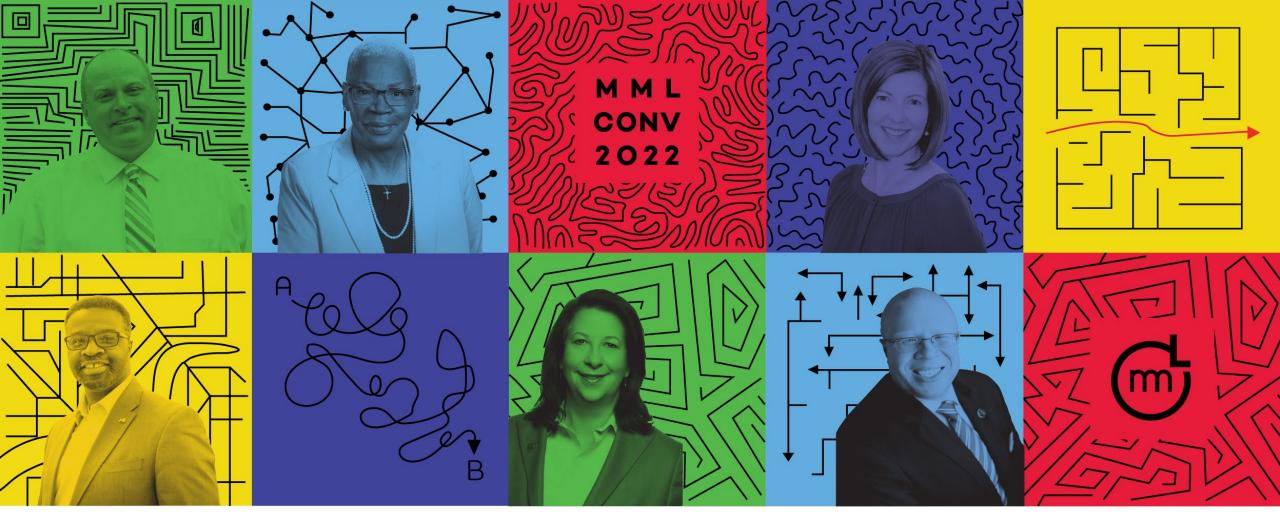


MICHIGAN MUNICIPAL LEAGUE CONVENTION 2022

MUSKEGON, MI

OCT 19-21, 2022

#MMLCONV



Creating a Municipal Climate Action Plan & Funding Opportunities

LeRoy Harvey, Environmental Programs Coordinator, Meridian Township

Julie Lyons Bricker, LEED AP O+M, PMP, Energy & Sustainability Manager, City of Royal Oak

Danielle Beard, Program Coordinator, Michigan Municipal League



LEROY HARVEY

Environmental Programs Coordinator

Meridian Township

LeRoy works with community teams on energy and environmental initiatives related to energy, water, recycling, wetlands, and ecology. LeRoy has a Masters Degree in Community Sustainability from Michigan State University. He has served as Director of Urban Options Energy & Environmental Demonstration House, instructor of Alternative Energy at Lansing Community College, dialogue facilitator, residential energy auditor, minister, musician, and father.



JULIE LYONS BRICKER

LEED AP O+M, PMP, Energy & Sustainability Manager

City of Royal Oak

Julie Lyons Bricker is the Energy & Sustainability Manager and Grants Coordinator for the city of Royal Oak, MI. In this position she manages municipal energy and sustainability projects. Some of these projects include championing the 2020 LEED for Cities Certified designation for Royal Oak, creating the city's first greenhouse gas emissions inventory, and developing the city's first sustainability and climate action plan in 2022.



DANIELLE BEARD

Program Coordinator, Michigan Green Communities

Michigan Municipal League

Danielle Beard is the Policy Research Labs special projects coordinator for the League. Prior to joining the MML, she spent the previous four years working for the City of Albion, Michigan in various roles. The most recent of which was as a project manager for the Albion Economic Development Corporation. Her experience is in community planning, economic development, grant writing, and project management.



Agenda

- 1. Background Efforts
- 2. Leveraging Efforts and Lessons Learned
- 3. Resources
- 4. Q&A





ROYAL OAK SUSTAINABILITY

WE'VE BEEN ENGAGED IN THIS WORK FOR YEARS...

