



# Path Forward Strategy

## EPA Advance Program

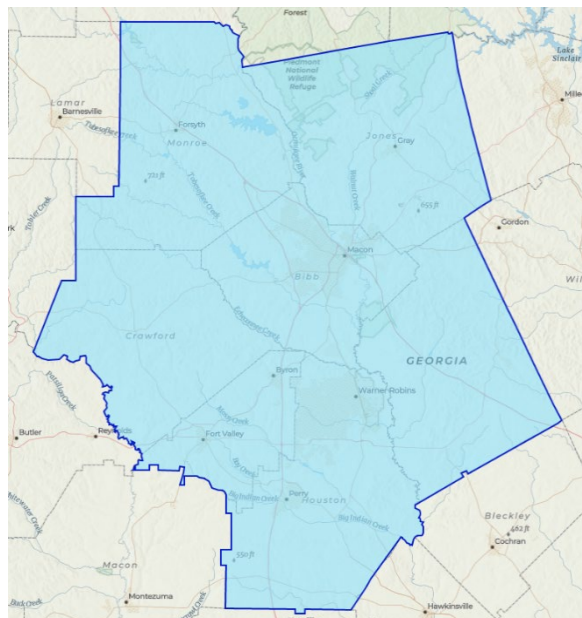
Addendum: January 14, 2021

*Taking Action to Improve Air Quality in Middle Georgia*

## Organizational Overview

The Middle Georgia Clean Air Coalition (**MGCAC**) was formed in 2003 to develop a long-term regional response to air quality issues while encouraging economic growth and ensuring the health and economic well-being of residents throughout the Middle Georgia region. MGCAC's connection to other counties and cities through a shared regional economy has made it possible for us to work together to address our shared environment and protect our regional economy, including Robins Air Force Base (RAFB), the largest employer in Middle Georgia.

Environmental compliance is required by law, but mere compliance is not enough to ensure sustained economic growth. MGCAC has worked to encourage voluntary action from all community members and has used market forces to develop projects that ensure clean air and economic growth. All citizens were called upon to engage in creating the conditions for a better tomorrow; and they answered.



*Photo 1: The Seven Counties within the MGCAC Region*

In this spirit, the Middle Georgia Clean Air Coalition voted unanimously in February 2015 to opt into the US Environmental Protection Agency's (EPA) Ozone and PM<sub>2.5</sub> Advance Program. The overwhelming support of making these commitments has been equaled only in the members' willingness to act on those commitments in the time since the plan's adoption. Accompanying this vote was the MGCAC's first Path Forward Strategy, which detailed to EPA the organization's plans and commitments for improved air quality throughout the region.

The purpose of this addendum is to address the actions taken by the Middle Georgia Clean Air Coalition to implement the Path Forward Strategy since its adoption in early 2015. The MGCAC previously amended the original Path Forward Strategy in 2016, 2017, and 2019.

Prior to 2020, the MGCAC conducted a more in-depth planning retreat which set forth goals for 2020 and beyond. These goals have been refined and built upon to begin 2021. It is the intention of the MGCAC to continue hosting annual planning sessions in December of each year to inform each year's subsequent addendum to the Path Forward Strategy, which will be approved by the MGCAC Executive Board in January of each year.

Through the collaboration of its members, the implementation of the Path Forward continues to advance with innovative and sophisticated actions. It is the belief of the MGCAC Executive Board that progress in implementing the goals outlined below will allow the Middle Georgia region to continue achieving cleaner and healthier air and an improved quality of life for all Middle Georgians.



## Review of Commitments

The commitments discussed in the original Path Forward Letter were grouped into eight overarching priorities, which are listed below. These priorities form the basis of the MGCAC's identity and are the common uniting elements of the organization's mission. These areas also inform more specific goals and implementation strategies.

### Commitment #1: Implementation of Strategies through Private Action

The MGCAC is a public organization with that recognizes private action as a key component of successfully reducing NOx and Ozone in the Middle Georgia Community. The region's "Clean Air Force" campaign has provided access to information regarding consequences of Ozone and PM<sub>2.5</sub> pollution. Other recent partnerships, like the 2018-2019 Solarize Middle Georgia campaign relied almost exclusively on private action attained through education of private citizens to understand the benefits deploying solar in their residences or businesses.



