

## MIDDLE GEORGIA CLEAN AIR COALITION

2014-2015 STRATEGY AND ACTION PLAN

### **Table of Contents**

Message from The Chairman	3
Vision and Principles Vision Principles	5
Scope of The Problem	8
EPA Regulatory Process for 8-Hour Ozone Standards Revision of the March 2008 Standard Current Status Regarding Ozone Changes to Monitoring Rules	10 11 12
Particulate Matter Human Health Impacts PM2.5 Effect on The Environment New Challenges Emissions and Trends New Greenhouse Gas Rules Reducing Carbon Dioxide Emissions Current Understanding of Sources VOC Sources Economic Development Implications Military Operations Impacts	12 13 14 15 16 17 18 20 21 22
Goal One: Implementation of Strategies Through Private Action Outreach to Business and Residents	25
Goal Two: Use Environmentally Sound Practices in Our Daily Business	31
Goal Three: Promote and Implement Smart Growth and Sustainable Communities Principles	37
Goal Four: Develop a Toolkit of Reduction Strategies	39
Goal Five: Obtain Resources to Take Action	40
Goal Six: Develop a Signature Project	42
Goal Seven: Develop Public-Private Partnerships to Achieve Goals	46
Goal Eight: Monitor the Effectiveness of Actions	48

#### **MESSAGE FROM THE CHAIRMAN**



The Middle Georgia Clean Air Coalition (MGCAC) has been working over the past 10 years to ensure that the people living, working and playing in the entire central Georgia region are breathing clean air. The people most vulnerable to contaminants

in the air are the very young, the elderly and those with diminished lung capacity contracted through illness or birth defect.

I am very proud to say that the 13 cities and seven counties that make up the MGCAC have accomplished demonstrable and measurable achievements over the past 10 years that have made a positive impact on our air quality. The region is currently in compliance with all elements of the Clean Air Act. This is the result of our combined efforts to put diesel filters on school buses, the banning of open burning during part of the year, changing the way we procure goods at the city and county level, the retrofits completed by Oglethorpe Power and Georgia Power at Plant Scherer, the adoption of hybrid vehicles for many of our cities and counties and many other similar actions. In short, we have changed the way we do business in Middle Georgia. We have been recognized by our Congressional delegation and the EPA at both the regional and federal level as unique and essential to making the Clean Air Act work.

I am also pleased to be serving my second term as Chairman. I take the reins from Bibb County Chairman Sam Hart, who led the organization in 2012-2013 and from Mayor Robert Reichert who led it in 2011-2012. Both periods were of major accomplishment for the region. Clean air and economic development are not mutually exclusive of one another; they go hand-in-hand.

We now face new challenges as we learn more about how extremely minute particles in the air can have serious effects on lung function if they stay in the air over an extended period. Additionally, the EPA is likely to lower the standard for ozone by late 2015 and as scientists piece together the connection between carbon dioxide emissions and climate change, there is certain to be more actions to limit these CO2 emissions. I plan to undertake my new duties with renewed vigor. We will start this New Year with an updated strategy that includes new initiatives, new projects, and a new look at how we can further improve air quality for our citizens and for our economic development.

**Ned Sanders** 

Chairman

#### **VISION AND PRINCIPLES**

#### Vision

The Middle Georgia Clean Air Coalition is comprised of all the Mayors and Chairs of the county commissions in the seven-county region. Our vision was to ensure the seven-county region of Middle Georgia would be in compliance with all aspects of the Clean Air Act by 2010. This has been accomplished, and now we are expecting new, more stringent standards that we will need to meet in 2015. Our mission must be to continue to take voluntary actions to sustain attainment beyond the current state of compliance that will be considered by our citizens, our governments, and our civic institutions as leadership actions toward sustainability.

#### **Principles**

The MGCAC is the cooperative mechanism with which local governments and the private sector in the Middle Georgia region address air quality issues and is responsible for the implementation of this strategy. Air pollution in one county affects neighboring counties and cities.

While the authority of decision-making on specific policies and actions remains within the purview of each county and city, a regional forum for communication and establishing partnerships among local governments and the private sector will help inform the decisions and overall process. Shared knowledge about how to implement the clean air actions will help each of the jurisdictions become more efficient and better able to adapt to necessary changes.

Middle Georgia's strategy will be successful if we undertake our mission in a manner that is synchronized with our values and the way we conduct our business. These principles will guide the leadership and the community toward success.

**Commit the Political Leadership:** The political leadership of Middle Georgia must be engaged and willing to commit to actions that will reduce air pollution in the region. Only

if the political leadership is committed, and demonstrates that commitment to the community will there be action. The leadership must communicate this commitment to its directors, staff, and the community. The leadership will show commitment by monitoring the actions of its staff and making modifications to policy to ensure effectiveness.

**Organize for Success:** The seven-county region must review the existing organizations within city and county governments to determine if there are adequate staff and budget to monitor, assess, and implement activities that will achieve the vision and mission of the Middle Georgia Clean Air Coalition.

**Engage and Educate the Community:** Effective training and education is the cornerstone of acceptance within the community and therefore the success of the strategy. Whether the change affects commuting patterns, open burning, or consumer choices; an educated community is vital to achieving cleaner air in Middle Georgia.

Harness the Forces of the Free Market: Market forces provide a vehicle for addressing the clean air issues in Middle Georgia. The availability of innovative clean technology can be influenced by the purchasing decisions of city and county governments, citizens and businesses. Considering air quality in purchasing decisions can spur suppliers to invest in clean energy infrastructure and products. The size and purchasing power of the entire region provides an opportunity to influence the marketplace. Harnessing market forces also includes working with the private sector and the associations representing them (such as the Chamber of Commerce and large organizations like Philips, Bluebird, Walthall Energy and Sun Edison) to share innovative ideas, technologies, and methods that will encourage investment in clean air. Landfill gas-to-energy and vehicle conversion to natural gas are two examples of market forces at work.

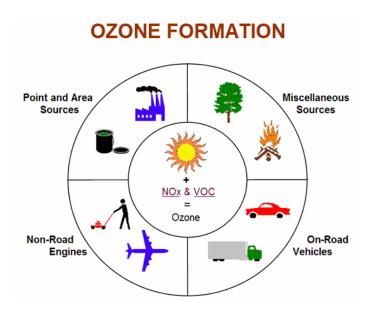
**Build Community Partnerships:** Developing partnerships with organizations that have similar goals will increase efficiency, effectiveness, and facilitate more discussion on innovative approaches to addressing regional air pollution. Partnerships can reduce the

duplication of effort on specific actions and provide a better outreach mechanism to educate more individuals on their role in maintaining good air quality.

