

Climate Action Plans

**Ten Actions Local Governments
Can Take to Reduce Greenhouse
Gas (GHG) Emissions
(and Recommended Processes)**

LWVUS Climate Interest Group

LWVUS CLIMATE ACTION PLAN TEAM



What are Climate Action Plans (CAPs)?

Plans for measures that a township, city or county government can take to reduce locally generated greenhouse gas (GHG) emissions

Must be voted on by Township Board, City Council or County Board

Climate Action Plans:

Set goals for reduction of GHG

Plan for periodic GHG inventories to measure progress toward the goals

Describes broad strategies (i.e. transportation) followed by specific actions (install EV charging stations)

**Over 1800 cities have established CAPs.
Many are failing to meet their goals.**

Struggle to move from the planning stage to execution

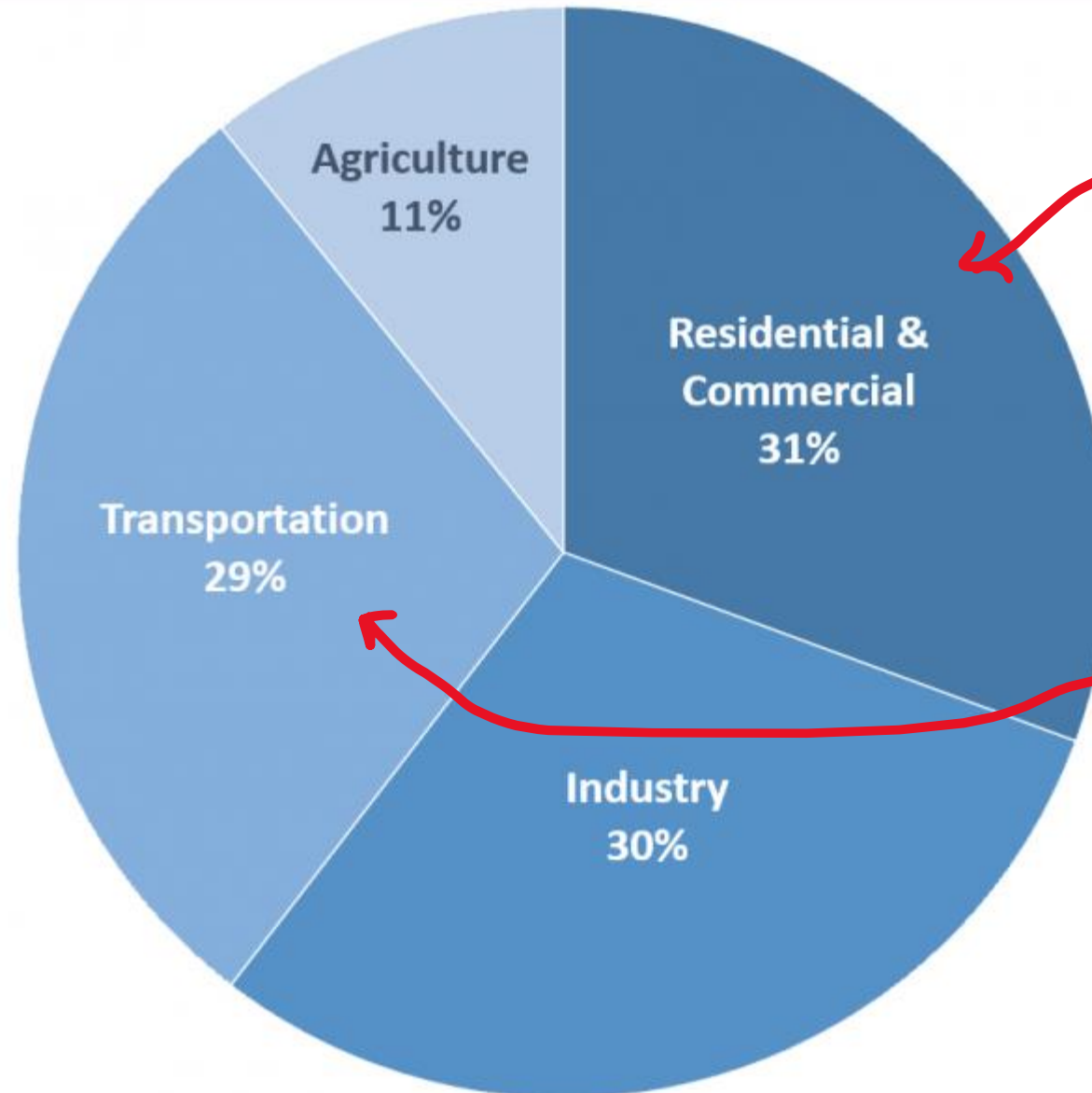
LWVUS Climate Action Plan Team Study:

Reviewed dozens of Climate Action Plans and held webinars with experts.