*Photo 2: MGCAC Members Celebrate the Arrival of New Locomotives at Brosnan Yard (April 2019)*

### Commitment #2: Develop Public-Private Partnerships to Achieve Goals

Related to this goal, the MGCAC seeks to partner with companies and other public entities to achieve emission reductions. The MGCAC always welcomes private companies to demonstrate new technologies and energy-saving advancements. MGCAC is a partner of the Georgia Public Service Commission and Commissioner Tim Echols for hosting the Clean Energy Road Show, which highlights the advantages of fleet conversions for private companies.

Many of the MGCAC's largest projects to reduce emissions have been public-private partnerships. Among these are the conversion of Norfolk Southern locomotives at Brosnan Yard, the installation of SO<sub>2</sub> scrubbers at Plant Scherer in Juliette, and the MGCAC's signature solar project with Robins Air Force Base, Georgia Power, and the Central Georgia Joint Development Authority.

### Commitment #3: Develop a Toolkit of Reduction Strategies

MGCAC is also dedicated to the upkeep of its website to identify common actions to reduce emissions. For its member local governments, the MGCAC continues to provide sample ordinances and policies to promote renewable energy and alternatives to coal, diesel, and gasoline. At every MGCAC meeting, there is an emphasis on providing case studies of actions taken elsewhere, while also providing forecasts of technology that is emerging and can be accessed. The MGCAC also continues to recognize those that participate in and adopt MGCAC strategies to reduce their environmental footprint.





#### Commitment #4: Use Environmentally Sound Practices in our Daily Business



*Photo 3: EV Charging Station Installed at the Warner Robins City Hall Annex with Support from the MGCAC (August 2019)*

In developing a toolkit for emissions reductions, each city and county is committed to implementing environmentally-sound practices that save taxpayer money. MGCAC developed an innovative approach to assisting all the counties and the region to assess and implement energy reduction. MGCAC has particularly supported the work of local governments to conduct energy savings performance audits and to enter into contracts that yield long term efficiencies and savings. Through MGCAC partnerships, these opportunities have even been extended to smaller cities that would not have otherwise been able to attract professional support.

To support these efforts, the MGCAC has adopted an incentives program where the MGCAC will provide funding of 50 percent or \$5,000 for any project that supports energy efficiency and emissions reductions. The City of Forsyth was the first awardee in September 2017 for their first downtown EV charging station. Public charging stations are also available at the Bibb County Courthouse and Warner Robins City Hall Annex.

#### Commitment #5: Promote and Implement Smart Growth and Sustainable Communities Principles

More broadly, the MGCAC is committed to promoting sustainable growth in our communities. Local and regional planning documents are consistent with these principles, and the Middle Georgia Regional Plan specifically supports implementation of the MGCAC Path Forward Strategy. This is also a key element of the Comprehensive Economic Development Strategy (CEDS) for Middle Georgia.

The MGCAC and its member communities seek out experts in sustainability to share their knowledge with the region, and the MGCAC seeks to grow new talent locally. In partnership with Mercer University, the MGCAC developed the Ned Sanders Scholarship to be awarded annually to a student who is studying environmental science. This recognition was expanded in 2020 to add a second annual award to a student at Fort Valley State University with the financial support of Schneider Electric.



*Photo 4: 2020 Scholarship Recipient Ahniya Spellers with Chairman Ned Sanders and Congressman Sanford Bishop*



**Commitment #6: Obtain Resources to Act**

MGCAC has continually sought out significant state and federal funding to help reduce Ozone and PM 2.5 emissions. The conversion of old diesel locomotives in Brosnan Yard is the coalition's largest award to date, receiving \$6.2 million in funding through the Congestion Mitigation and Air Quality Improvement Program (CMAQ), for which the MGCAC is singularly responsible for securing federal support with U.S. Senator Johnny Isakson. More recently, the Macon Transit Authority was able to receive \$1.5 million from the Federal Transit Administration's Low or No Emission Vehicle Program. The two new electric busses received are the first to be deployed in Middle Georgia. The education and information provided through the MGCAC are also useful for private organizations. Over the last 15 years, many companies have attended MGCAC meetings regularly and have benefited from discussions and presentations. The MGCAC has been especially thankful for the long-term financial support provided by Georgia Power and Oglethorpe Power.