Leadersh
Started N
Earned g More me
Leadersh Commitr
More Me







Measuring



June 2017 - Joined National Mayors' Support of Paris Climate Agreement – Continued to sign on to additional climate pledges

grant funding & asurements



November 2018 - Created utility tracking accounts for all municipal buildings to analyze and optimize energy waste reduction. Inventoried all existing sustainability initiatives in the city.



May 2019 - Awarded 2019 LEED® for Cities and Communities grant program funded by Bank of America in partnership with USGBC.

hip ment



April 2020 - Earned the LEED® for Cities Certified designation.

asurements



July 2020 - City Commission adopted the Resolution Acknowledging the Climate Emergency, the expansion of the EAB's scope, and tasked staff with completing a Greenhouse Gas Emission Inventory.

Created the Guidebook for Implementation



- **September 2020 -** Completed the first citywide greenhouse gas (GHG) emissions inventory.
- January 2021 the city commission approved GHG reduction goals & tasked staff to develop a community-wide sustainability plan
- May 2022 the city commission approved the sustainability & climate action plan (S-CAP)



Royal Oak's Pathway to a Plan...





2018 GHG INVENTORY RESULTS: ENTIRE COMMUNITY*

*Emission sources <u>not</u> included:

- Food consumption
- Durable and non-durable consumer goods consumption
- Leisure travel
- Gasoline-powered yard equipment, off-road vehicles, and leakage from a/c, chillers and refrigerators for residential, commercial, and industrial (municipal was counted)
- Upstream energy sector construction and processing

CATEGORIES	FUEL OR SOURCE	MTCO2e	PERCENT
Commercial	Electricity	221,909	24.2%
Transportation	Gasoline	174,715	19%
Residential	Electricity	148,302	16.1%
Residential	Natural Gas	145,364	15.8%
Transportation	Diesel	62,586	6.8%
Industrial	Electricity	58,923	6.4%
Commercial	Natural Gas	44,394	4.8%
Electric Grid Transmission Losses		21,085	2.3%
Landfilling of Solid Waste		16,315	1.8%
Natural Gas System Leakage		6,268	0.7%
Transportation SMART		4,508	0.5%
Wastewater Treatment		4,138	0.5%
Street Lighting (commercial elec.)		3,045	0.3%
Waste Collection and Transport		2,415	0.3%
Industrial	Natural Gas	2,398	0.3%
Potable Water Supply	Pumps	1,922	0.2%
TOTAL		918,287	100%



2018 GHG INVENTORY RESULTS: MUNICIPAL OPERATIONS

CATEGORIES	MTCO2e	PERCENT
Buildings & Facilities - Electric	4,885	39.1%
Street Lights & Traffic Signals	3,045	24.4%
Buildings & Facilities - Natural Gas	1,705	13.7%
Employee Commute	1,389	11.1%
Vehicle Fleet	1,317	10.6%
Off-road Equipment	91	0.7%
Air Conditioning Fugitive Emissions	46	0.4%
TOTAL	12,478	100%



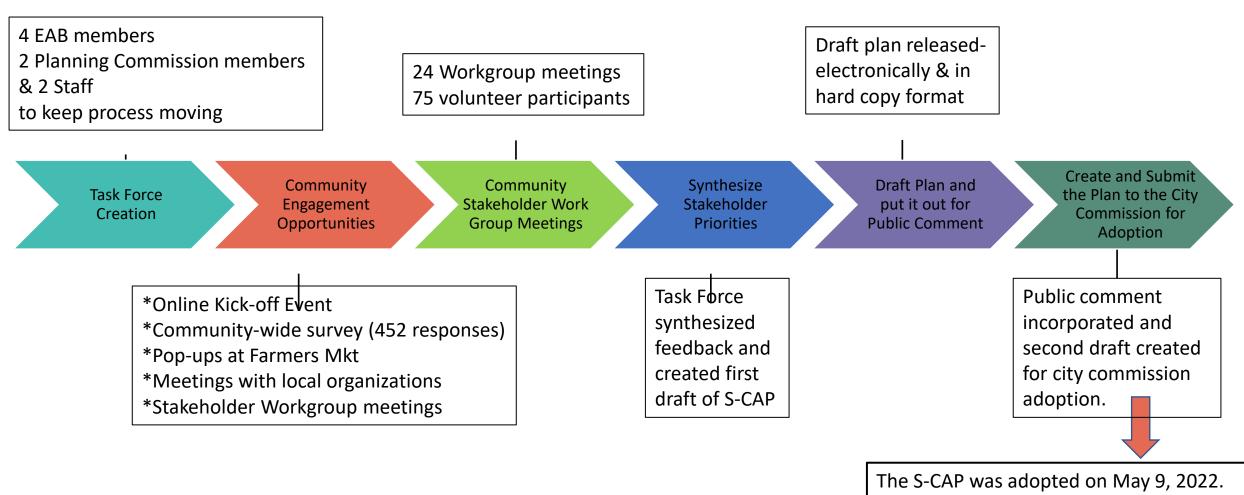
1. City operations only has a minimal amount of impact on reducing GHG. Community stakeholders have to participate!

