



MID-OHIO REGIONAL
MORPC
PLANNING COMMISSION

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Energy and Air Quality Working Group Meeting
Mid-Ohio Regional Planning Commission
Microsoft Teams Meeting
Tuesday, May 25th, 2021
2:00pm

AGENDA

1. **Welcome and Introductions, Dale Arnold, Vice Chair (2:00 pm)**
2. **[Featured Presentation: Mat Roberts and Luke Sulfridge, SOPEC \(2:05pm\)](#)**
3. **[Policy Update](#), Joe Garrity, MORPC (2:35 pm)**
4. **Ohio EPA Update, Erica Fetty-Davis, Ohio EPA (2:45pm)**
5. **MORPC staff updates, MORPC staff (2:50pm)**
 - a. **Regional Sustainability Agenda**
 - b. **Air Quality Program**
6. **Subcommittees (3:05pm)**
 - a. **Solar Subcommittee**
7. **Adjourn (3:30pm)**

Please Notify Brooke White 520-331-4359 or bwhite@morpc.org to confirm your attendance.

The next Energy and Air Quality Meeting is
July 27th, 2021 2:00pm

Energy & Air Quality Working Group

May 25, 2021



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Featured Presentation

Luke Sulfridge, Executive Director
Mat Roberts, Director of Marketing

Sustainable Ohio Public Energy Council

SOPEC



Electric Aggregation: *A Tool For Local Clean Energy Deployment and Sustainability Planning*

Mat Roberts, Director of Marketing
Luke Sulfridge, Executive Director

Prepared for MORPC - Energy and Air
Quality Working Group - May 25, 2021

What is electric aggregation?

AEP Ohio

IOU/electric distribution utility that serves Southeast Ohio

Investor-Owned Utility – IOU

IOU purchases power to provide the standard service offer (SSO) - the rate automatically given to customers who do not select their own supplier.

IOU maintains transmission and electric distribution lines.

IOU provides customer support for power outages and billing assistance.

SOPEC

Sustainable Ohio Public Energy Council



Community Choice Aggregation – CCA

CCA purchases power to provide a competitive supply price for all eligible customers in a community - replaces the SSO as the new automatic rate.

IOU maintains transmission and electric distribution lines.

IOU provides customer support for power outages and billing assistance.

Council of Governments

SOPEC is a non-profit Council of Governments

- Governed by communities we serve.
- Public benefit, not profit, is the motive.
- Communities are active in pricing decisions and programs.

As a public entity, SOPEC is

- Governed by General Assembly and Board of Directors.
- Audited regularly by the state of Ohio.
- Open to the public for meetings.

And acts as a regional energy manager for sharing resources

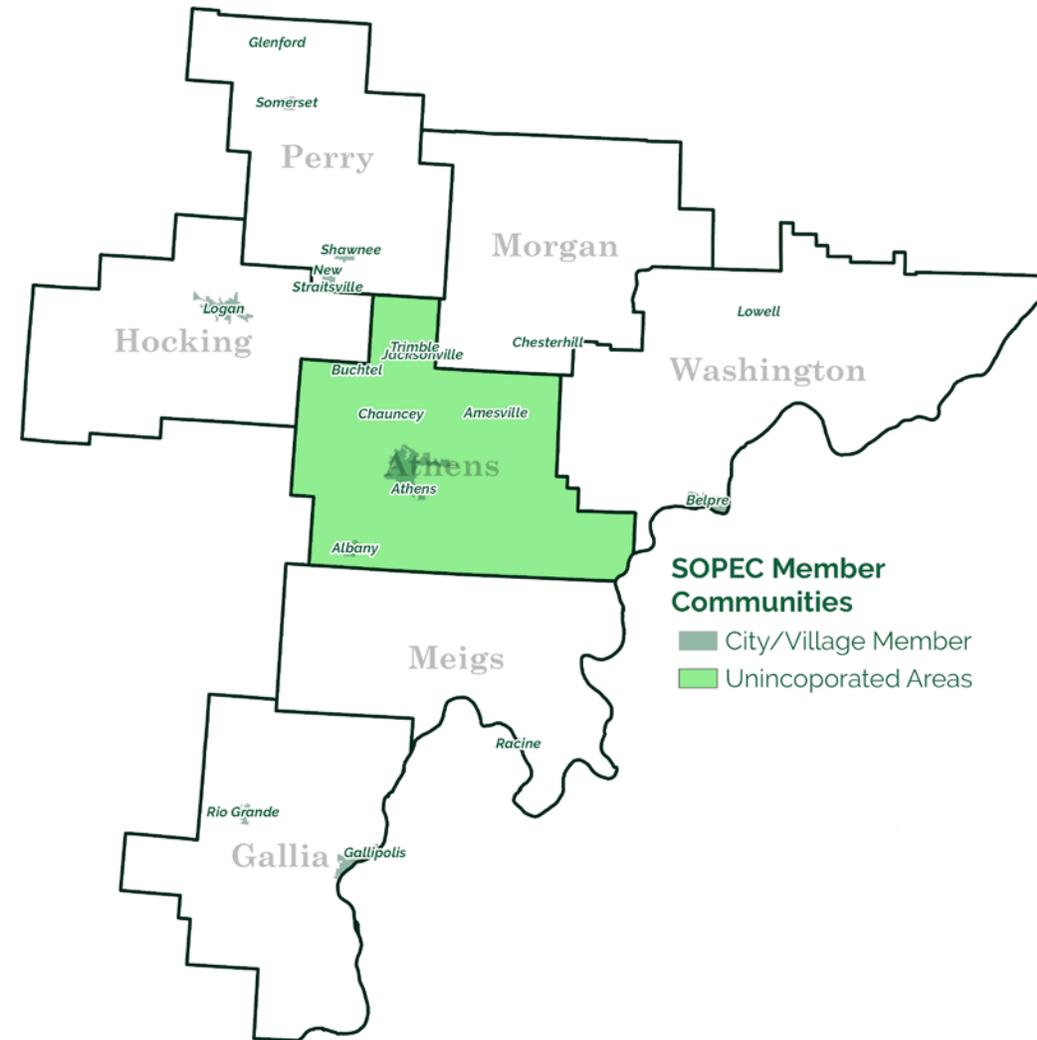
- With communities as active partners between contracts.
- Allowing community grants to be part of the program design.
- With energy expertise and energy attorneys available to members.