**Use Good Science as a Basis for Action:** The MGCAC will review the best science available before acting; complete an earnest due diligence; then act. The political leadership recognizes that we are using resources that the citizens of Middle Georgia have invested. We are custodians of their resources and therefore must ensure that our actions are based on sound science. This will require officials to spend resources only on those actions that will protect the public health and comply with the law, but it also means officials will act forcefully to protect the public health.

#### **SCOPE OF THE PROBLEM**

Air pollution in Middle Georgia has historically been the result of two pollutants: ground-level ozone and particulate matter. The US Environmental Protection Agency (EPA) continuously adopts new federal air quality standards for both ozone and particulate matter due to new scientific findings, court decisions and changing technology. In an effort to enforce new standards, EPA is required to look at air quality data across the country and define areas that meet or do not meet the standard.



Air quality monitors have been established in the Macon Metropolitan Statistical Area. One of these monitors has been located at the Georgia Forestry Commission site on Riggins Road since 1997. This monitor is collecting data on NOx and PM 2.5. Another monitor has been located on Moseley Dixon Road since 2005 and measures NOx. Because air pollution is transported across county lines or even state lines, surrounding counties that do not have monitors are examined to determine if they significantly contribute air pollution to the region that has a monitored violation

On December 3, 2003, the US EPA announced their intent to designate Houston, Monroe and Bibb counties as nonattainment for the new 8-hour ozone National Ambient Air Quality Standard (NAAQS). Bibb County had a violating monitor; Houston and Monroe

Counties were listed because EPA considered them as contributors to Bibb County's monitored violations of the Ozone NAAQS, Boundary County Considerations.

In April of 2004, the U.S. Environmental Protection Agency formally designated Bibb County and a portion of Monroe County as non-attainment areas. In response to this designation, 13 cities and seven counties in Middle Georgia came together and formed the Middle Georgia Clean Air Coalition.

The goal of the local governments that created the Middle Georgia Clean Air Coalition is to improve air quality in the Middle Georgia region, to protect the health of their citizens, and to continue to grow the economy of Middle Georgia while achieving attainment earlier than required. The Middle Georgia Clean Air Coalition has adopted a unique regional approach to addressing air quality challenges in Middle Georgia. Working cooperatively, the twenty (now 19 with the consolidation of Bibb County and the City of Macon), local governments in Middle Georgia have created partnerships with state and federal government agencies as well as with private-sector businesses and NGOs in an attempt to bring all available resources to bear on improving regional air quality.

"Air quality pressures generally affect operations at our installations more than on our ranges, but they potentially limit our basing options for force realignments and weapon system bed downs...," Vice Chief of Staff of the Air Force

DoD officials have identified this issue as a "show stopper" issue because the NAAQS requires that before the DoD can add missions to a particular base in EPA designated non-attainment areas, the DoD must identify emission tradeoffs equivalent to the projected emissions of the new mission. This effectively negates the DoD's ability to put new missions into a base until the non-attainment has been resolved. These efforts are time critical because they support key elements of the BRAC decision process. While Robins AFB has been a good environmental steward, decision makers could see non-attainment in Houston County as a factor, limiting community growth potential, thus limiting new mission assignments to the Base.

The EPA reviews its non-attainment designations on a periodic basis, and will pay particular attention to the Middle Georgia area for a period of 10 years after achieving attainment in Bibb and Monroe counties. Therefore, Houston County and Robins AFB continue to face the risk of being designated as a non-attainment county at any time, and the entire Middle Georgia area must work to maintain attainment.

The efforts of the Middle Georgia Clean Air Coalition, local utilities, Georgia EPD and DOT, and the U.S. EPA have significantly improved air quality in the Middle Georgia Region. From 2004 to 2009 Macon has seen a notable decline in ozone levels. In 2007, the EPA determined that Bibb and Monroe counties were meeting federal ozone standards and in 2011 the EPA determined that these counties were also meeting standards for fine particulate matter. The current standard for 8-hour ozone is 75 ppb.

#### **Current Status**

Macon (Bibb, plus part of Monroe) is designated maintenance for the 1997 ozone standard. That designation was effective October 2007.

#### **EPA Regulatory Process for 8-Hour Ozone Standards**

On March 27, 2008 (73 FR 16436), EPA published a National Ambient Air Quality Standard (NAAQS) for ozone that revised the level of the 8-hr primary ozone standard from 0.08 ppm to 0.075 ppm. During the 2008 review process, President Bush's Clean Air Scientific Advisory Committee (CASAC) unanimously recommended a more health protective primary standard than was eventually set in 2008. Following the 2008 decision, CASAC wrote a letter to former EPA Administrator Stephen Johnson, offering unsolicited advice that reiterated its previous recommendations and urged EPA to reconsider its advice in future action on the ozone standards. In this April 7, 2008, letter, the CASAC stated:

"Nevertheless, the members of the CASAC Ozone Review Panel do not endorse the new primary ozone standard as being sufficiently protective of public health." The CASAC unanimously recommended decreasing the primary standard to within the range of 0.060–0.070 ppm.

In May 2008 state, public health, environmental, and industry petitioners filed a lawsuit against EPA to challenge the newly published ozone NAAQS rule.

In 2009, while EPA was considering whether to revisit the March 2008 ozone standard of .075 ppm, the GA Department of Natural Resources submitted its draft assessment of non-attainment areas to EPA Region 4. In this letter, the Georgia Environmental Protection Division recommended that EPA designate Bibb County and a portion of Monroe County as in non-attainment for the March 2008 standard.

The EPA notified the court that it intended to reconsider the ozone NAAQS set in March 2008 to ensure that they were scientifically sound and protective of public health and the environment.

#### **Revision of the March 2008 Standard**

In 2010, the EPA published its notice of its intent to promulgate a new NAAQS standard for ozone of between .07 ppm and .06 ppm. In March of 2010, the Middle Georgia Clean Air Coalition submitted comments on the proposed standard. The MGCAC comment letter reiterated the founding principles of the Middle Georgia Clean Air Coalition and identified three particular challenges faced by MGCAC members:

- 1. The effect of interstate shipping on Middle Georgia air quality;
- 2. The position and number of monitors in the Middle Georgia region; and
- 3. The effect of topography and other meteorological conditions that create a naturally elevated baseline concentration of ozone in the Middle Georgia region.

