: By the Numbers

Emissions By Type



City Electricity



Renewable Potential