Bringing Green CCA to your community

- **Voters approve CCA legislation** and council approves program. Deadline to place an opt-out CCA measure on fall ballot is August 4, 2021.
- Switch from existing broker or demand they **offer default green supply option.**
- **Reactivate** dormant program.

With SOPEC aggregation in place:

- We can represent public entities, political subdivisions, non-profit organizations, and houses of worship to provide an **opt-in** supply rate as part of our *Public Pricing Program (P3)* – achieving rates 15-20% lower than the opt-out aggregation rate.
- Invest public dollars to obtain federal or state grant dollars – For over 4 years SOPEC has been the recipient of the *USDA REDA grant* that provides **free solar assessments** and technical assistance to rural small businesses and agricultural producers.



We create sustainable-first design



4 SOPEC member communities- Amesville, Athens, Athens County, and Trimble - were designated as **EPA Green Power Communities** for green power usage in the 2019/2020 supply year (starting in June). 14, including the original 4, will submit agreements for designation for the 2020/2021 supply year. SOPEC will continue to work to ensure all communities with a 100% green power default supply product receive this designation for each reporting year.

- By ensuring dollars spent on electricity in our member communities is held with SOPEC to support the common good and re-distributed through the *SOPEC Community Grant Program*, emerging concepts such as a shared revolving loan fund for clean energy projects , and broad regional priorities, including, but not limited to, local *power generation planning* and *electrified transportation* deployments.
- Create unique electric aggregation program designs that include small premiums to help communities reach their sustainability and revitalization goals, such as the *Athens Carbon Fee* that feeds the *Athens Public Solar Fund*.

Recent examples of Community Grants



Athens County EMS Station

- ~\$1,000 for an **LED lighting upgrade** project within the Village of Racine
- ~\$5,000 for an **LED lighting upgrade** project within the City of Belpre
- ~\$6,000 for Logan Police Department **Tesla charging station** and installation
- ~\$25,000 for a **solar system** at a new Athens County EMS station
- ~\$35,000 for an AEP Ohio **microgrid demonstration project** at the Athens Water Treatment Plant
- ~\$40,000 for an **all-electric transit shuttle bus** as part of a larger DOE grant focused on rural mobility solutions

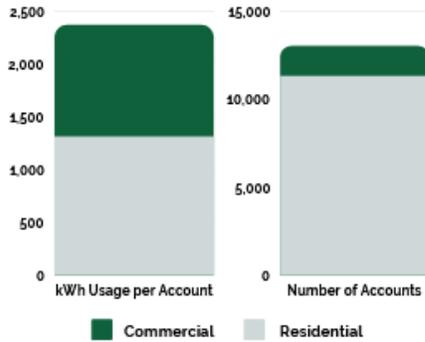
At a Glance: 2019

All Communities



The Year in Review:

Kilowatt-hour Usage per Account **Number of Accounts**

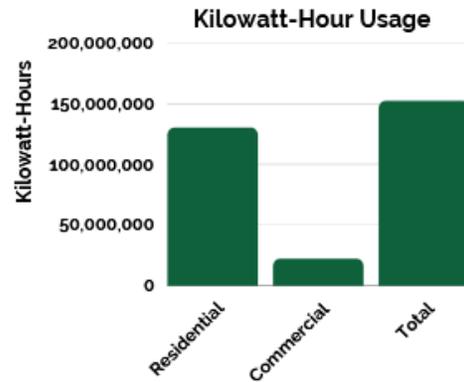


Shown on the graphs above, as of December 2019, SOPEC was serving 11,315 residential and 1,716 commercial customers within its communities. On average, for the full year, the kilowatt-hour usage per account ratio was 1,314 kWh/account for residential customers and 1,058 kWh/account for commercial customers.