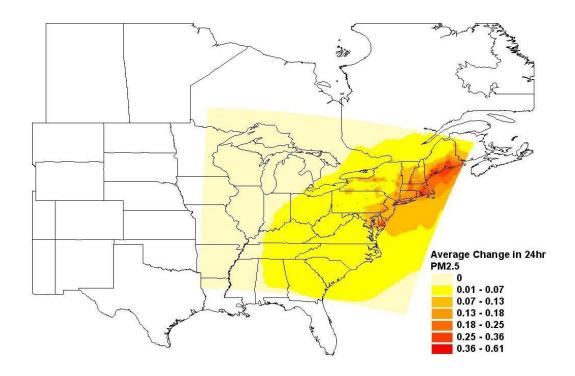
In March 2011, the EPA released a draft scientific assessment of the health effects of ozone. That draft scientific assessment concludes that ground-level ozone is more harmful than originally thought and that short-term spikes in ozone levels can increase the risk of premature deaths in infants.

The release of this report is notable since it clearly demonstrates that the EPA continues to believe that the .075 ppm ozone standard is inadequate to protect public health and that the EPA may push for a new standard at the lower end of the .060 – .070 ppm range.

**Status Regarding Ozone:** Macon-Bibb, plus part of Monroe has been designated "maintenance" for the 1997 ozone standard since 2007.

#### **Particulate Matter**

Particulate matter is the term used for a mixture of solid particles and liquid droplets found in the air. PM2.5 refers to particulate matter that is 2.5 micrometers or smaller. PM2.5 micrometers is approximately 1/30 the size of a human hair; so small that several thousand of them could fit on the period at the end of this sentence. The sources of PM2.5 include fuel combustion from automobiles, power plants, wood burning, industrial processes, and diesel- powered vehicles such as buses and trucks. These fine particles are also formed in the atmosphere when gases such as, sulfur dioxide, nitrogen oxides, and volatile organic compounds (all of which are also products of fuel combustion) are transformed in the air by chemical reactions. Fine particles are of concern because they are risk to both human health and the environment.



#### **Human Health Impacts**

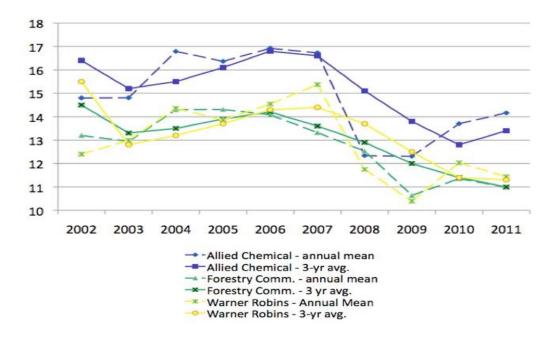
Because these particles are so small, they are able to penetrate to the deepest parts of the lungs. Scientific studies have suggested links between fine particulate matter and numerous health problems including asthma, bronchitis, acute and chronic respiratory symptoms such as shortness of breath and painful breathing, and premature deaths. Most of these premature deaths are the elderly whose immune systems are weaker due to age or other health problems such as cardiopulmonary diseases.

Children are more susceptible to the health risks of PM2.5 because their immune and respiratory systems are still developing. The average adult breaths 13,000 liters of air per day and children breath up to 50 percent more air per pound of body weight than adults. The breathing of fine particles by children is believed to cause both acute and chronic respiratory problems such as asthma. Forty percent of all asthma cases are children who make up only 25 percent of the population.

#### PM 2.5 Effect on the Environment

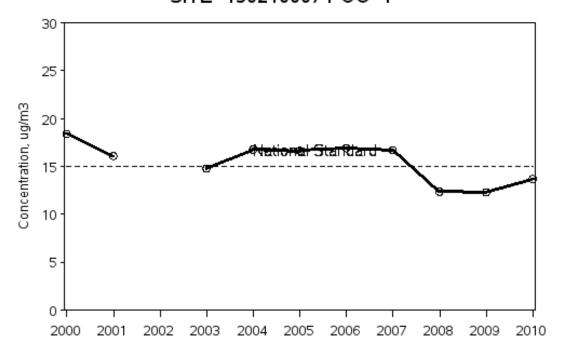
These same fine particles that lead to health effects are also a major cause of visibility impairment in most parts of the United States. It is estimated that in certain parts of the U.S. the visual range has been reduced by 70 percent of natural conditions. Because these particles are so small, they can travel great distances affecting areas in other states or even regions. It is believed that one-third of the haze seen over the Grand Canyon comes from Southern California.

These fine particles also have a great affinity for water, thus contributing to acid rain. Acid rain affects all things biological or man-made and by thus affecting the environment, can have repercussions to human health. This problematic cycle is why the EPA has taken an initiative to monitor and address fine particles in the atmosphere.



The EPA's PM 2.5 standard of 12 micrograms per cubic meter will reduce by 20 percent the maximum allowable amount of particulate matter that will be released into the air. PM 2.5 levels have declined in the Middle Georgia region over the last decade but are currently above the new standard. Bibb County's 2009-2011 Annual Design Value is 13.4 micrograms per cubic meter.

### PM2.5 Air Quality, 2000 - 2010 (Based on Seasonally-Weighted Annual Average) Macon, GA SITE=130210007 POC=1



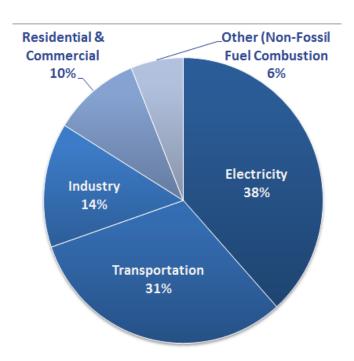
#### **New Challenges**

Carbon dioxide (CO2) is the primary greenhouse gas emitted through human activities. In 2011, CO2 accounted for about 84 percent of all U.S. greenhouse gas emissions from human activities.

Carbon dioxide is naturally present in the atmosphere as part of the Earth's carbon cycle (the natural circulation of carbon among the atmosphere, oceans, soil, plants, and animals). Human activities are altering the carbon cycle—both by adding more CO2 to the atmosphere and by influencing the ability of natural sinks, like forests, to remove CO2 from the atmosphere.

While CO2 emissions come from a variety of natural sources, scientists believe that human-related emissions account for the increase that has occurred in the atmosphere since the industrial revolution.