*Photo 5: "Bolt," Pictured Above, and Its Partner, "Sparky," Hit the Streets of Macon in October 2020*

**Commitment #7: Develop a Signature Project**

MGCAC partnered with the Central Georgia Joint Development Authority and Georgia Power to develop a 128 MW<sub>AC</sub> solar array around Robins Air Force Base. This has been supported by all the mayors, county commissioners, and the Georgia Public Service Commission. This array is estimated to reduce NO<sub>x</sub> by 100 tons a year. This one project has been the most significant effort over the last year and would not be possible without the efforts of Robins Air Force Base, the Mayor of Macon-Bibb, the Chairman of the Houston County Commission, Georgia Power, the Central Georgia Joint Development Authority, and the Middle Georgia Regional Commission.

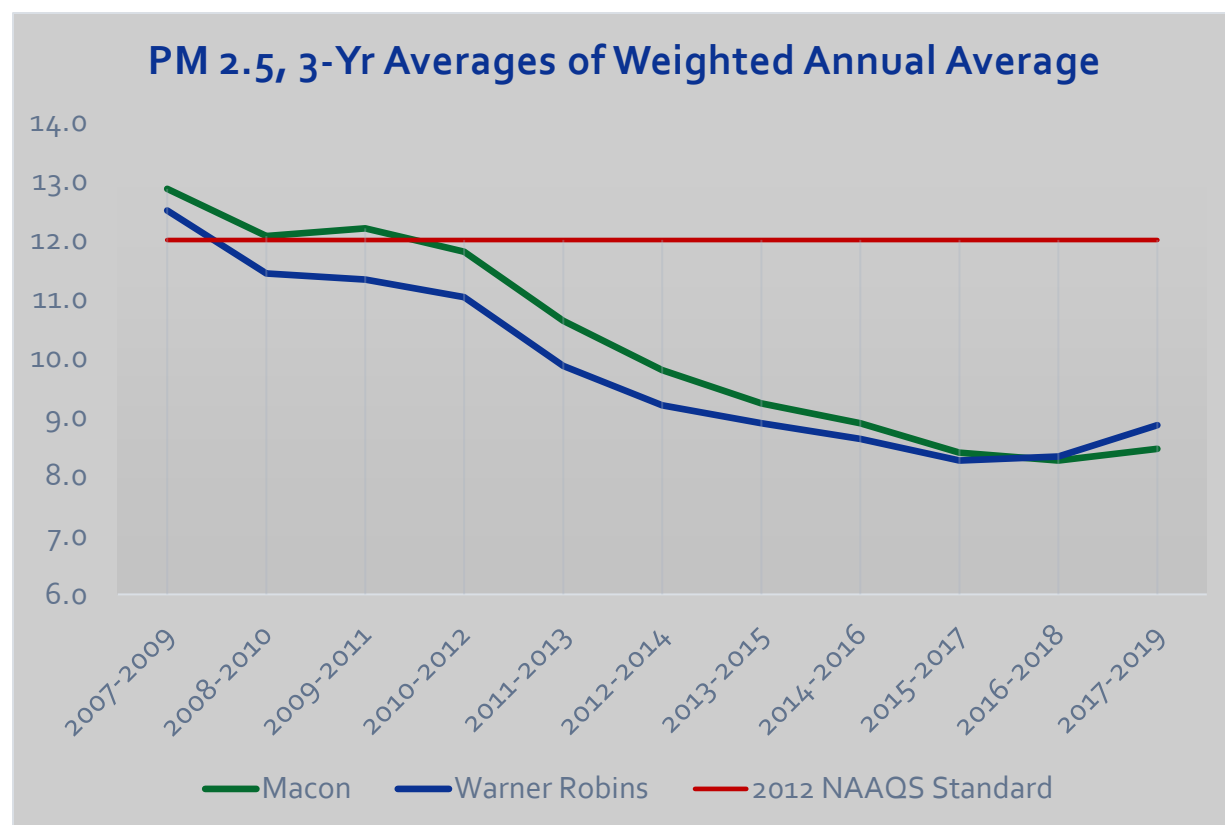