SOPEC's Most Efficient Communities:

- | | |
|------------------------|-------------------------|
| Residential: | Commercial: |
| 1. City of Athens | 1. Village of Amesville |
| 2. Village of Shawnee | 2. Village of Buchtel |
| 3. Village of Somerset | 3. Village of Chauncey |

*based on kWh/account ratios



Throughout 2019, SOPEC residential electricity usage totaled to 129,983,094 kWh; commercial usage totaled to 21,952,994 kWh, coming to a grand total of 151,936,088 kWh.

By utilizing Green-e® certified electricity this year, your community:

- Offset the release of **118,416 tons*** of CO₂! This is equivalent to:
 - CO₂ emissions from **248,711 barrels of oil consumed***
 - **1 year** of greenhouse gas emissions from **23,208 passenger vehicles**
 - CO₂ emissions from burning **591 railcars' worth of coal***



*Estimates drawn from the EPA's Greenhouse Gas Equivalencies calculator

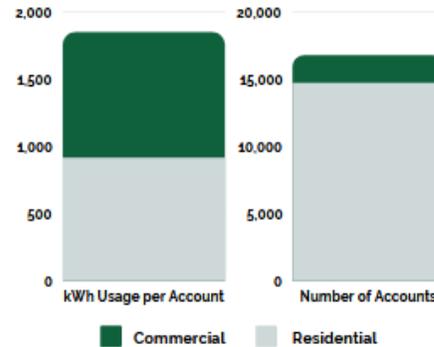


At a Glance: 2020

All Communities

The Year in Review:

Kilowatt-hour Usage per Account **Number of Accounts**

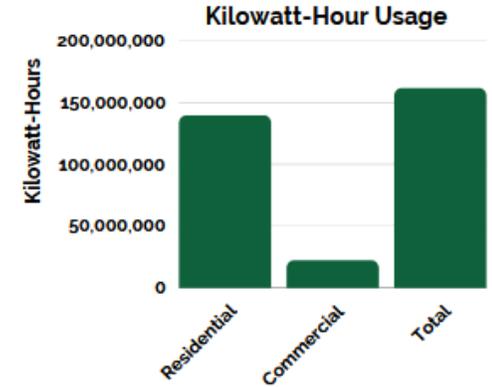


Shown on the graphs above, as of December 2020, SOPEC was serving 14,718 residential and 2,071 commercial customers within its communities. On average, for the full year, the kilowatt-hour usage per account ratio was 916 kWh/account for residential customers and 933 kWh/account for commercial customers.

SOPEC's Most Efficient Communities:

- | | |
|----------------------------|---------------------------------|
| Residential: | Commercial: |
| 1. City of Athens | 1. Village of Chauncey |
| 2. Village of Albany | 2. Village of Buchtel |
| 3. Village of Jacksonville | 3. Unincorporated Athens County |

*based on kWh/account ratios



Throughout 2020, SOPEC residential electricity usage totaled to 139,166,571 kWh; commercial usage totaled to 22,211,055 kWh, coming to a grand total of 161,377,626 kWh.

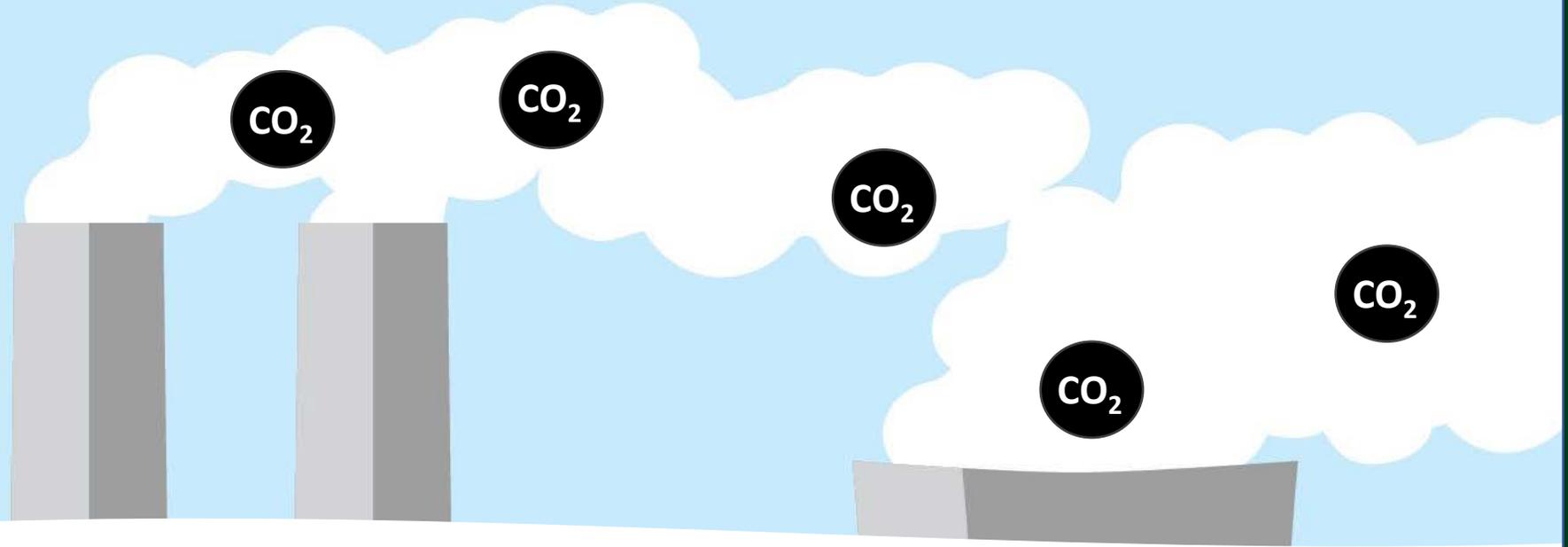
By utilizing Green-e® certified electricity this year, your community:

- Offset the release of **125,774 tons*** of CO₂! This is equivalent to:
 - CO₂ emissions from **264,167 barrels of oil consumed***
 - **1 year** of greenhouse gas emissions from **24,651 passenger vehicles**
 - CO₂ emissions from burning **627 railcars' worth of coal***



*Estimates drawn from the EPA's Greenhouse Gas Equivalencies calculator





What is the Athens Carbon Fee?

- On May 8, 2018, 76% voters (1,458 in favor) in the City of Athens approved the opt-out carbon fee to be charged on electric utility usage within the City of Athens. This affects eligible residential and small business meters enrolled in the **SOPEC Electric Aggregation Program**.
- The fee was proposed as a local mechanism to account for some of the social costs of carbon dioxide (CO₂) emissions that result from fossil fuel power plants supplying electricity to the utility grid.
- The approved ballot measure restricts all revenues collected from the fee to be used for future development of solar PV systems for publicly-owned facilities within the City of Athens — **the Athens Public Solar Fund**.

Why target carbon?

The Problem with Carbon

- Carbon is damaging to our economy—**every ton of carbon emissions causes \$36 in economic damages.**¹
- Coal- and gas-fired power plants emit large amounts of carbon—**every Megawatt hour of electricity generated in Ohio causes 1,510 pounds of carbon emissions**, resulting in \$27 in unaccounted for damages.²
- These damages are not factored into the price of energy, which means the proper incentive is missing for users to lower usage and reduce these economic damages.

The Market-Based Solution

- A carbon fee accounts for these damages by factoring these costs into the price of energy.
- By factoring these damages into the price of energy, energy users will pay for the total cost that their energy consumption creates on the economy and society.
- Paying the full cost of energy creates the proper incentive for users to *conserve* usage, *invest* in energy efficient upgrades, and *install* solar panels.

By 2025, this figure will be \$46 every ton.
(in 2007 dollars per metric ton CO₂)

How much is the fee?

0.2 cents per kilowatt-hour (kWh)

Added to the generation rate for City of Athens customers

=

5.840 cents/kWh

City of Athens – SOPEC Electric Aggregation Program Rate

**Generation Only* from June 2021-2023*

12-13 cents/kWh – TOTAL ELECTRIC CHARGE

Creating the incentive to conserve...

*For electric-based water heater and HVAC users.

There is no carbon fee associated with the City of Athens natural gas aggregation program.

*TIPS FOR SAVING MONEY AND CONSERVING ENERGY

The "carbon fee" would add an additional \$1.60 to \$1.80 to the monthly electric bill of the average Athens electric aggregation customer. Here's some tips to offset the fee and save even more!



Turn your water heater down to 120°F.
The higher the temperature, the more energy will be needed to maintain that heat until you need it.



Wash clothes in cold water.
Up to 90% of the energy consumed in washing clothes is used to heat the water. There are many great detergents designed to work well in cold water.



Install LED light bulbs or LED strip lights in the areas where you use the most lighting.



Turn off the lights when you leave a room and unplug appliances that are not in use. A power strip can help turn off multiple items at once.



Turn your thermostat 1°F toward the outside temperature compared to what you normally set your thermostat at.
For example, if you keep your indoor temperature in the winter months at 65 °F, turn it to 64 °F. If you keep your indoor temperature at 70°F in the summer months, turn it to 71°F. This 1°F change tip will completely offset the carbon fee for the average residential customer.