In September 2013, the Environmental Protection Agency issued a new proposal for carbon pollution from new power plants. After considering more than 2.5 million comments from the public about the 2012 proposal and consideration of recent trends in the power sector, EPA is changing some aspects of its approach. EPA is proposing to set separate standards for natural gas-fired turbines and coal-fired units.



Note: All emission estimates from the Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2011.

In the United States, since 1990, the management of forests and non-agricultural land has acted as a net sink of CO2, which means that more CO2 is removed from the atmosphere, and stored in plants and trees, than is emitted. This sink offset about 14 percent of total emissions in 2011.

#### **Emissions and Trends**

Carbon dioxide (CO2) emissions in the United States increased by about 10 percent between 1990 and 2011. Since the combustion of fossil fuel is the largest source of greenhouse gas emissions in the United States, changes in emissions from fossil fuel

combustion have historically been the dominant factor affecting total U.S. emission trends. Changes in CO2 emissions from fossil fuel combustion are influenced by many long-term and short-term factors, including population growth, economic growth, changing energy prices, new technologies, changing behavior, and seasonal temperatures. Between 1990 and 2011, the increase in CO2 emissions corresponded with increased energy use by an expanding economy and population, and an overall growth in emissions from electricity generation. Transportation emissions also contributed to the 10 percent increase, largely due to an increase in miles traveled by motor vehicles. Going forward, CO2 emissions in the United States are projected to grow by about 1.5 percent between 2005 and 2020.

#### **New Greenhouse Gas Rules**

In June 2014, the Obama administration proposed a new rule to restrict carbon dioxide on existing power plants. The Environmental Protection Agency (EPA) announced the proposal. The rule calls for reducing carbon 30 percent by 2030 over 2005 levels.

While the proposal is complex, the bottom line is simple. Once the rule becomes final — expected in about a year — state regulators begin a new approach to planning energy portfolios, this time with carbon restrictions in mind. A few states already have mandatory carbon targets, but for most states such requirements would be a first. In June 2014, the Supreme Court endorsed the EPA's efforts to regulate greenhouse gas emissions from sources like power plants. The 7-2 vote is one in a recent string of rulings upholding the EPA's authority to issue Clean Air Act regulations to curb climate change.

Also in June 2014, a bipartisan group of mayors from across the U.S. passed a resolution to promote projects to tackle climate change. The group approved a resolution at the U.S. Conference of Mayors event in Dallas that encourages cities to use nature to "protect freshwater supplies, defend the nation's coastlines, maintain a healthy tree and green space cover and protect air quality."

#### **Reducing Carbon Dioxide Emissions**

The most effective way to reduce carbon dioxide (CO2) emissions is to reduce fossil fuel consumption. Many strategies for reducing CO2 emissions from energy are crosscutting and apply to homes, businesses, industry, and transportation.

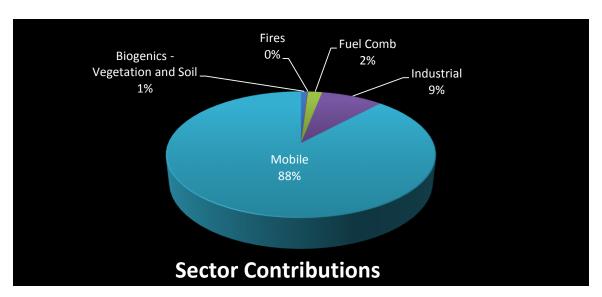


#### **Current Understanding of Sources**

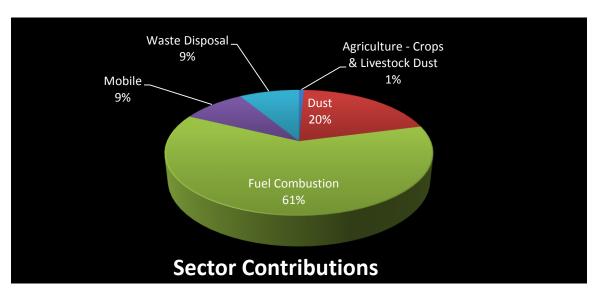
Due to the work of researchers at Georgia Tech, the Middle Georgia region is ahead of the curve when it comes to understanding the scope and sources of regional ozone pollution issues. The Fall Line Air Quality Study (FAQS) collected vital information on sources of air pollution and their regional effects beginning in 2000. The research goals were to assess urban and regional air pollution, identify the sources of pollutants and pollutant precursors, and recommend solutions to improve air quality in the Augusta, Macon, and Columbus metropolitan areas of Georgia. Upon completion of the FAQS in 2003, the National Emission Inventory (NEI) is now utilized to assess regional air pollution data.

The FAQS emissions assessment in 2000 focused on the Macon Metropolitan Statistical Area (MSA), which was the presumptive regulatory boundary that EPA used to define non-attainment areas. In 2000, the Macon MSA included Bibb, Jones, Houston, Peach, and Twiggs counties. However, in 2003 the US Office of Management

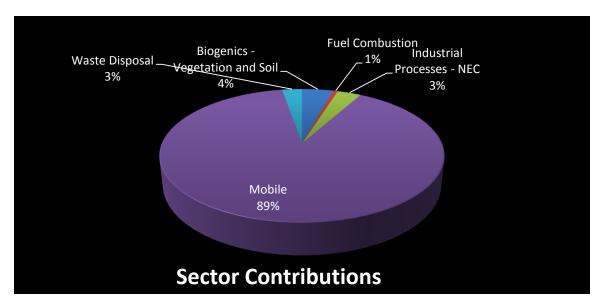
and Budget redefined these boundaries and created the Warner Robins MSA, comprised of Houston and Peach counties, and added Crawford and Monroe counties to the Macon MSA. This larger grouping of counties, all considered by EPA in its non-attainment designation, is defined as the Macon-Warner Robins-Ft. Valley Combined Statistical Area (CSA). Additionally, in 2013, Pulaski County was added to the Warner Robins MSA. The NEI contains data for the current Macon MSA.