Identified 10 specific actions that local governments can take that are highly effective at reducing GHG.

Identified 10 specific processes that local governments can use to effectively implement their plans.

Total U.S. Greenhouse Gas Emissions by Sector with Electricity Distributed



Local Governments
have influence over
buildings and
transportation

From epa.gov



TEN ACTIONS that cities can take to reduce their GHGs

Move away from fossil fuels

1. Terminate fossil fuel *purchase contracts*/enter only into renewable energy contracts.
 2. Permit *new construction* only without fossil fuel energy.
-

Electrify buildings

3. Retrofit or build *municipal structures* for renewable energy supply and energy efficiency. Install solar PV systems.
 4. Require, or create incentives for, retrofit of *private buildings* for renewable energy supply and energy efficiency.
 5. Offer incentives for and facilitate residential, neighborhood and commercial *rooftop solar*.
 6. Offer *community solar* programs to enable renters/low-income persons to enjoy benefits of low cost renewable energy.
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Electrify vehicles

7. Replace fossil fuel *municipal vehicles* with renewable energy powered vehicles.
 8. Install, or incentivize the installation of, *EV charging* stations in public and private parking lots and convenient locations.
 9. Offer incentives and rebates for *EV and electric appliance* purchases.
-

Reduce vehicle use

10. Reduce vehicle miles travelled (*VMT*) by planning measures and incentives to use public transportation.

Consider Environmental Justice In all 10 Actions



Affordable access to clean energy economy.



Electric based transportation and heating saves \$\$



Incentives to build clean energy affordable housing.



Work with Environmental Justice Communities.

Action 1: Terminate fossil fuel *purchase contracts* and only enter into renewable energy contracts.



Traverse City:

100% clean energy for its electrical supply by 2040.

15% renewable by 2021 and 40% renewable by 2025.

Action 1: (example #2)

Authorized in 10 States:

- California
- Illinois
- Maryland (Montgomery Co. Pilot)
- Massachusetts
- New Hampshire*
- New Jersey
- New York
- Ohio
- Rhode Island
- Virginia*

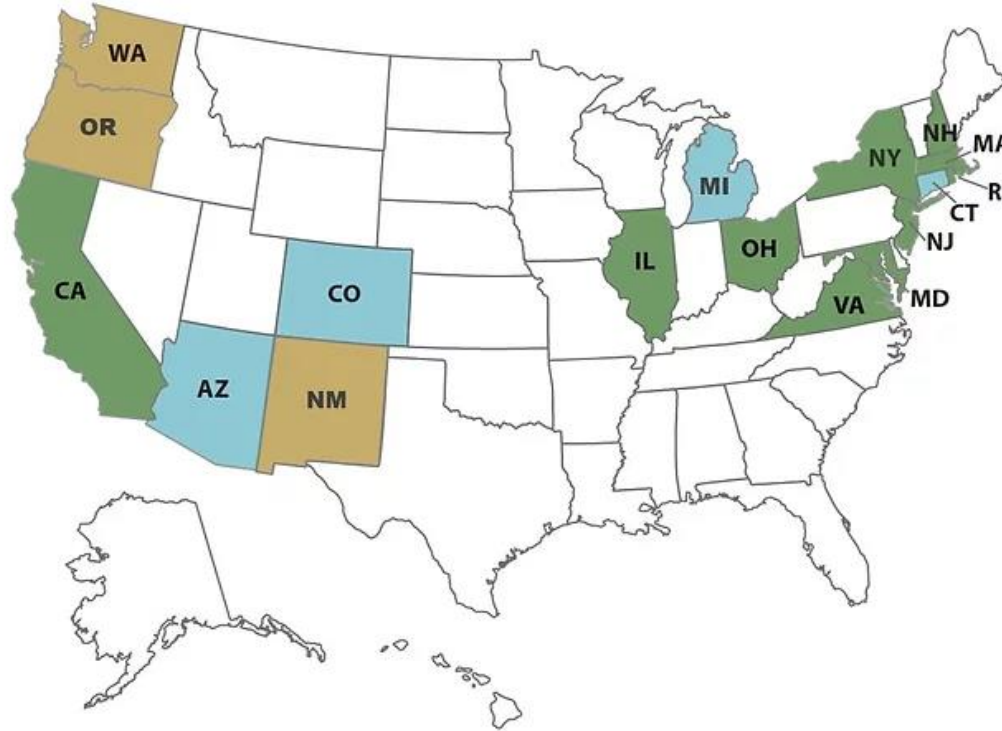
Actively Investigating:

- Arizona
- Colorado
- Connecticut
- Michigan

Watch List/Potential:

- Oregon
- Washington
- New Mexico

* Not yet implemented

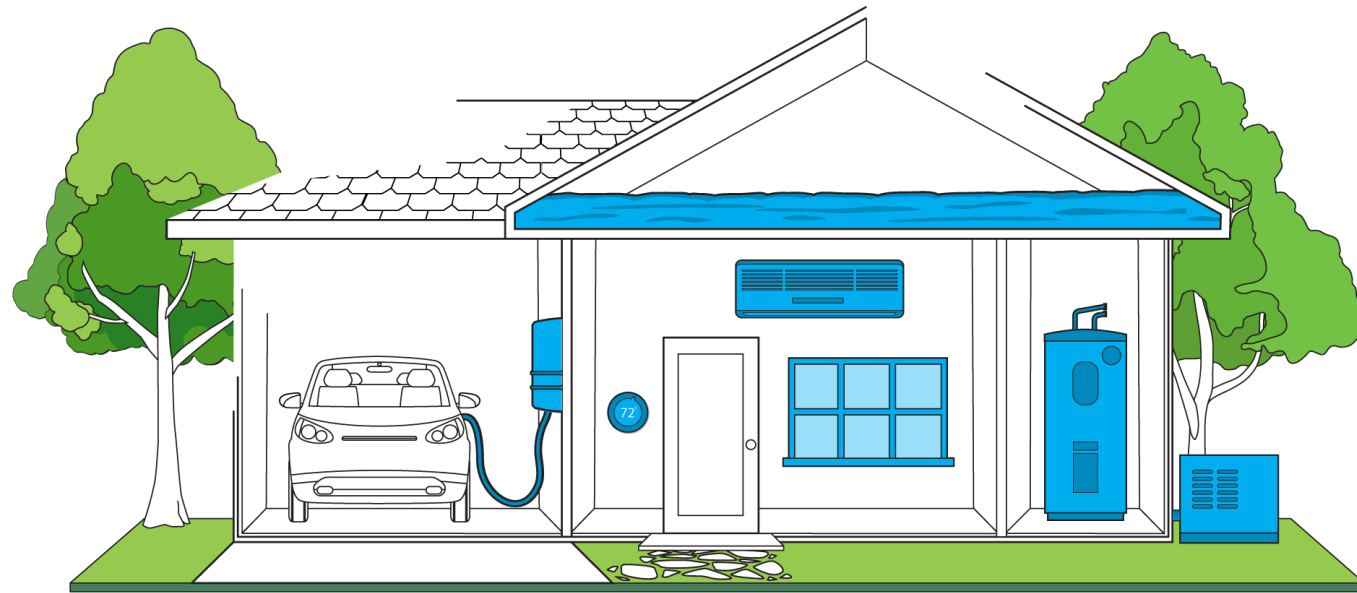


Updated 8.27.21

Leanenergyus.org

Ann Arbor:
Goal of 100% clean energy for its electrical supply by 2027 by using COMMUNITY CHOICE AGGREGATION (CCA) or creating a SUSTAINABLE ENERGY UTILITY (SEU)

Action 2: For *New construction*, use only renewable energy systems (no fossil fuels)



epa.gov

100% Electric Home:

Heat Pump for Home Heating

Heat Pump Water Heater

Induction Cooktop Stove

Grand Rapids:

Habitat for Humanity of Kent County has built a 100% electric home

Action 2: For *New construction*, use only renewable energy systems (no fossil fuels)

BUILDING CODES:

Michigan (updated every 6 years)

State building code prohibits local governments from adopting building codes that are more stringent than the state codes. Codes being updated in 2022.

California (updated every 3 years)

Effective Jan 2023: 100% electric-ready residential requirements

Action 3: Retrofit or build *municipal* structures for renewable energy supply and energy efficiency.
Install solar systems.



Ypsilanti:

Solar Ypsi: Volunteer-led grassroots organization

2005: Grant to put solar on their local Food Co-op

Today: Over 126 installations:
Fire station, schools, community centers, carports

Action 3: Retrofit or build *municipal* structures for renewable energy supply and energy efficiency.
Install solar systems.