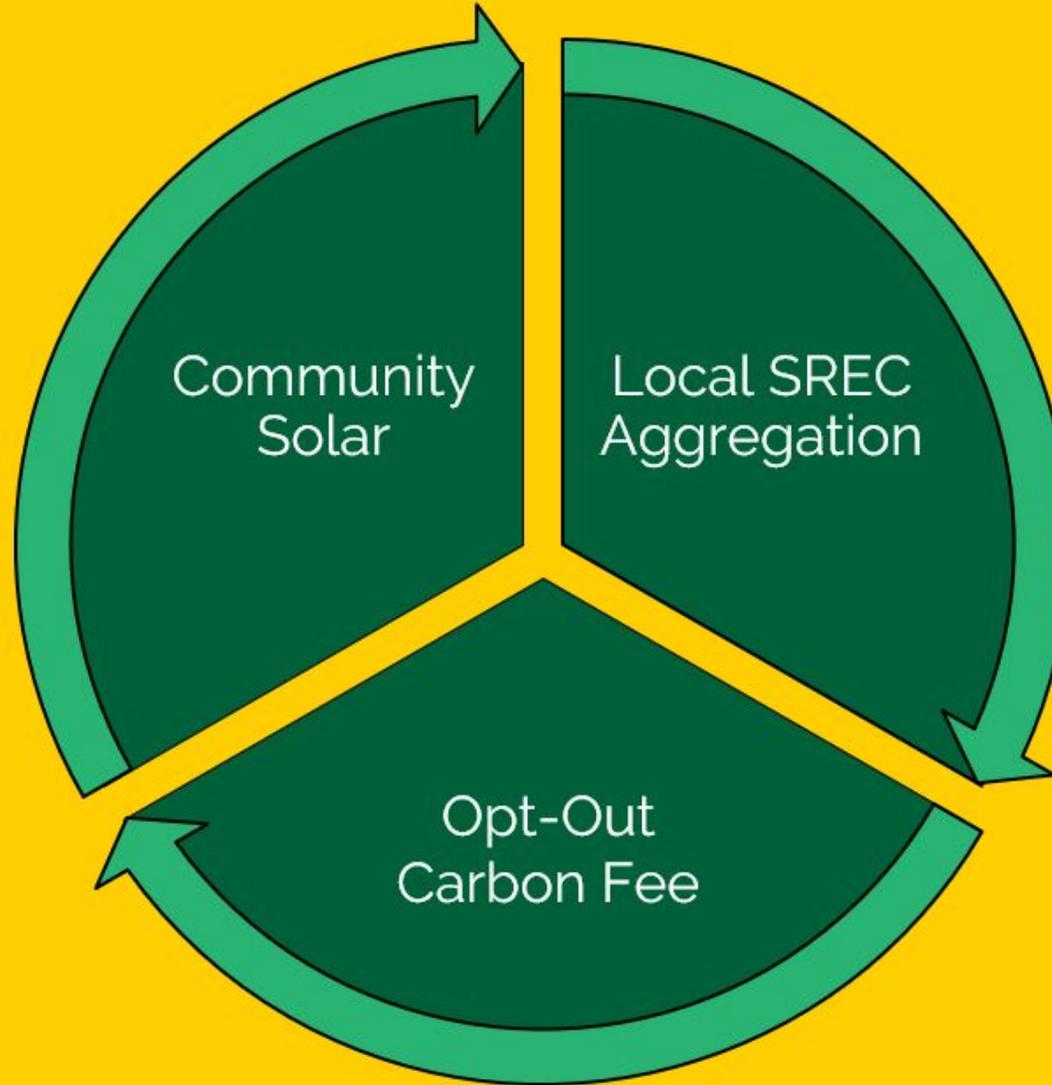
Why solar?

- Save taxpayer money
- Feel proud knowing you will support new solar
- Choice doesn't go away
- Concrete plan to meet City's sustainability goals
- Helps reduce overall carbon footprint



City of Athens – Electric Aggregation Program

**Estimated
to generate
\$100-140k
each year**



**Solar-RECs from
community solar
are purchased
for aggregation
program**

\$2 for every 1,000 kWh (so far)

Contact

SOPEC



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Luke Sulfridge – lsulfridge@sopec-oh.gov
740-336-4045



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Policy Update

Joe Garrity





MORPC

Ohio EPA Update

Erica Fetty-Davis

MORPC Staff Updates

Regional Sustainability Agenda
Brandi Whetstone

Air Quality Program
Brooke White



REGIONAL SUSTAINABILITY AGENDA

Brandi Whetstone, Sustainability Officer
Mid-Ohio Regional Planning Commission



MID-OHIO REGIONAL
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AGENDA



- About the Mid-Ohio Regional Planning Commission
- Regional Sustainability Agenda (RSA) Background
- Sustainable2050
- Process for developing the RSA
- RSA goals and objectives
- Questions

REGIONAL SUSTAINABILITY AGENDA (RSA)