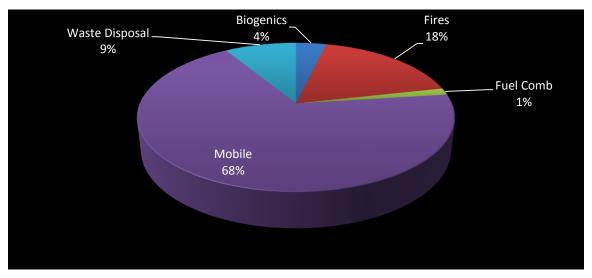
**Bibb County NOx Emissions** 



**Monroe County NOx Emissions** 



**Twiggs County NOx Emissions** 



**Jones County NOx Emissions** 

**VOC Sources**. Based on the 2011 NEI developed by the Georgia Environmental Protection Division (EPD), Air Protection Branch, the Macon MSA produced a total of 405 tons per day of VOCs. The predominant source of VOCs in the MSA was biogenic sources (84.6%), which are comprised of plant (vegetation) emissions. Point, Mobile, and non-road sources such as cars, solvents, gasoline stations, tobacco curing, and paper manufacturing comprise the rest of the VOCs.

The five-county Macon MSA includes Bibb, Crawford, Jones and Twiggs counties. While it does not contain Houston and Peach counties, it is not expected that their emissions profile would be significantly different as to change the composition and percentage contribution from sources.

#### **Economic Development Implications**

In addition to health effects, a community's air quality can also have economic implications. Title V of the Clean Air Act outlines requirements related to operating permits and "requires that major industrial sources and certain other sources obtain a permit that consolidates all of the applicable requirements for the facility into one document. The purpose of Title V permits is to reduce violations of air pollution laws and improvement in enforcement of those laws."

In terms of economic development impacts, new business and industry are not prevented from locating in an area due to non-attainment status. However, companies within non-attainment areas are often required to install additional pollution emission controls, offset the projected emissions by purchasing unused emissions credits and/or change operating processes to reduce pollutants or its chemical "precursors" (i.e. ozone for certain types of VOC's).<sup>2</sup> These additional requirements add to the cost of doing business in a non-attainment area. New business/industry and existing businesses that expand operations may not be able to afford to implement these additional requirements. With the competitive nature of economic development, the additional costs associated with locating in a non-attainment area could factor into a company's decision-making when determining where to or where not to locate.

<sup>&</sup>lt;sup>1</sup> EPA, Operating Permits, http://www.epa.gov/airquality/permits/

<sup>&</sup>lt;sup>2</sup> Food Industry Environmental Council, Issues, <a href="http://environ-council.affi.org/AFFI/files/ccLibraryFiles/Filename/00000000564/TPs%20for%20Ozone%20Final%20Rule.pdf">http://environ-council.affi.org/AFFI/files/ccLibraryFiles/Filename/00000000564/TPs%20for%20Ozone%20Final%20Rule.pdf</a> ; Georgia EPD, Air Protection In Georgia, <a href="http://www.gaepd.org/Documents/index\_air.html">http://www.gaepd.org/Documents/index\_air.html</a>

The US Chamber of Commerce provides a clear and concise overview of the potential impacts that accompany non-attainment designation: <sup>3</sup>

- Loss of Federal Highway and Transit Funding. One year from the date of a nonattainment designation, federally funded highway and transit projects will not be allowed to proceed unless the state demonstrates there will be no increase in emissions associated with the projects.
- Enhanced Regulatory Oversight. Once an area is designated as being in nonattainment, EPA has the authority to intervene and revise permitting decisions throughout the state.
- Restrictive Permitting Requirements. New and upgraded facilities in, or near, non-attainment areas are required to install the most effective emissions reduction controls without consideration of cost. Operators of existing facilities may also be required to install more restrictive control technologies than are otherwise required for similar units in areas that are in attainment.
- Mandatory Emissions Offsetting. Prior to permitting the construction of new facilities, a state must offset any emissions increases by achieving reductions at existing facilities.
- Boutique Fuels. Non-attainment areas are subjected to the Clean Air Act's reformulated gasoline program, which significantly raises the price of motor vehicle fuels for consumers.
- Loss of Economic Development Opportunities. The added regulatory and paperwork burdens, as well as expenses associated with constructing new facilities, or expanding existing ones, limit the amount of economic investment in non-attainment communities.

#### **Military Operations Impacts**

Non-attainment impacts are not limited to private business and industry; military installations are also affected. There are a wide-range of emissions sources at military installations, from aircraft and ground vehicles and the use of hazardous air pollutants in

<sup>&</sup>lt;sup>3</sup> US Chamber of Commerce, Consequences of Non-Attainment, <a href="https://www.uschamber.com/issue-brief/ozone-national-ambient-air-quality-standards">https://www.uschamber.com/issue-brief/ozone-national-ambient-air-quality-standards</a>

daily operations, to the use of obscurant smoke and prescribed fire for hazard reduction and environmental management.<sup>4</sup> The DoD is continually working to prevent future adverse impacts by exploring science and technology initiatives to facilitate future equipment and processes that emit fewer pollutants than legacy equipment.<sup>5</sup>

These technological initiatives, however, do not exempt the DoD from Clean Air Act (CAA) requirements. The CAA includes conformity rules that require federal agencies to analyze emissions from proposed projects or activities. Federal agencies are required to comply with EPA approved State Implementation Plans (SIP) and are prohibited from funding, licensing, permitting, approving or otherwise supporting activities that do not conform to the SIP. Installations located in areas of non-attainment, or areas that recently met NAAQS, work with state and/or local regulatory agencies to offset any potential emission increases to ensure the area's area quality is not significantly degraded.<sup>6</sup>

In addition to the increased costs related to environmental compliance activities, DoD cites location within a non-attainment area as having potential impacts to the operations and realism of training activities, day-to-day operations and being a critical factor when re-basing decisions and mission assignments are made.<sup>7</sup> The DoD further notes that increasing competition for emissions offsets and more stringent compliance requirements have the potential to create conflicts with commercial development.

-

<sup>&</sup>lt;sup>4</sup> Too Close for Comfort: Encroachment on Military Lands, by John Elwood, USAF National Guard Bureau, Andrews AFB, Maryland, http://www.dodbiodiversity.org/ch4/.