Municipal operations emissions = 12,478 Entire community emissions = 918,287

Municipal percentage = 1.4%



Royal Oak's Sustainability & Climate Action Plan (S-CAP) Development Process...

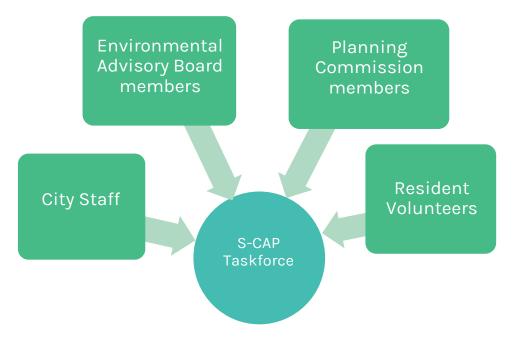




S-CAP Task Force Creation



Learn more about the environmental advisory board at: www.romi.gov/EAB



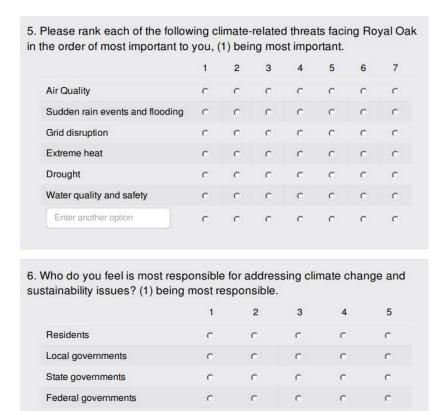
The task force's goal: using lots of stakeholder input, submit the final draft sustainability and climate action plan (S-CAP) to the city commission in May 2022.



It is really valuable to have a volunteer environmental group as a partner and collaborator on the plan development and future sustainability initiatives



Community Engagement Tools



1. Energy: Ple f which you wo villing to do, or v	uld be n	nost willi	ng to do d	or already			
	Never heard of	Already doing	Would like to do, but not sure how to get started	Would like to but face obstacles	Don't think I will try this in the next five years	Don't think I would ever try this	City should support a program on this
Switch to an induction cooktop electric stove	С	С	С	С	С	С	c
Convert household heating to a heat pump	c	c	С	С	С	С	c
Add solar panels to my house or garage rooftop	c	c	С	С	С	С	c
Convert all of my household	c	0	C	c	c	o	c





Businesses

Lesson Learned

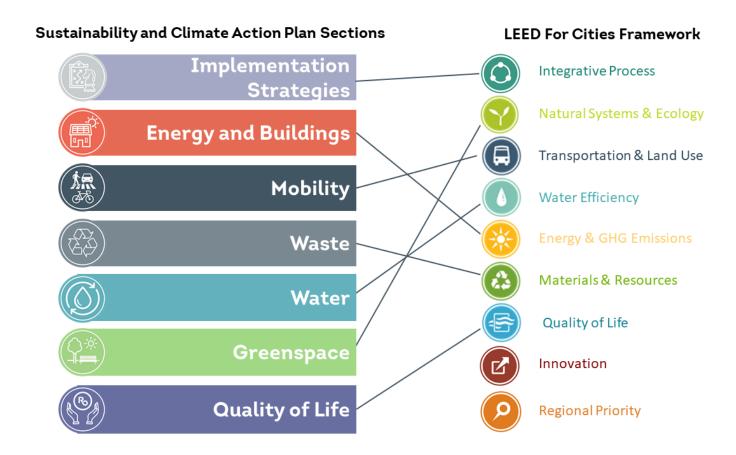
- 1. It was too long. 32 questions and took the average respondent 30 min...
- 2. A gift card lottery for respondents helped drive responses