DOE program that helps governments and businesses to go solar faster and more affordable

Ypsilanti and East Lansing :
received “Gold” Designation
Grand Rapids and Ann Arbor:
Received “Silver” Designation

Action 4: Create incentives to retrofit *private* buildings for renewable energy and energy efficiency.

Holland:

ON-BILL FINANCING:

Homeowners can borrow \$5,000-30,000 for energy improvements and pay back the loan through their utility bill.

HOLLAND ENERGY FUND:

20% rebate grant on homeowner energy efficiency investments of at least \$10,000.



Action 5: Facilitate residential, neighborhood and commercial rooftop solar.

**MICHIGAN NEEDS TO REMOVE THE 1% CAP ON
ROOFTOP SOLAR**

MI HB 4236 supported by LWVMI

Action 5: Facilitate residential, neighborhood and commercial rooftop solar.

Up to 2/3 of solar cost is “soft cost” (permitting, inspection, interconnection to the electric grid, installation, taxation and system financing)

Ann Arbor:

Streamlined the permitting process and offers group buy and resources for homeowners.



SolarAPP+ :

DOE offers an APP for local governments to quickly and safely approve standardized rooftop solar.

Action 6: Offer community solar programs to enable renters /low-income persons to enjoy benefits.

**MICHIGAN CURRENTLY DOES NOT ALLOW COMMUNITY
SOLAR UNLESS INITIATED THROUGH UTILITIES**

MI HB 4715 and 4716 supported by LWVMI

Action 6: Offer community solar programs to enable renters /low-income persons to enjoy benefits.



CELICA UTILITY PROJECTS

Co-op Utility: Cherryland Cooperative and the Northwest Michigan Community Action Agency (50 low-income households)

Municipal Utility: Village of L'Anse and the Baraga-Houghton-Keweenaw Community Action Agency (25 low-income households)

Investor-Owned Utility: Consumers Energy and the Capital Area Community Services (50 low-income households in Lansing)

Action 7: Replace fossil fuel municipal vehicles with renewable energy powered vehicles.



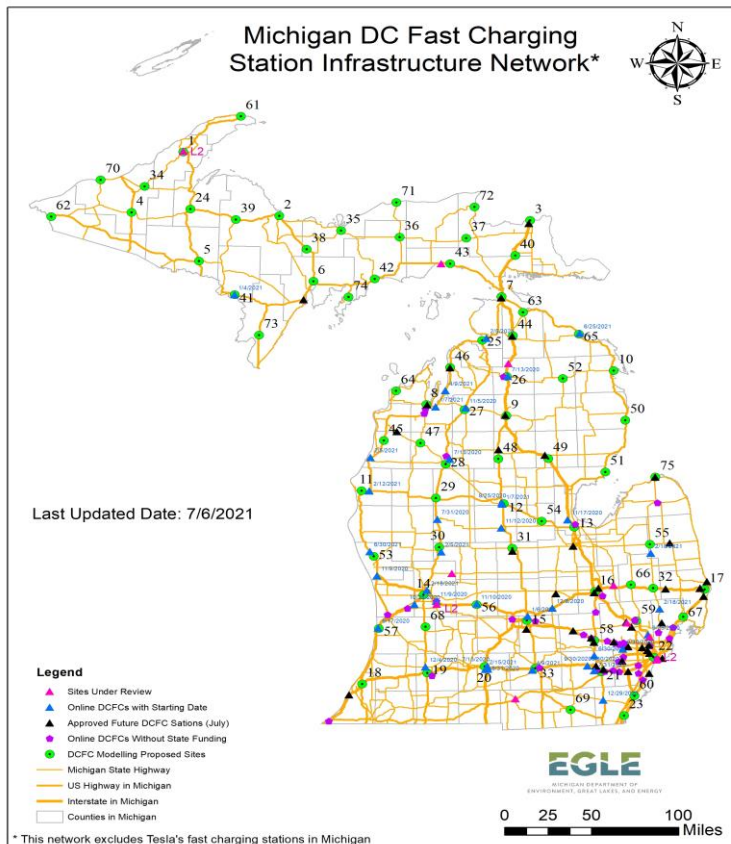
Port Huron:

Blue Water Area Transit – Two 100% electric battery-operated buses.

Ann Arbor:

City Council OK'd the \$93,926 purchase of two 2021 Ford Mustang Mach-E police patrol vehicles

Action 8. Install EV (Electric Vehicle) charging stations in public and private parking lots and convenient locations.