<sup>&</sup>lt;sup>5</sup> Military Training: DOD Lacks a Comprehensive Plan to Manage Encroachment on Training Ranges (11-JUN-02, GAO-02-614), <u>Http://www.gpo.gov/fdsys/pkg/GAOREPORTS-GAO-02-614/html/GAOREPORTS-GAO-02-614.htm.</u>

<sup>&</sup>lt;sup>6</sup> Military Training: DOD Lacks a Comprehensive Plan to Manage Encroachment on Training Ranges (11-JUN-02, GAO-02-614), <a href="http://www.gpo.gov/fdsys/pkg/GAOREPORTS-GAO-02-614/html/GAOREPORTS-GAO-02-614.htm">http://www.gpo.gov/fdsys/pkg/GAOREPORTS-GAO-02-614/html/GAOREPORTS-GAO-02-614.htm</a>; Military Aviation and the Environment: Historical Trends and Comparison to Civil Aviation by Ian A. Waitz, Stephen P. Lukachko, and Joosung J. Lee. <a href="http://web.mit.edu/aeroastro/people/waitz/publications/Mil.paper.pdf">http://web.mit.edu/aeroastro/people/waitz/publications/Mil.paper.pdf</a>.

<sup>&</sup>lt;sup>7</sup> Too Close for Comfort: Encroachment on Military Lands, by John Elwood, USAF National Guard Bureau, Andrews AFB, Maryland, <a href="http://www.dodbiodiversity.org/ch4/Chapter.4.Encroachment.pp74-89.pdf">http://www.dodbiodiversity.org/ch4/Chapter.4.Encroachment.pp74-89.pdf</a>.

# THE MIDDLE GEORGIA CLEAN AIR COALITION

# STRATEGY TO IMPROVE AIR QUALITY

2014-2015

## GOAL ONE: IMPLEMENTATION OF STRATEGIES THROUGH PRIVATE ACTION

#### JOIN THE MIDDLE GEORGIA CLEAN AIR FORCE!

The Middle Georgia Clean Air private citizens and the partners in the successful strategies. As such, our goal is



Coalition recognizes that business community are key implementation of our to promote the involvement of

the Chambers of Commerce and ensure a continuous education program through the creation of an information campaign, emphasizing the need to combine government driven actions with the voluntary lifestyle choices of private citizens. Engaging the individual and business sector as part of the solution in reducing emissions will promote the sustainability of Middle Georgia and have a positive impact on the environmental conditions in Middle Georgia. Objectives of the information campaign are as follows:

- Provide a basic understanding of air pollution and the scope of the problem in the Middle Georgia region through a series of public forums, "Lunch and Learn" programs, social media, electronic newsletters and shared resources
- Provide progress updates to the community on a quarterly basis
- Clearly define the roles of our citizens in attaining better air quality
- Support the Georgia Department of Natural Resources' effort to ensure compliance with the open burning restrictions
- Promote the Georgia Commute Options program in order to reduce emissions resulting from traffic congestion
- Develop a partnership through an MOU with Georgia Institute of Technology in order to take an active role in on-going research studies and data collection
- Create a website that will engage citizens and business

**Outreach to Business and Residents.** Many businesses and residents are unaware of the simple changes they can make that, collectively, will make a significant contribution to improving air quality in their communities. MGCAC will help them understand the impact they can have by making our strategies a visible part of their lives and giving them access to good information.

- MGCAC will provide the information, speakers, and "Clean Air Force" logos, signs, and decals
- Businesses can announce their partnership with MGCAC through:
  - Press release
  - Radio talk show
  - Board meeting declaration or resolution
  - Bulletin on cable access channel
- Encourage your local newspaper to publish a series of articles. Sample articles will be on our online toolkit.



- Create a MGCAC Clean Air Force tab on every city website with information for households and businesses alike.
- Publish a series of articles in community newsletters, encouraging residents and businesses to adopt MGCAC strategies that are on the Clean Air Force tab of the MGCAC website. Cities and counties should encourage practices such as purchase of low-VOC paint and cleaners, energy-saving lighting.
- Write a letter to the editor or opinion page article co-signed by the mayor and other key elected office-holders about the community's participation in clean air strategies.

- Check the MGCAC online toolkit for brochures, fliers, and stickers that can be distributed in your community.
- Display MGCAC Clean Air Force stickers on city vehicles, including police, fire, refuse collection, and street cleaners.
- Put a MGCAC Clean Air Force sticker on residential vehicles that undergo voluntary emission testing.
- Display fliers, posters and brochures at city hall and other municipal facilities, including police and fire stations.
- Seek cooperation from other units of local government to help educate the public about MGCAC.
  - Posters and literature at the public library.
  - Encourage school science teachers to incorporate clean air into elementary and high school curricula, perhaps around Earth Day.
  - Encourage Park District facilities to display posters and literature.
- At community events, feature a display and distribute literature about clean air.
   MGCAC will provide literature that can be easily downloaded from its website. It can be used at:
  - Farmers markets
  - Holiday celebrations (4th of July, Memorial Day, Holiday parades)
  - Sidewalk sale days
  - Municipal board meetings
  - House and garden walks
- Speak to Chambers of Commerce, Rotary Clubs or other groups of business and community leaders. MGCAC can provide you with speakers for your events.
- Insert a flier in mailings to businesses.
- On your municipal website, maintain a current list of MGCAC participating businesses and publish a rotating series of short profiles of model MGCAC businesses in your community.
- Draft and pass a municipal board resolution recognizing businesses and institutions who become MGCAC supporters. Example resolutions will be available in the online toolkit.

- Many businesses will want to participate in MGCAC because of the recognition and good will it will generate with customers, employees and others. When a business agrees to participate, we will help it maximize positive publicity.
  - Coordinate a press release announcement so that a quote from the mayor is included. Sample press releases will be included in the online toolkit.
  - Showcase participating businesses in newsletters, websites, city hall bulletin boards and other places.
  - Reference businesses by name in speeches, municipal board meetings and other appropriate settings.
- An elected official of the MGCAC will present a certificate to businesses and institutions that join the Clean Air Force and adopt MGCAC strategies. Encourage businesses that participate to advertise the fact by their MGCAC Clean Air Force logo on company websites, window stickers, and advertising.
- In speeches and in print, encourage citizens to patronize businesses displaying the MGCAC logo.
- Send a letter, issue a proclamation or adopt a municipal board resolution congratulating the business for participating.
- Contact area retailers and ask them to distribute information on low-VOC products.
- Encourage businesses to offer employees various transportation or telecommuting options.
- Provide business license and zoning applicants with information on energy efficiency and emission reduction strategies.

#### **Promoting Household Participation**

- Partner with the Water Authority to include in water bills and other mailings to households insert fliers with MGCAC website information.
- Encourage grocers, hardware stores and stores such as Home Depot to have instore displays and shelf signage showcasing low-VOC products, environmentally friendly lawnmowers and gas cans, and other strategies.
- Help get vehicles off the road by making your community friendlier to bikers and commuters, and by encouraging workplace transportation options.