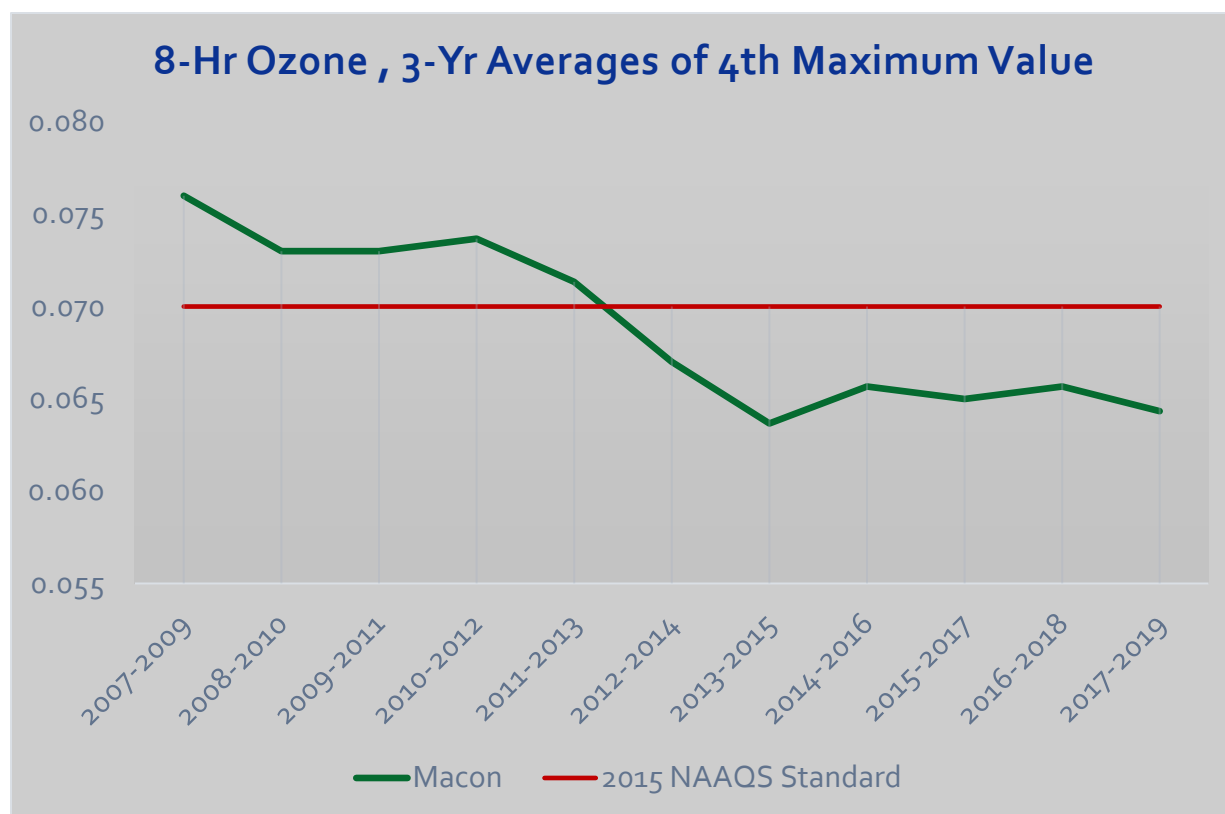
**Commitment #8: Monitor the Effectiveness of our Actions**

Middle Georgia has remained in attainment of all National Ambient Air Quality Standards (NAAQS) since joining the EPA Advance program in 2015. The MGCAC continues to periodically review and assess air quality conformity for the region. Current trends are shown below:



*Photo 6: Contractors Installing the RAFB Solar Array in August 2020*







## 2021 Goals and Implementation Strategies

Building on the past commitments of the MGCAC, the Executive Board has developed a series of goals, priorities, and implementation strategies for the 2021 calendar year. The following pages include eight areas of focus. The first four are noted as “high priority” goals, based on the results of the MGCAC planning session on December 9, 2020.