**CHARGE UP MICHIGAN PROGRAM:
EV Charger Placement project - build the
infrastructure for DC fast charging stations
in the state of Michigan.**

**Department of Environment, Great Lakes,
and Energy (EGLE) will provide 33%
funding.**

Action 9: Offer incentives and rebates for EV (Electric Vehicle) and electric appliance purchases.



MICHIGAN ENERGY OPTIMIZATION REBATES:

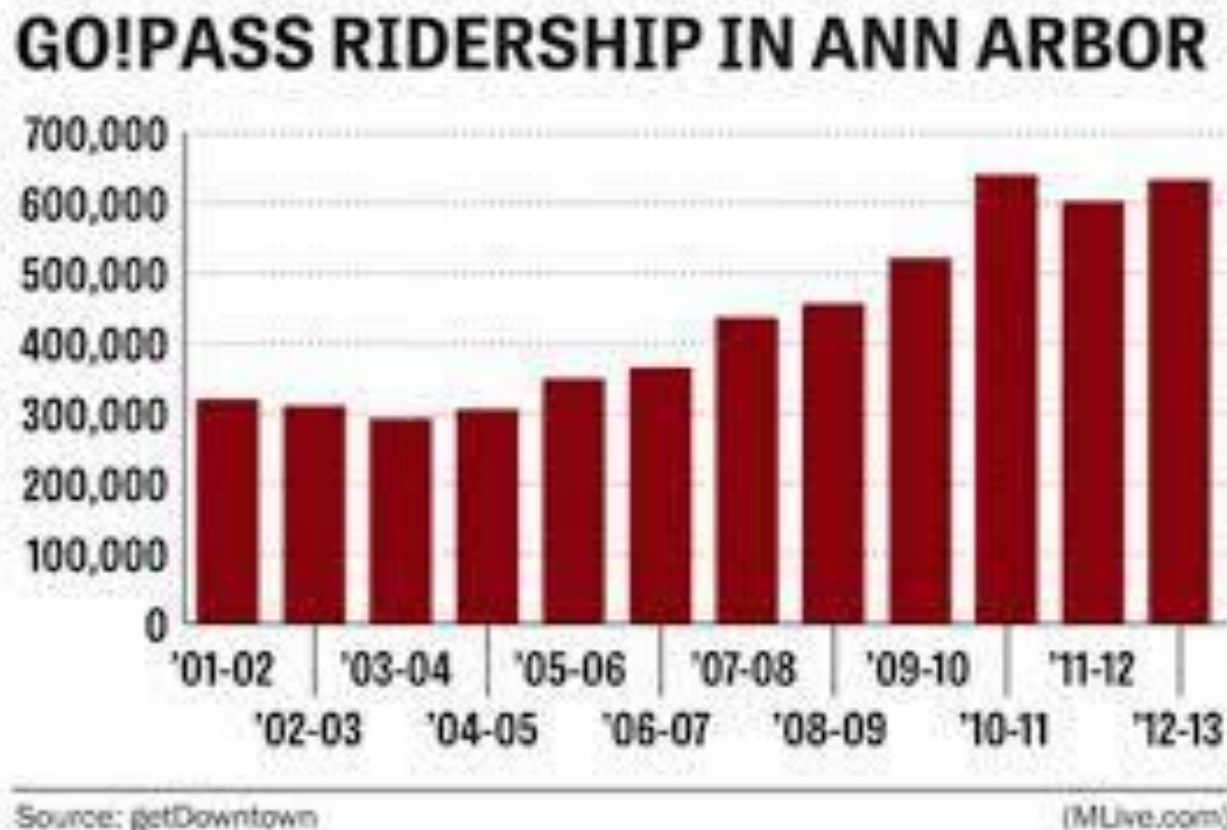
**Closed Dec 2021 for Municipal and Co-
operative Utilities**

**Continuing for Regulated/Private
Utilities**

Petosky:

\$300 Rebates for Heat Pumps

Action 10: Reduce vehicle miles travelled (VMT) within a city by planning measures and incentives to use public transportation.



Ann Arbor GO!Pass

Free rides for employees who work at companies in DDA boundary area. Employers pay for pass.