lighting to LED

Community Engagement Tools

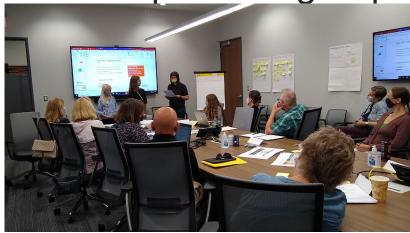
Focus Topic Workgroups

- The Task Force developed the six draft focus topics based on industry knowledge and the LEED for Cities Framework.
- The topics were used as areas for the six work groups to focus on



Community Engagement Tools

Focus Topic Workgroups





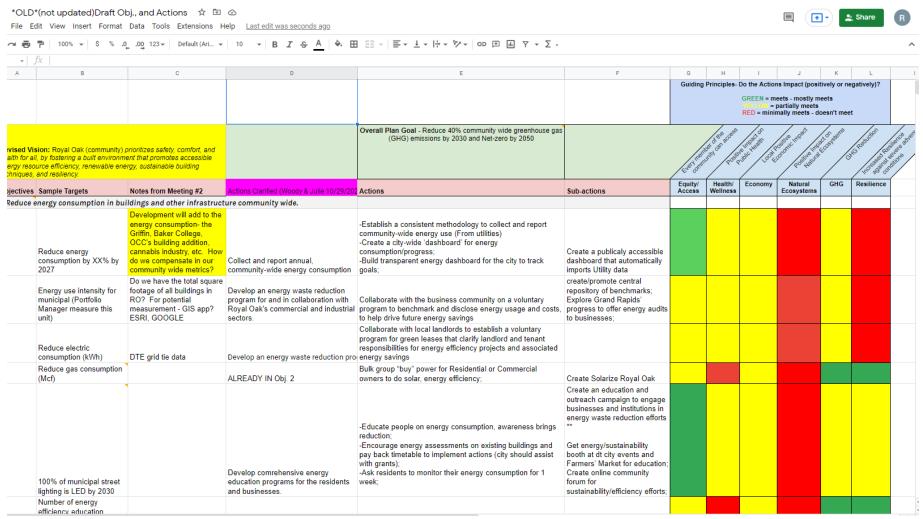




We allocated 10 weeks in which to do four meetings for each focus topic. That was not enough time. Eighteen weeks was more reasonable.



Reviewing and Evaluating





A planning consultant would have been helpful to keep the workgroups organized based on the goals, vision, and objectives, and creating true actions for the action-tables (not subactions, comments, etc.)



GENERAL LESSONS LEARNED

Leadership buy-in,
Having a local environmental group as a collaborator,
And engaging the community early and often is key

- Doing an audit of existing sustainability initiatives is helpful in showing stakeholders that actions are already being done and that you're not starting from ground zero.
- ICLEI membership is worth the expense for the GHG inventory software access and technical assistance.
- Involve other municipal staff and departments to keep the communication channels open.
- Consider a consultant to help you move through this entire development process.
- If you can't afford a consultant for the whole process, consider a consultant to guide the workgroups' process and develop the written draft framework. (Those were heavy lifts!)
- Look for grants to help fund the work.
- Work to reach minority groups and the youth. We thought we were putting out information in many ways that would reach all, but we did not have much participation from those groups.
- This is hard but important work. Have hope, have fun, and celebrate your wins!



A key implementation strategy of this plan is to prioritize and integrate sustainability when updating future planning and policy documents:

- Master Plan
- Five-year Parks & Rec Plan
- Capital Improvement Plan (CIP)
- **Budget planning**
- and others



RESOURCES

- Royal Oak's 2022 Sustainability & Climate Action Plan
- Michigan Green Communities Challenge: https://migreencommunities.com/
- EGLE Catalyst Communities: https://www.michigan.gov/egle/outreach/catalyst-communities
- EGLE Sustainability for Communities: https://www.michigan.gov/egle/about/organization/materials-management/energy/communities
- EGLE- Climate Webinars: <u>Lessons Learned in Creating a Municipal Climate Action Plan</u> (Royal Oak's full presentation-recorded 4/26/22)
- ICLEI: https://icleiusa.org/
- EPA GHG Inventory Tool: https://www.epa.gov/statelocalenergy/local-greenhouse-gas-inventory-tool
- Royal Oak's Sustainability webpages at www.romi.gov/sustainability (still under construction)
 https://semcog.org/blog/earth-day-2022-building-sustainability-in-southeast-michigan
 Starting in April, SEMCOG will be working with Public Sector Consultants and ICLEI (Local Governments for Sustainability) to complete a Greenhouse Gas Emissions Inventory for the Southeast Michigan region. This will help local communities to take the first step in sustainability planning, and the data can be used to identify community sectors where emissions can be reduced.