### Goal #1: Continue Focus on Electric Vehicles

(HIGH PRIORITY)

The MGCAC has made promotion of electric vehicles a priority for the past several years and has supported funding for new EV charging stations. Expanding the number of EV charging stations within the region remains a very high priority, due to projected growth in the marketplace. Specific implementation strategies for 2021 include:

- Request EV Site Proposals from MGCAC Members
- Conduct GIS Analysis of Highest Potential EV Sites
- Outreach to Georgia Power & EMCs for Partnership Opportunities
- Evaluate EV Proposals and Determine Total Budget
- Create an EV Deployment Strategy for Middle Georgia

**Air Quality and Community/Economic Benefits:** By transitioning more vehicles in Middle Georgia to alternative fuels, including electric vehicles, emissions from diesel and gasoline vehicles should decrease. This is important to Middle Georgia because mobile sources, particularly automobiles and trucks make up significant portions of our NO<sub>x</sub> (42 percent) and Volatile Organic Compound (VOC) (34 percent) emissions. Deployment of EV charging stations also helps to prepare the infrastructure of Middle Georgia for future trends in EV sales. By preparing in advance of demand, Middle Georgia can strategically position itself ahead of other regions in Georgia and throughout the Southeast United States.

### Goal #2: Expand Middle Georgia Solar Programs

(HIGH PRIORITY)

In 2020, the MGCAC adopted a model ordinance for permitting of solar energy systems throughout the region. This continues support for solar energy that has existed for many years and includes both efforts like Solarize Middle Georgia for small-scale usage and large-scale projects like the RAFB Solar Array, which is currently the signature air quality achievement of the region. Specific implementation strategies for 2021 include:

- Assist Cities and Counties with Enactment of Model Solar Ordinance
- Develop and Implement Education Campaign on the Benefits of Solar
  - Extend this Partnership to Economic Developers
- Partner with Georgia Power, Oglethorpe Power, and MEAG on Utility-Scale Solar Development
  - Identify Next Signature Project Opportunity
  - Focus Especially on Monroe County in Response to Closure of Unit 4 at Plant Scherer
- Assist with Development of Real Cost / Savings of Solar to the End User and to Utility Providers
  - Foster Productive Dialogue Between Solar Advocates and Municipal Energy Producers



**Air Quality and Community/Economic Benefits:** The combustion of fuel is another significant contributor to emissions that can jeopardize attainment of the NAAQS. According to the 2017 National Emissions Inventory (NEI), fuel combustion accounted for 48 percent of all NO<sub>x</sub> emissions, 11 percent of all PM<sub>2.5</sub> emissions, and 65 percent of all SO<sub>2</sub> emissions. Most of these emissions (though not all), can be traced back to Plant Scherer in Juliette. Solar electricity generation can reduce the future demand for coal-fired power plants, thus resulting in significant emissions reductions.

However, these large plants like Plant Scherer are significant contributors to the local economy and their closure can seriously damage the tax base. The year 2020 saw major utility announcements, including the announced closure of Unit 4 at Plant Scherer, as well as the commitment by Southern Company to achieve net zero emissions by 2050. Location of new utility-scale solar installations in communities that are currently reliant on tax revenue from fossil fuels is an opportunity to build economic resiliency regardless of what future energy decisions may be made by electric providers.

### **Goal #3: Develop a Healthy Buildings Initiative (HIGH PRIORITY)**

A new goal for 2021 will be to turn special focus of the MGCAC to the health of our public buildings in Middle Georgia. The need for this has been highlighted by the recent COVID-19 pandemic, but the potential benefits of improved indoor air quality will last long beyond the scope of COVID-19. Specific implementation strategies for 2021 include:

- Discuss and Promote Opportunities for HVAC System Improvements
  - Explore COVID-19 Mitigation Strategies
  - Improve Energy Efficiency
  - Test New Technologies (Such as Bipolar Ionization)
- Explore Research Partnerships with University System of Georgia and/or Mercer University (Rural Health Innovation Institute) Related to Architecture and Healthcare

**Air Quality and Community/Economic Benefits:** Maintenance of HVAC systems is critical to keeping buildings safe, healthy, and usable. Older units and those that have not been well maintained can require more electricity to keep them running effectively. This leads to greater energy usage, meaning high emissions of NO<sub>x</sub> as well as higher energy bills for local governments. A focus on healthy buildings can help save taxpayer dollars in the long term while also helping to reduce the spread of diseases that can cause lost productivity—damaging the local economy.