- Host and aggressively promote lawnmower buy-back and gas can trade-in programs.
- MGCAC will offer stickers for cars and homes that say, "We Belong to the Middle Georgia Clean Air Force" and feature website addresses in smaller print.
- Provide residents with information on energy efficiency and emission reduction strategies with vehicle sticker purchase and/or other community mailings
- Encourage the local newspaper, or use your municipal newsletter, to showcase outstanding individual achievements in landscaping, home building materials or other MGCAC tactics.



#### **GOAL TWO:**

#### **USE ENVIRONMENTALLY SOUND PRACTICES IN OUR DAILY BUSINESS**

This strategy encourages our citizens and industries to support a new way of doing our everyday business. This also means that the elected officials should first look at the way local governments go about doing business. We must commit the political leadership to take the lead. Every decision we take as a county or city has an impact.



The availability of innovative clean technology can be influenced by the purchasing decisions of city and county governments, citizens and businesses. Considering air quality in purchasing decisions can spur suppliers to invest in clean energy infrastructure and products. The size and purchasing power of the entire region provides an opportunity to influence the marketplace.

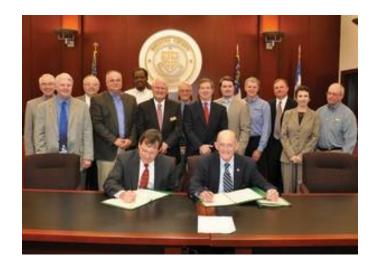
Harnessing market forces also includes working with the private sector, the associations representing them (Chamber of Commerce, etc.) and sharing innovative ideas, technologies, and methods that will encourage investment in clean air. Landfill gas-to-

energy is an example of market forces at work, such as the Houston County solid waste facility.



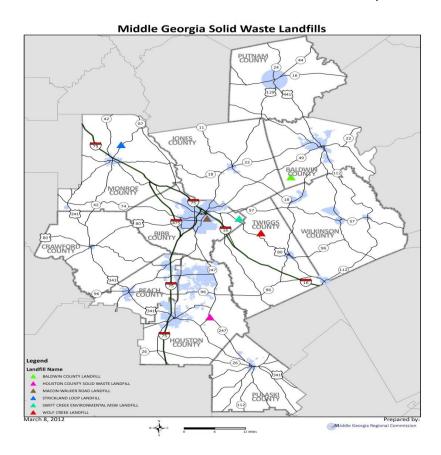
Houston County Solid Waste Facility Converts Landfill Gas to Energy





Our goal is to have each city and county in the MGCAC conduct a 2014/2015 review of its entire operations and maintenance (grass cutting, road maintenance, building upkeep and renovation, etc.) and develop a plan to reduce NOx and Ozone producing chemicals.

• Each landfill should be assessed for the potential to capture gas.

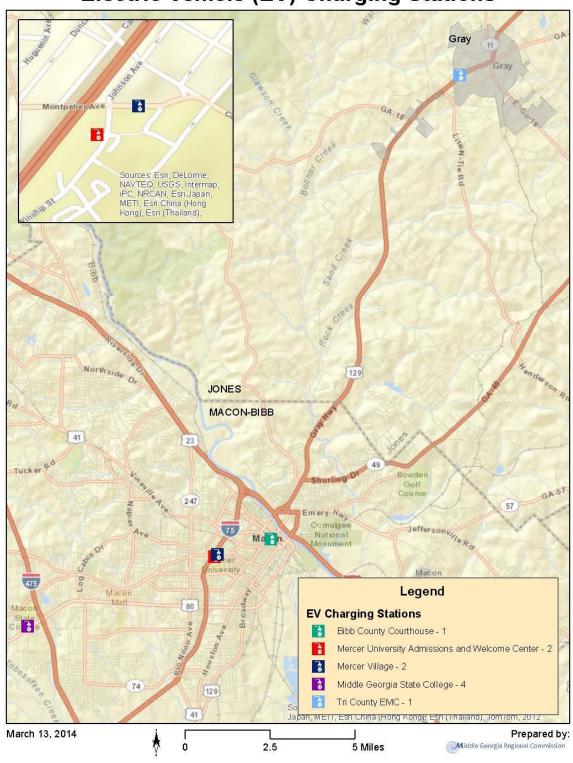


- Each city and county in the region should conduct Energy Audits in all city and county buildings.
- Replace maintenance and operations equipment with high efficiency equipment wherever there is a payback of less than 36 months.
- Review city and county procurement practices for equipment that uses fuels, like lawnmowers, automobiles, and backup energy generators. Provide recommendations to the MGCAC within one month after completion of review.
- With mobile source emissions comprising 22% of the NOx emissions in Middle Georgia there is a need to reduce mobile source emissions through the increased use of alternative fueled vehicles for clean air. The planning officials of each city and county within the MGCAC will, as a group, coordinate with Georgia DOT to support their assessment survey of current commuter behavior in Middle Georgia and develop a survey to gather information for the design of several commuter programs for the region and select major employers.
- Develop procurement policy that favors contractors who use reduced NOx equipment.
- The MGCAC will provide technical assistance on all the above initiatives and will send a questionnaire to each member to determine how much assistance they will need.
- Members of the MGCAC issue an Executive Policy Letter directing the Public Works Department to provide an overall audit of opportunities in the energy efficiency, lighting and renewable energy potential and set a goal to reduce energy usage by 15 percent.
- Each city and county should provide department heads an energy efficiency target to meet over the next five years.