Action 10: (example #2)



Image sourced from: Passenger Hub • AAATA Park & Ride - <https://pbs.twimg.com/media/DSIoVVuUEAAZM8v.jpg>

Ann Arbor:

**Plymouth Road Park and Ride.
Schedule is 10 minutes apart
during peak hours.**



TEN PROCESSES for local GHG reduction planning

Set goals, measure, hold accountable

1. Set annual GHG reduction *goals*.
 2. Take *inventory* and use SMART metrics.
 3. Establish *consequences* for failure to meet goals.
-

Actions and budget

4. Clarify *specific actions* to be taken.
 5. Assign *authority and budget*.
-

Integrate actions with public priorities

6. Link GHG reduction plans to *workforce development*.
 7. Link GHG reduction plans to affordable *housing and utility* bills.
 8. Integrate climate action with *building codes*.
-

Transparency

9. Embrace public *transparency* at all stage of planning
10. Use Climate Action Plans (CAPs) for their intended *purpose of GHG emissions reduction*.

Consider Environmental Justice In all 10 Processes



Affordable access to clean energy economy.



Electric based transportation and heating saves \$\$

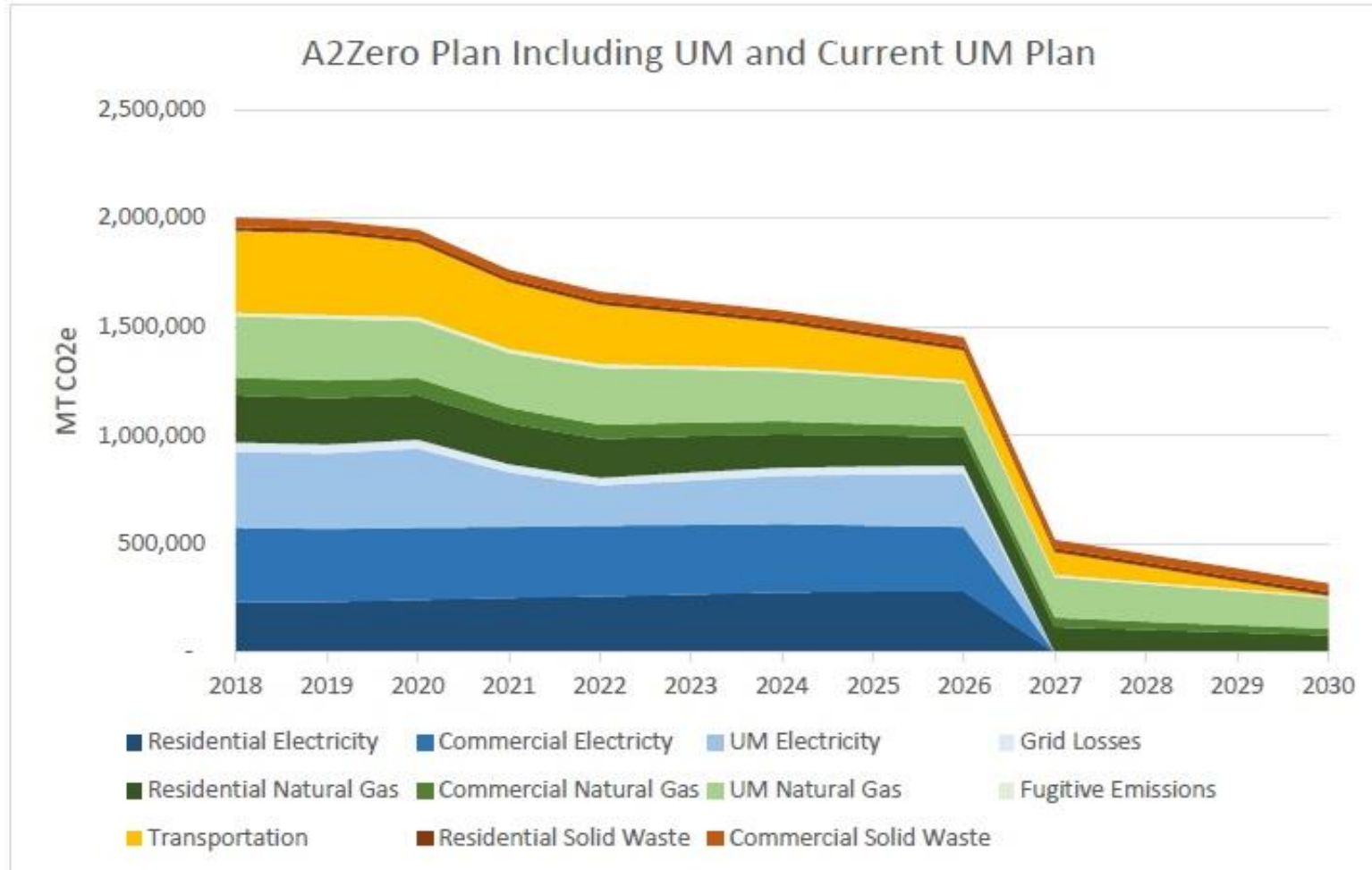


Incentives to build clean energy affordable housing.