Making the Case... Why is sustainability important to a city??

Sustainability strategies help facilitate:

Reduced costs due to energy waste reduction

Reduced costs due to solid waste tonnage reduction

Increased brand recognition

Enhanced quality of life for residents

Improved perception of how well the city is managed

Increased competitive advantage (development/growth)

Access to new residents/business owners

Increased employee productivity

Improved ability to attract and retain top talent

Enhanced stakeholder relations

Reduced risk: resiliency after natural/man-made disasters

RESOURCE:

Sustainability Toolkit for Municipalities in Ontario:

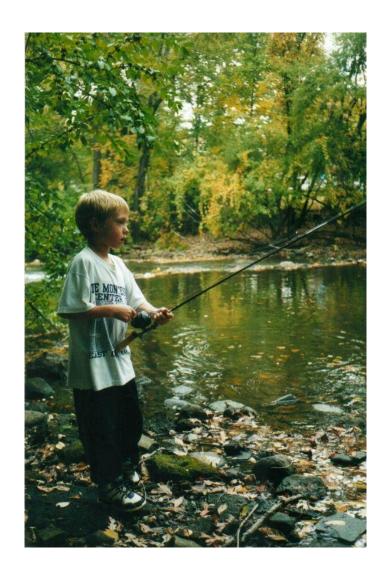
https://www.cobourg.ca/en/town-hall/resources/Legislative-Services-Licensing/Ann.-C-AMO-Sustainability-Planning-Toolkit.pdf (Making the Case for Sustainability on slide 23 (Tool#1))

RESOURCES

Sustainability/Climate Planning		
Plan development		
Bloomington, IN - 2018 Sustainability Plan		
and planning process notes	https://bloomington.in.gov/sustainability/action-plan	
2020 U of M Sustainability 1 pagers	http://css.umich.edu/sites/default/files/css_doc/Bound_Factsheets_2020.pdf	
	https://www.cityofdubuque.org/DocumentCenter/View/46662/Dubuque-Climate-Action-Plan-	
DuBuque, IA	2020 Full-Report FINAL	
	https://www.kirklandwa.gov/files/sharedassets/public/public-	
Kirkland, WA	works/recycling/sustainability/sustainability-master-plan-adopted-dec-2020.pdf	
	https://www.lakewood.org/files/assets/public/planning/sustainability/planning-for-	
Lakewood, CO	sustainability/lakewoodco-sustainability-plan-2015.pdf	
	https://static1.squarespace.com/static/5b4ead40c3c16a711ae78401/t/5c704aa4fa0d6033019	
Indianapolis, IN	<u>e373a/1550863041205/2019CPSR001-ThriveIndianapolis-web.pdf</u>	
Durango	https://durangogov.org/900/Sustainability-Action-Plan	
Climate Conversations		
NOAA Climate Disaters- Overview	https://www.ncdc.noaa.gov/billions/	
ACCO MI Series	https://climateofficers.org/michigan-archive	
Purdue 2020 Climate Training	https://ag.purdue.edu/climate/climatetraining2020/	
Skeptical Science	https://skepticalscience.com/argument.php?f=percentage	
Misc.		
		Drive ideas in the
city sustainability grants for community	https://www.sustainabledubuque.org/grants	community
living sustainably flyer for outreach	https://files.lasvegasnevada.gov/planning/PD-Sustainability-Flyer.PDF	
Kim Lundgren Associates, Inc.	https://www.kimlundgrenassociates.com/en-us/blog/plan-design	Climate Plan ideas , nice designs
i tiiii zaiiagi oii / toooolatoo, ii lo.	integration and the second control of the se	

My Story

- Environmental Interests
- Internship at Urban Options/Michigan Energy Options 40 years ago
- Grad Student in Community Sustainability 20 years ago
- Interest in healthy communities and learning organizations
- Interest in dialogue as a way of learning, teaching, inspiring, networking, and enjoyment
- 14 years as Environmental Programs Coordinator



Meridian's Story

- In 2007 joined 1000+ communities in signing the U.S. Mayors Climate Protection Agreement
- A volunteer-driven Energy Team formed in 2008
- In 2017, adopted a resolution of support for the Paris Climate Accord on June 20, 2017 and its first Climate Sustainability Plan
- Meridian is currently updating this plan with help from several self-directed teams.