### **Goal #4: Encourage Local Planning to Support Air Quality (HIGH PRIORITY)**

This goal was among the most actively pursued areas of focus in 2020. Expected legislation at the federal level has made the present an important time to plan for future growth and development that is tied to Smart Growth and Transit-Oriented Development principles. In partnership with the I-75 Central Corridor Coalition, the MGCAC now has a significant opportunity to continue this work into 2021, especially as current indications at the federal level point to support for rail infrastructure in an upcoming surface transportation appropriations bill. Significant organizational work has already been done, and the topic of commuter rail from Atlanta to RAFB has become an effective talking point for the region. Specific implementation strategies for 2021 include:





- Continue Partnership with the I-75 Central Corridor Coalition (I-75 CCC) as a Model for Smart Growth Potential in Georgia
- Support Efforts of the I-75 CCC to Obtain \$500,000 in Funding for a Regional Smart Transportation Growth Plan
  - Bring Business Community on Board to Promote Benefits of Commuter Rail
  - Gain Support from Georgia Department of Transportation Board
  - Conduct Outreach to University System of Georgia
- Partner (Jointly with the I-75 CCC) with Transportation for America at a Federal Level for Inclusion in a Nationwide Paired-Cities Rail Initiative
- Engage with Local Developers to Educate on the Benefits of Smart Growth

**Air Quality and Community/Economic Benefits:** As noted earlier, mobile sources are a significant contributor to NO<sub>x</sub> emissions in Middle Georgia. Commuter rail will help move more people with fewer emissions that contribute to Ozone and PM<sub>2.5</sub>. In addition, Smart Growth and Transit-Oriented Development principles lead to less car usage in general. People will be able to walk and bike more, making themselves healthier while also reducing NO<sub>x</sub> and VOC emissions. From an economic standpoint, commuter rail would tie Middle Georgia much more closely to Atlanta, increasing options for housing and businesses as the Atlanta suburbs spread further out and begin to encroach on Middle Georgia, especially in Monroe County. Finally, young professionals are more likely to seek out quality of life and housing amenities before selecting an area in which to search for employment. Given evidence that communities following Smart Growth patterns are more attractive to Millennials, this commitment can also attract a younger and more educated workforce to find a home in Middle Georgia.

### Goal #5: Engage with Georgia Department of Transportation

The Georgia Department of Transportation (GDOT) is an important partner for the MGCAC as they maintain significant amounts of roadway within the region. The safe and efficient flow of traffic also supports the MGCAC efforts to reduce emissions. The MGCAC wishes to continue engagement with GDOT in 2021 and has identified specific implementation strategies for 2021, to include:

- Encourage Use of Alternative Fuel Equipment for Right-of-Way Maintenance
  - MGCAC Chairman to Coordinate with GDOT District 3 Office on Options
  - Assist with Development of Model Procurement Guidelines
- Explore Strategies to Leverage Alternative Fuel Corridor Designations
  - MGCAC Chairman to Coordinate with GDOT Policy Office in Atlanta
  - Promote Installation of Infrastructure to Support Corridor Designations
    - Including EV Charging Stations at Rest Areas
  - Promote Designation of New Alternative Fuel Corridors in Middle Georgia, Especially Including Non-Interstate Highways of Middle Georgia.

**Air Quality and Community/Economic Benefits:** The use of alternative fuels can be beneficial in reducing emissions across any context, whether dealing with non-road equipment or heavy-duty trucks. Positive reception from GDOT is a helpful step forward for long-term changes to support air quality through transportation initiatives. In addition, stations selling alternative fuels such as Compressed Natural Gas (CNG) can be a lucrative market if the demand is not being met elsewhere.