Work with Environmental Justice Communities.

Process 1: Set annual GHG reduction goals.





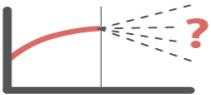
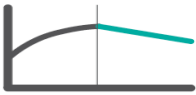
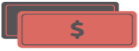





***“If you don’t set goals,
you have nowhere to
go”***

***“If you aim at nothing
you are going to
achieve nothing”***

Process 2: Take inventory and use SMART metrics.



WITHOUT GPC	WITH GPC
<p>Different types of measurements</p> 	<p>One measurement</p> 
<p>Account for only a portion of emissions</p> 	<p>Consistently account for all emissions</p> 
<p>Unclear if climate targets will be met</p> 	<p>Emissions trajectory well understood</p> 
<p>Incomplete data limits investment</p> 	<p>Good data drives investment</p> 
<p>Unable to relate to national climate action</p> 	<p>Can measure city's contribution to national climate efforts</p> 

“What gets Measured gets Managed”

The Global Protocol for Community-Scale Greenhouse Gas Emission Inventories (GPC)

Baseline inventory, then yearly/biennial updates

SMART goals are:

- ***Specific***
- ***Measurable***
- ***Achievable***
- ***Realistic***
- ***Time Frame***

Process 3: Establish consequences for failure to meet goals.

No examples?!

Process 4: Clarify *specific actions* to be taken.

Ann Arbor:

By 2030, through the provision of bulk buys and discount programs, 78MW of local renewable energy is being generated on viable buildings, parcels of land, and carports. At least ¼ of these installations also have some form of battery storage, which is helping enhance the resilience of our local community and economy.

Whitefish MT:

Advocate for solar-friendly policies.

Process 5: Assign *authority* and *budget*.

Cities with Sustainability Offices and Managers:

Ann Arbor, Grand Rapids, Detroit, Lansing, Holland,
Royal Oak (more...)

Funding:

Ann Arbor:

Community Climate Action Millage
ballot proposal in November 2022

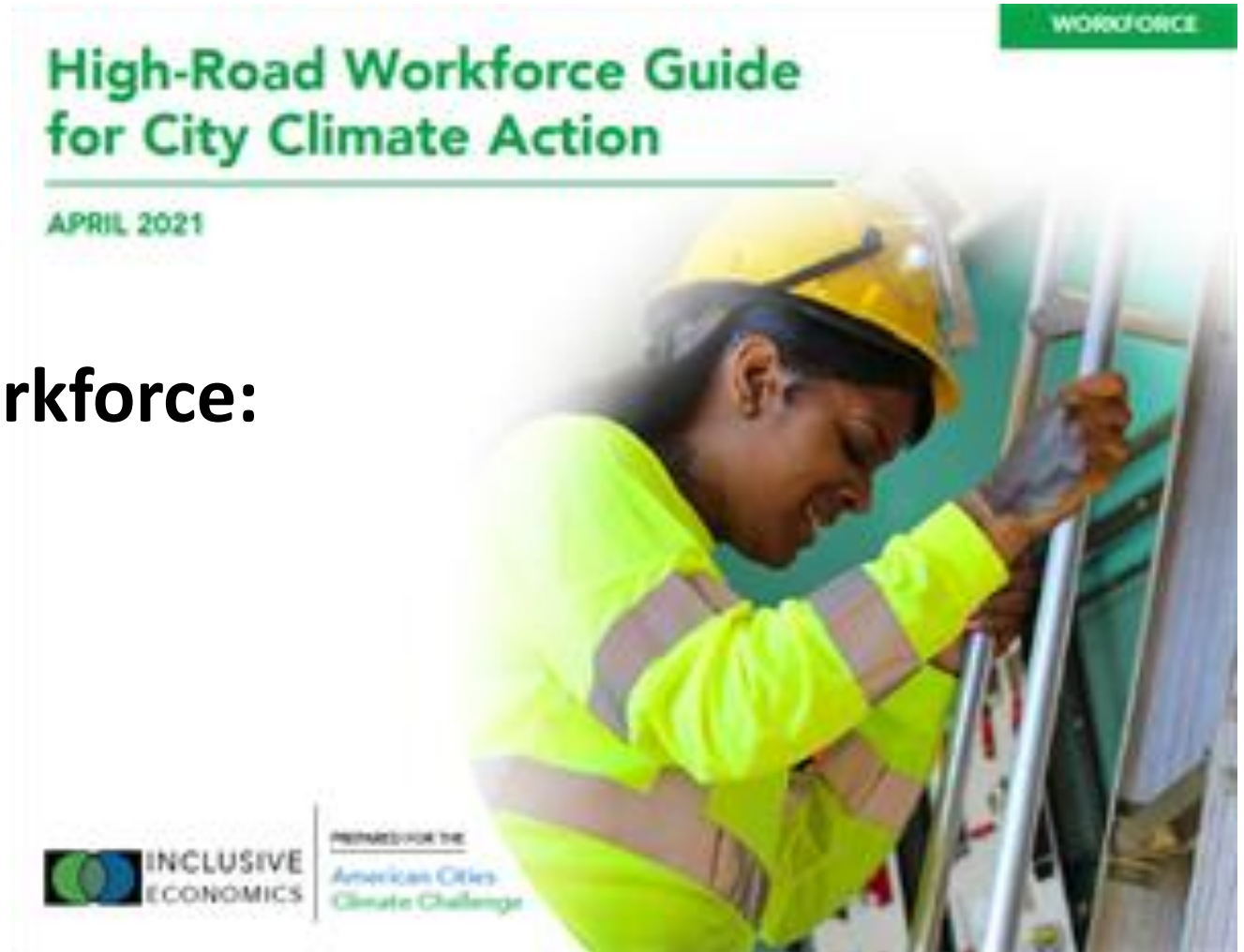
Holland:

Holland Energy Fund

Process 6: Link GHG reduction plans to *workforce* development.

Plan for changes in the workforce:

- Identify Goals
- Build Partnerships
- Identify Challenges



Process 7: Link GHG reduction plans to affordable *housing and utility bills.*



Ontonagon:

UPPCO and Ontonagon Village Housing Commission installed 36 cold climate mini-split heat pumps. Saves money, provides air conditioning, and better humidity control.

Residents are more comfortable.

Process 8: Integrate climate action with building codes.



Ann Arbor:

Commission is seeking developers to build “100% electric ready” affordable housing on city owned property.

Process 9: Embrace public transparency at all stages of planning.



Ann Arbor: From 11/19 – 4/20:

3 public surveys

60 public events

2 town halls

80 tech advisors

66 partner organizations

On June 1st, 2020, Ann Arbor City Council Members unanimously adopted A²ZERO

Process 10: Use Climate Action Plans (CAPs) for their intended *purpose of GHG emissions reduction*.



N/A

Thanks to the
LWVUS
Climate
Action Plan
Team for
creating:

Climate Action Plans

Ten Actions Local Governments Can Take
to Reduce Greenhouse Gas Emissions
(and Recommended Processes)

*For information about the LWVUS Climate
Interest Group and other resources go to the
LWVUS TOOLKIT FOR CLIMATE ACTION website*

**4/4/2022 IPCC
REPORT:
The evidence is
clear: the time
for action is
now.**

Addresses mitigation

**Governments must act now to limit
warming to 1.5°C**

**Cities offer significant opportunities for
emissions reductions**

Michigan Specific Resources:



MI GREEN COMMUNITIES :
Collaborative network of local governments and universities to promote sustainability solutions, can track and benchmark progress

2019 MGC CHALLENGE COMMUNITIES:

GOLD **CERTIFIED**

Ann Arbor
Battle Creek
Dearborn
East Lansing
Grand Rapids
Holland
Novi
Traverse City
Delhi Township
Pittsfield
Township

SILVER **CERTIFIED**

Detroit
Ferndale
Petoskey
Clinton Charter
Township
Charter
Township of
Delta
Township of
Meridian

BRONZE **CERTIFIED**

Eaton Rapids
Elk Rapids
Flint
Huntington
Woods
Ithaca
Kalamazoo
Ludington
Northville
Rockford
Royal Oak
St. Joseph
Ypsilanti
Hartland
Township
Monroe County
Milford
Township of
West Bloomfield
Township of
Northville

Michigan Specific Resources:



MI HEALTHY CLIMATE PLAN

Adopted on Earth Day 2022!

- **60% of State's electricity will be from renewal energy by 2030**
- **Support 2 million electric vehicles by 2030**
- **40% of funding for climate and water invested in marginalized communities**

**Thank YOU for
Your Interest
in How We
Can Fix Our
Climate
Emergency**

Questions??

Your Name
LWV of
Your email

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