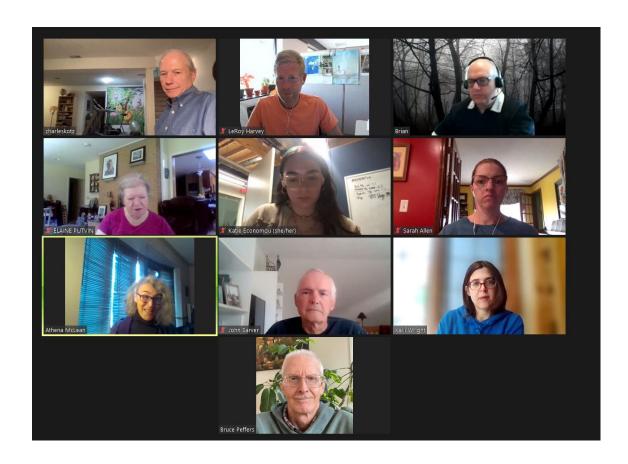
Two Themes

- Self-Directed Teams
- Green Dialogues



Self-Directed Teams

- Green Team
- Energy Team
- Wetland Education Team
- Food to Compost Committee
- Gleaning Team
- Meridian Conservation Corp
- Green Grants Committee
- Tree Team
- Okemos Earth Club/Podcast Project
-Create Your Own!





Benefits/Strengths of Small Teams

- Easy to Launch
- Few if any Limits (agenda, procedural, open meetings, membership)
- Accessible & Inclusive
- Self-Directed
- Inspiration-driven & Shared Leadership
- Nimble & Responsive
- Sustainable
- Fun



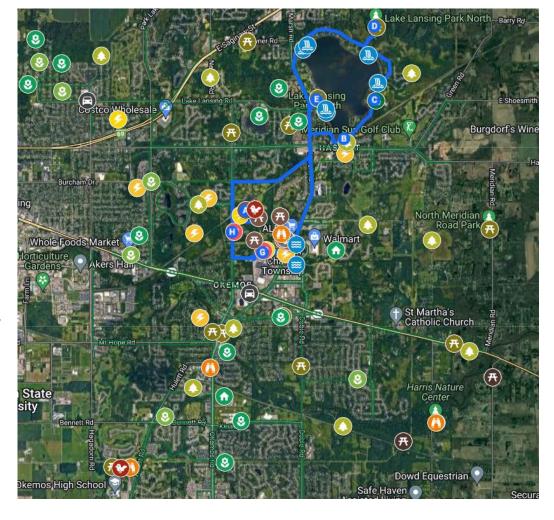
Green Dialogues

- Ongoing weekly for 2 years
- Most are open agenda occasional guest speakers to kick off conversation
- People talking about their interests a place to share ideas and get inspired
- Not results oriented but many initiatives have spunoff
- Invitation: Tune in any Wednesday at 9am: Click <u>http://bit.ly/green-conversations</u> (Zoom Link)
- Stay as long as you like. Ends at 10ish.



Outcomes of Green Dialogues

- Learning on Many Topics
- Green Neighbors Network
- Land Preservation
- Green Fairs
- Green Map and Sustainable Home and Landscape Tour
- Wetland Education
- Food to Compost Committee
- Residential and Neighborhood Projects
- Green Grants



Email Harvey@meridian.mi.us or call 517.853.4466 for more information

Lessons We're Learning

- Small teams can be an important part of planning and implementation
- Focus and scope that's manageable not overwhelming
- Focus on what's wanted
- Learn from others
- Municipality can support in many ways (email, web, zoom, meeting space, media outreach, etc.)
- Creating Climate Action Plans can be a catalyst for dialogue collaboration
- People have diverse interests (we don't all have to agree) – health, safety, economics, waste reduction, energy self-sufficiency, protecting nature, neighborhood beautification, recreation, etc.
- Dialogue can be an effective process for positive change







Accelerate environmentally sustainable actions by communities to enhance Michigan's livability & economic competitiveness in the 21st century global green economy.