### Goal #6: Create Data Partnerships

The MGCAC is also incentivized to have up-to-date data and information available that can both sell the benefits of investing in air quality, while also allowing Middle Georgia to lead the nation in research. MGCAC will continue the Ned Sanders Scholarship, and will also support several other implementation strategies for 2021, including:

- Work with EPA, Specifically the CUPP and/or RARE Programs to Identify Partner Research Faculty and Institutions, Especially in Middle Georgia
- Explore New Opportunities for Middle Georgia to Be on the Forefront of New Technologies
- Specifically Explore Partnerships with Agriculture, such as Carbon Sequestration Research
  - Seek Opportunities to Engage with the USDA Task Force on Agricultural Air Quality
- Continue Telling the Story of How Clean Air Benefits Middle Georgians

**Air Quality and Community/Economic Benefits:** The EPA Advance Program opens the door for Middle Georgia to access the tools and resources of the federal government in ways that other communities may not be able to do so. A unique research topic of benefit to Middle Georgia businesses and industries would provide a strategic advantage for new industry growth and development, including diffusion of technology into the private sector, which is a key building block for regional innovative capacity. Agriculture is a particularly strong opportunity, as it contributes to 73 percent of regional emissions of Ammonia (NH<sub>3</sub>) into the atmosphere. Also, given the importance of agriculture in Georgia, innovations occurring locally can have a significant statewide impact on our economy.

### Goal #7: Engage at Federal Level to Promote MGCAC and Expand MGCAC Model

A previous EPA Administrator once referred to the MGCAC as “the Holy Grail of the Clean Air Act.” Recognizing that the need to engage regionally around issues of environmental quality persists all across the nation today, the MGCAC has worked to promote its efforts and gain federal support for continuance of the MGCAC model of regional collaboration. In partnership with Congressman Sanford Bishop, the MGCAC proposed a \$10 million federal allocation through the USDA Rural Utilities Service to promote regional efforts to improve air quality in rural parts of the United States. Support for this idea was also backed unanimously by the National Association of Counties (NACO). On December 22, 2020, this appropriation was passed through Congress. See: *SEC. 781. There is hereby appropriated \$10,000,000, to remain available until expended, for the Secretary of Agriculture to carry out a pilot program to provide financial assistance for rural communities to further develop renewable energy.*

With this accomplished, only one implementation item remains for 2021:

- Work with USDA, EPA, and Other Federal Partners to Secure Funding to the MGCAC and Implement the Goals of this Appropriation as a Pilot Program

**Air Quality and Community/Economic Benefits:** Most significantly, this project can be beneficial by securing funding for Middle Georgia, including the activities of the MGCAC. More broadly, this will allow the MGCAC to test new collaborative strategies for emissions reduction in rural communities. The final language puts a specific emphasis on development of renewable energy in rural communities, which will also meet the MGCAC objectives of reducing NO<sub>x</sub> and PM<sub>2.5</sub>.



**Goal #8: Engage at the Local and State Levels to Further MGCAC Priorities**

Finally, the MGCAC also intends to continue and further its engagement at the local and state levels throughout 2021. This includes some new specific outreach opportunities locally, as well as a continuation of existing practices. Local partnerships are at the heart of the MGCAC's mission and successes. The specific implementation strategies for 2021 include:

- Bring the Twiggs County Board of Commissioners Back to the MGCAC as Voting and Financially Contributing Members.
- Engage Local Boards of Education in MGCAC Activities
  - Assist in Finding Opportunities to Reduce Mobile Emissions
  - Provide Model Procurement Guidance for Alternative Fuels
  - Host a "Schools Day" at a MGCAC Meeting
- Consider Hosting MGCAC Day at the Georgia Capitol, and/or a Local Legislative Listening Day
  - Hold a Reception for Elected Officials
- Continue to Update and Use Briefing Package on MGCAC Successes
  - Conduct Orientation for New Elected Officials
  - Coordinate Outreach with Middle Georgia Regional Commission, Central Georgia Joint Development Authority, and I-75 Central Corridor Coalition
- Continue providing Clean Air Incentives Grants for Local Communities
- Continue to Explore Grant Opportunities to Support MGCAC Work

**Air Quality and Community/Economic Benefits:** This last goal recognizes that the work of the MGCAC is inherently regional in nature. The more Middle Georgia communities that are actively engaged in supporting work to improve air quality, the greater our successes will be. These efforts will also hopefully result in the ability to secure external funding through grants for continued improvements.