MORPC



Mid-Ohio Regional
Planning Commission

REGIONAL SUSTAINABILITY AGENDA 2017-2020



ENERGY
CONSUMPTION



NATURAL
RESOURCES



ECONOMIC
OPPORTUNITY



SUSTAINABLE
NEIGHBORHOODS



COLLABORATION



GOAL 1	Reduce per capita ENERGY CONSUMPTION and promote alternative fuel resources to increase affordability and resilience of regional energy supplies.		GOAL 3	Position Central Ohio to attract and retain ECONOMIC OPPORTUNITY to prosper as a region and compete globally through sustainable practices and solutions.	
	OBJECTIVE	2020 TARGET		OBJECTIVE	2020 TARGET
1.1	Reduce vehicle miles traveled (VMT).	9,200 VMT per capita (5% reduction)	3.1	Increase the number of businesses in Central Ohio with established sustainability policies and practices.	20% increase in the number of GreenSpot businesses
1.2	Reduce the percentage of commuters driving alone and increase the percentage of commuters riding transit, biking, or walking.	80% of commuters drive alone; 6% of commuters ride transit, bike, or walk	3.2	Increase the number of adopted institutional purchasing policies that support the purchase of local food.	XX% increase in adopted institutional food purchasing policies (data and methodology under development)
1.3	Increase the percentage of vehicles using alternative fuels.	XX% of registered vehicles use alternative fuels (data and methodology under development)	 <p>GOAL 4</p> <p>Create SUSTAINABLE NEIGHBORHOODS to improve residents' quality of life.</p>		
1.4	Increase the number of trail miles traveled annually.	13 million Central Ohio Greenway trail miles traveled annually			
1.5	Increase the number of alternative fuel stations.	220 alternative fuel stations (50% increase)		OBJECTIVE	2020 TARGET
1.6	Reduce per capita energy consumption across all sectors.	50% reduction in the gap of per capita total energy consumption between Central Ohio and U.S.	4.1	Encourage MORPC member communities to adopt complete streets policies or policies that contain those elements.	45% of MORPC member communities have adopted complete streets policies or policies that contain those elements
1.7	Increase the number of local renewable energy projects and generating capacity.	576 certified renewable energy facilities with 89.4 megawatts of total generating capacity (25% increase)	4.2	Target infrastructure development to serve a higher number of people and jobs, and increase sidewalk coverage of arterials and collectors.	5 people + jobs per acre are within 3/4 mile of arterials; 40% of arterials and collectors have sidewalks
GOAL 2	Protect NATURAL RESOURCES and mitigate infrastructure vulnerabilities to maintain a healthy ecosystem and community.		4.3	Reduce the number of fatalities and serious injuries from crashes.	0.63 fatalities per 100 million VMT; 5.83 serious injuries per 100 million VMT; 10% reduction in non-motorized fatalities and serious injuries
	OBJECTIVE	2020 TARGET	4.4	Target transit and bikeway infrastructure development to serve a higher number of people.	72% of population live within 3/4 mile of a transit stop; 72% of population live within 3/4 mile of a bikeway
2.1	Reduce emissions to meet federal air quality standards.	Ozone attainment, PM2.5 attainment	4.5	Increase the annual number of income eligible households receiving free weatherization and safety-related home repairs.	5% increase in the number of households served
2.2	Increase the number of people receiving air quality information and education.	10% increase in number of people receiving a combination of Air Quality Alerts, Air Quality Alert Highway sign exposure, and media marketing exposure	4.6	Increase the number of Central Ohio Greenways trail miles.	Build 20 additional miles of Regional Greenways Trails
2.3	Reduce the amount of municipal solid waste per capita disposed in the landfill.	4 pounds of waste produced per person per day (6% reduction)	 <p>GOAL 5</p> <p>Increase regional COLLABORATION and educational opportunities to advance innovative sustainability solutions.</p>		
2.4	Minimize greenfield development and promote infill and redevelopment.	50% of development occurred inside the urban area between 2010 and 2020			
2.5	Reduce per capita water consumption.	5% reduction in gallons of water per capita consumed		OBJECTIVE	2020 TARGET
2.6	Improve water quality in the Upper Scioto Watershed.	85% of Upper Scioto sampling sites are in attainment	5.1	Establish the annual Summit on Sustainability as a premiere environmental conference through high participation and visibility.	Increase attendance by 10% annually
			5.2	Increase number of local governments committed to sustainability.	100% of MORPC members are committed to sustainability



sustainable 2050

Central Ohio Communities
Working Toward a Better Future



MORPC

RSA SUB-COMMITTEE



Chair: Justin Milam, City of Upper Arlington

Vice-Chair: Alex Slaymaker, Smart Columbus

Membership:

- Emerald Hernandez, City of Columbus Department of Neighborhoods
- Kyle O'Keefe, SWACO
- Nick Plouck, City of Dublin
- James Mako, Fairfield Regional Planning Commission
- Jennie McAdams, Franklin County Public Health
- Basar Ozbilen, Ohio State University
- Dan Sowry, Ohio EPA
- Eric Walli, Honda North America



PROCESS



MORPC

- Vision and principles
- Sustainable2050 member survey & interviews
- Workshop focused on equity considerations
- Propose and vet goals, objectives, strategies
- Regional stakeholder survey
- Regional stakeholder presentation
- Sub-committee, Sustainability Advisory Committee, and Board approval



PUBLIC INPUT



Survey

- 80-90% agreed that the goals and the objectives would benefit all communities
- 52% provide services or programming for low-income or minority populations.
- Several comments about equity and inclusion.