PARTNERS

















MGC Components

Annual MGC Challenge

Opening December 2022

Networking

Virtual & in person

Technical Assistance

- Catalyst
 Communities
- Cohorts

MGC Challenge Categories

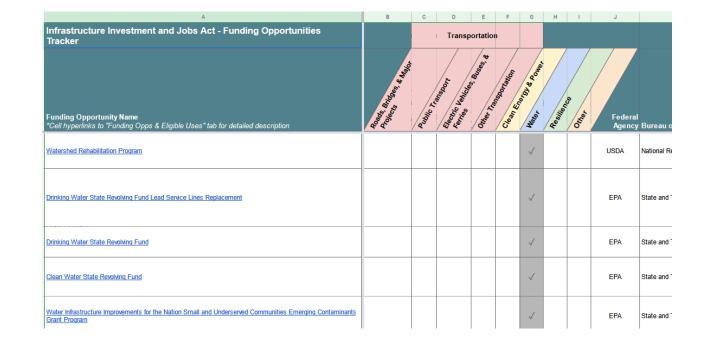
- 1. Planning for Inclusive & Lasting Impacts
- 2. Climate Resilience & Adaptation
- 3. Energy Efficiency & Renewable Energy
- 4. Responsibly Managing Materials
- 5. Sustainable Land Use & Economic Development
- 6. Improving Health Outcomes
- 7. Protecting & Conserving Water Resources
- 8. Support Clean & Inclusive Mobility
- 9. Inspire & Mobilize Residents





Funding Information and Assistance

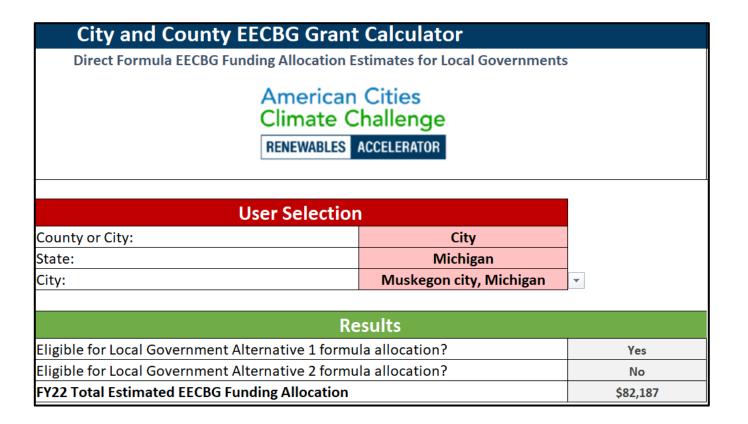
- IIJA Funding Tracker
- ServeMICity from the League
- Local Infrastructure Hub
- State Agencies
- Official BIL Website





EECBG – Energy Efficiency & Conservation Block Grants

- Formula funding for 35,000+ residents
- Applications for local units under 35,000
- 60% of state allocation will go to local units of government





Uses for EECBG

- Energy efficiency and conservation strategy
- Commercial & residential energy audits
- Financial incentive programs for energy efficiency improvements
- Developing and implementing energy efficiency and conservation programs for buildings and facilities
- Conserving energy used in transportation (e.g. flex time for employees; satellite work centers; zoning guidelines or requirements that promote energy efficient development; infrastructure, such as bike lanes, pathways and pedestrian walkways; and synchronized of traffic signals)
- Increasing participation and efficiency rates for recycling programs
- Replacing traffic signals and street lighting
- Purchasing and implementing technologies to reduce and capture methane and other greenhouse gases generated by landfills or similar sources
- Developing, implementing and installing on or in any government building onsite renewable energy technology that generates electricity from renewable resources
- Financing energy efficiency, renewable energy and zero-emission transportation (and associated infrastructure), capital investments, projects and programs for leveraging of additional public and private sector funds

Questions?

Julie Lyons Bricker

<u>JulieB@romi.gov</u>

LeRoy Harvey
Harvey@meridian.mi.us

Danielle Beard

dbeard@mml.org

www.migreencommunities.com