Virtual Lunch and Learn

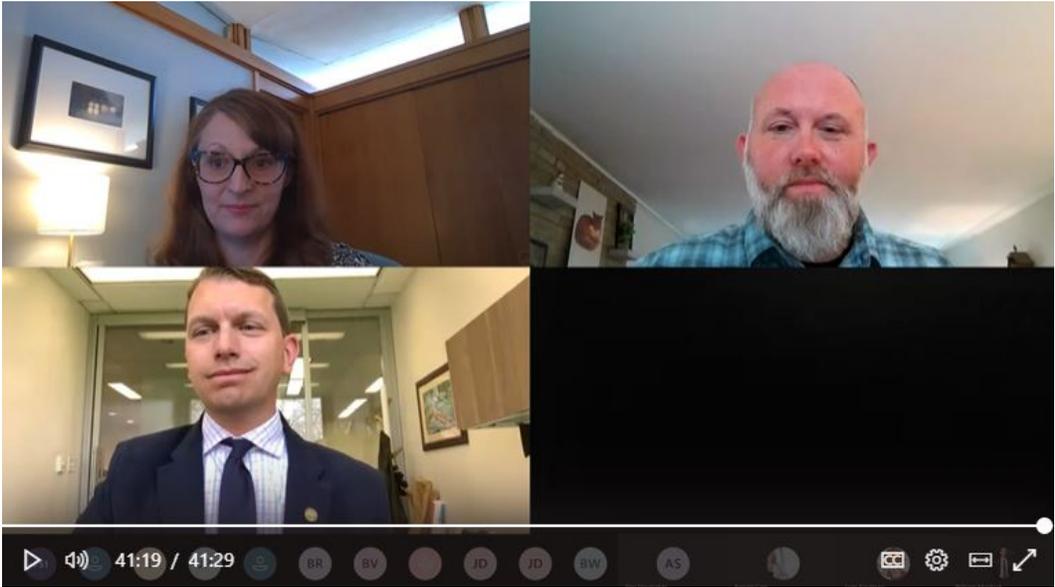
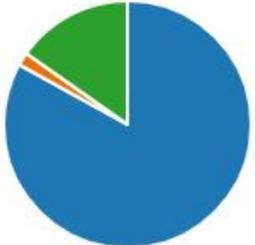
- Over 80 in attendance
- Diverse partners

3. Do you feel that this goal will benefit all communities in central Ohio?

[More Details](#)

Insights

Yes	49
No	1
Maybe	9



EQUITY RESOURCE DOCUMENT COMPONENTS



EXAMPLES OF PEER (BEST PRACTICE) DATA TOOLS TO ANALYZE EQUITY ELEMENTS



STRATEGIES AND BEST PRACTICES TO FOSTER ROBUST ENGAGEMENT WITH EQUITY COMMUNITIES



EXAMPLES OF BEST PRACTICES (IN PLANNING AND POLICY TO SUPPORT EQUITY IN SUSTAINABILITY)



INVENTORY OF ADDITIONAL RESOURCE TOOLS (DATA, BEST PRACTICES)





Goal 1: Improve air quality and reduce climate change impacts to protect public health and the environment.

- 1.1 Reduce per capita vehicle miles traveled.
- 1.2 Increase alternative fuel vehicles and infrastructure.
- 1.3 Reduce per capita energy consumption across all sectors.
- 1.4 increase local renewable energy generating capacity.
- 1.5 Reduce regional greenhouse gas emissions.
- 1.6 Increase the number of days with good air quality.

REGIONAL SUSTAINABILITY AGENDA - GOAL 2



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Goal 2: Protect and preserve natural resources to support a healthy and resilient region.

2.1 Reduce the amount of municipal solid waste per capita disposed in the landfill.

2.2 Reduce per capita water consumption.

2.3 Improve water quality in central Ohio watersheds.

2.4 Increase the amount of land devoted to natural areas and ecosystem services.

2.5 Reduce the conversion rate of farmland.

REGIONAL SUSTAINABILITY AGENDA - GOAL 3



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Goal 3: Improve quality of life for all residents by creating sustainable and equitable communities.

3.1 Improve transportation and mobility safety for all residents.

3.2 Prioritize infrastructure development which supports multi-modal transportation options for all users.

3.3 Increase access to parks and regional trails.

3.4 Reduce household energy cost burden.

3.5 Reduce the rate of elevated blood lead levels among children.



Goal 4: Promote robust, inclusive, and sustainable growth and development.

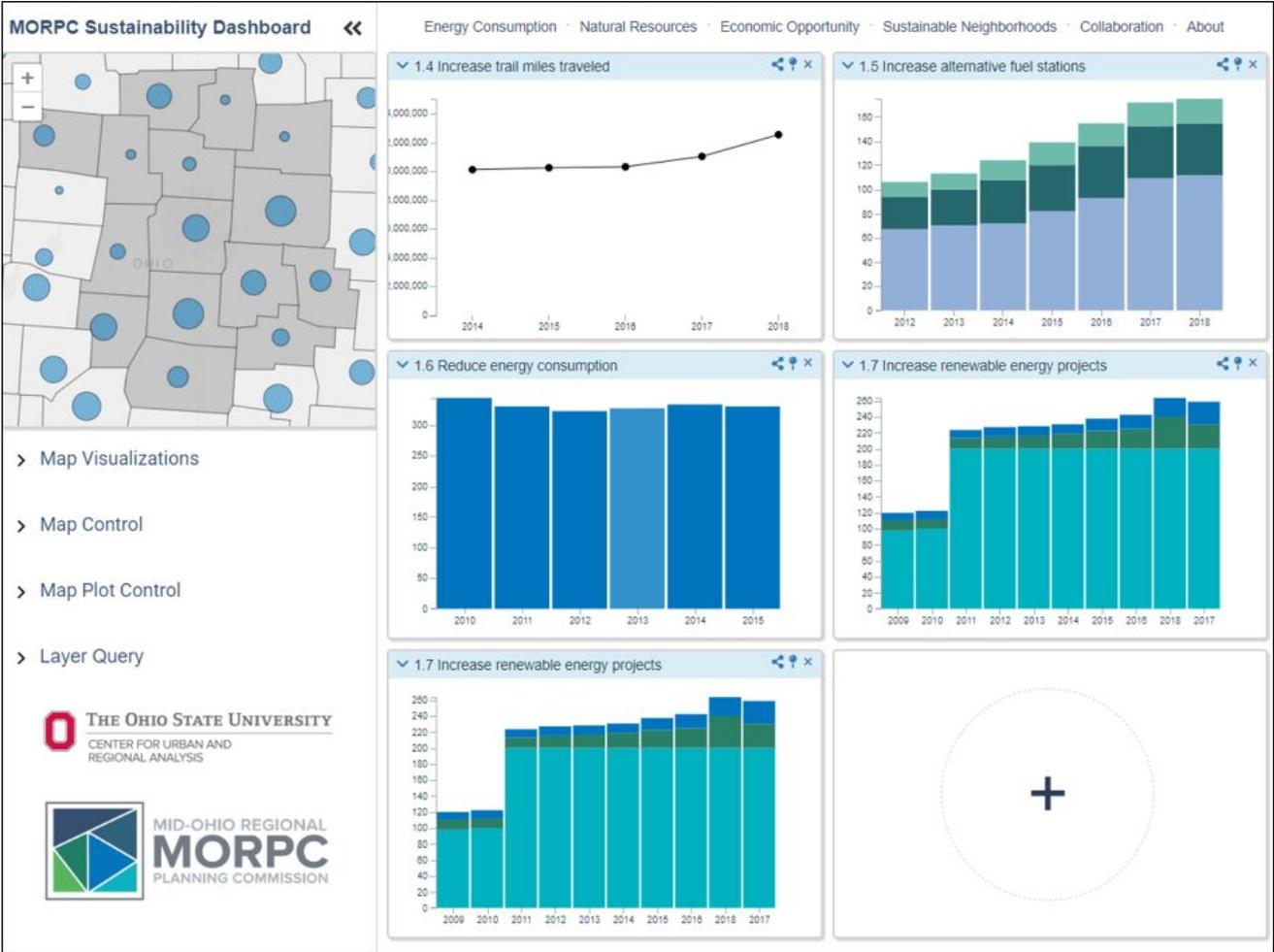
4.1 Increase the number of businesses with established sustainability policies and practices.

4.2 Maximize infill and redevelopment along existing infrastructure.

4.3 Increase availability of affordable housing options near transit or job centers.

4.4 Increase employment in green jobs.

REGIONAL SUSTAINABILITY DASHBOARD (RSD)



Official tool to track progress for the Regional Sustainability Agenda

rsd.morpc.org

 **THE OHIO STATE UNIVERSITY**
CENTER FOR URBAN AND REGIONAL ANALYSIS

 **MID-OHIO REGIONAL MORPC PLANNING COMMISSION**

NEXT STEPS



- Design/format for website
- Analyze data and propose targets
- Create new Sustainable2050 certification workbook
- Update Regional Sustainability Dashboard to track progress

Questions?

Brandi Whetstone

Sustainability Officer

Mid-Ohio Regional Planning Commission

bwhetstone@morpc.org



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Air Quality Program



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Air Quality Program



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Establishing an Air Quality Monitoring Network to Inform Local Strategies



PREVENT ENGAGE RESPOND GROW

Franklin County
Public Health

- 43203 (Near East/King Lincoln)
- 43211 (South Linden)
- 43222 (Franklinton)
- 43227 (Whitehall)
- 43232 (Blacklick)
- 43204 (Hilltop)
- 43123 (Grove City)
- 43214 (Clintonville)
- 43212 (Grandview Heights)
- 43207 (Far South)

Solar Subcommittee

SolSmart Designation

Craig Foster