Macon Police on Segway

## Electric Vehicle (EV) Charging Stations

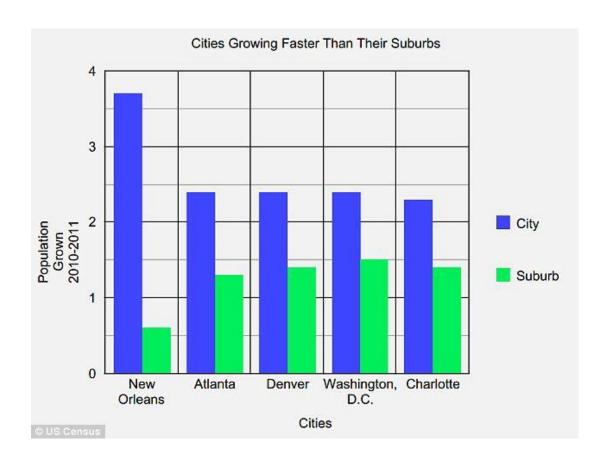


#### **GOAL THREE:**

# PROMOTE AND IMPLEMENT SMART GROWTH AND SUSTAINABLE COMMUNITIES PRINCIPLES

Local governments and organizations charged with regional development should pursue and welcome new industry and development that protects the environment in the process of bringing employment and economic benefit to the community. Growing jobs and wealth in the community can enable citizens to use market forces as a vehicle for addressing the clean air issues in Middle Georgia. As jobs grow, so will residential and commercial development. It is important that regional growth reduces the amount of suburban sprawl that contributes to more vehicle miles traveled and therefore more air pollution. Objectives include:

- MGCAC will offer to help review and update all applicable local and regional planning documents to ensure consistency with Smart Growth/Sustainable Communities principles, policies and best practices. Updates will be performed in accordance with timelines established by the Georgia Department of Community Affairs (DCA) Office of Planning and Environmental Management. Applicable documents include local Comprehensive Plans and corresponding Community Work Programs, the Middle Georgia Regional Plan and the Middle Georgia Regionally Important Resources (RIR) Plan.
- Promote and implement the appropriate Smart Growth/Sustainable Communities
  activities identified in local and regional planning documents; investment in
  infrastructure improvements, development of alternative transportation facilities,
  land dedicated for parks, recreation areas and conservation uses, transportation
  and land use alignment, etc.
- MGCAC members should actively participate in the annual update of the Comprehensive Economic Development Strategy (CEDS) for the Middle Georgia Economic Development District ensuring identified strategies are consistent with Smart Growth/Sustainable Communities principles.



## **GOAL FOUR:**

## **DEVELOP A TOOLKIT OF REDUCTION STRATEGIES**

Achieving air quality that meets or exceeds the standards in law and regulation is possible and is our mandate. The MGCAC will develop a toolkit that will aid cities, counties, citizens and businesses to take action. It will be available online and will identify actions taken in other jurisdictions, provide case studies and identify the gains expected by taking such actions. It will look to obligations identified in this strategy to guide the development of this toolkit and will include:

- A draft letter to businesses to solicit MGCAC participation that can help facilitate communication to businesses in your community, inviting them to participate and support in MGCAC. This letter can be altered to your preference and should be signed by a municipal leader such as the mayor or county president.
- A sample insert card for municipal mailings that can be added to weekly, monthly
  or other patterned municipal mailings to encourage recipients to take part in
  MGCAC. The card is self-addressed to MGCAC, where interested parties will be
  guided on how to begin their participation.
- Drop-in articles that can be added, at your discretion, to municipal websites, newsletters and other communication mediums to encourage community members to adopt MGCAC strategies.
- Sample press releases
- Sample ordinances and resolutions
- Case studies
- Adopt recognition letters, certificate templates and award plaques to recognize and honor those that participate in and adopt MGCAC strategies.
- Sample resolution for businesses

#### **GOAL FIVE:**

## **OBTAIN RESOURCES TO TAKE ACTION**

It is also important to recognize that the resources being used belong to the citizens of Middle Georgia. The MGCAC is a custodian of their resources and therefore must ensure that actions are based on sound science. This will require officials to spend resources only on those actions that will protect the public health and comply with the law, but it also means officials will act forcefully to protect the public health. We will review the best science available before acting; complete an earnest due diligence; then act.

The cities and counties within the Middle Georgia region must pursue activities that optimize MGCAC efforts and resources to achieve the greatest measured emission reductions. That has been true since the beginning of the MGCAC. The areas where we need to continue to develop projects and programs are in the energy and transportation sector. One of our major accomplishments over the last 10 years was to secure \$4.5 million to implement projects such as school bus retrofits, purchase of hybrid vehicles, and purchase a new, less polluting locomotive for Brosnan Yard.

- Develop Public-Private Partnerships. There are many new instruments available to cities and counties since we initiated the MGCAC. There are many private companies that will use their capital to undertake energy efficiency projects, which is recovered through efficiency retrofits.
- Leverage Resources within the MGCAC. Finding a balance in the ability and expertise of MGCAC members and partners with the resources available to implement the actions with the greatest potential for emissions reduction is one certain challenge for decision makers.
- Develop a Sponsorship Category in the Membership of the MGCAC. The
  education and information provided through the Clean Air Coalition is enormously
  useful to private organizations. Over the last 10 years, many companies have
  attended the MGCAC meetings regularly and have benefited from these meetings.
- Seek Federal and State Grants. Although federal and state grants have become
  more competitive with fewer resources available, there are still important and

targeted grants that can have an impact. MGCAC should seek out those that have a high likelihood of success, have a good return on investment of time and will make a positive contribution to air quality.

Seek Ozone Advance Grants. In 2014 the MGCAC was accepted into the Ozone
Advance Program, which is a partnership with EPA. This program will give the
MGCAC access to more tools, more programs, and more resources.

The MGCAC will invite five corporate sponsors to be members of the MGCAC.

## **GOAL SIX:**

## **DEVELOP A SIGNATURE PROJECT**

The MGCAC 2014-2015 strategy includes developing at least one signature project that is of the scale and scope to positively affect air emissions. The commitment is to pursue a partnership with the business community to develop a solar array that will help reduce air emissions and help Georgia Power meet its Public Service Commission mandate.

The U.S. now has over 8,500 megawatts (MW) of cumulative installed solar electric capacity, enough to power more than 1.3 million average American homes. The residential market continues to show consistent, incremental growth as residential installations grew 53 percent in Q1 2013 over the same quarter in 2012 and utility installations saw 318 MW come online in the first quarter of 2013.

According to an Arizona State University study the states with the most potential to deploy solar are:

- Arizona
- Colorado
- Georgia
- Texas
- Hawaii
- Arkansas
- Wyoming/Alabama (tie)
- Missouri
- California

The "Optimal Deployment of Solar Index, (OSDI)" published in the Electricity Journal by W. P. Carey School of Business at Arizona State University, provides a ranking of ideal states for solar power based on several different considerations. The conditions for an ideal state are:

- A relatively high level of solar insulation (ability to generate a significant amount of solar energy).
- A fairly large amount of economic activity resulting from solar energy being deployed.
- A reasonably low cost of energy installation.
- Higher than average current prices for electricity.
- The potential for electricity production through solar power that would offset large amounts of carbon emissions.

In 2012, the U.S. solar industry grew by 76 percent, with more than 3,300 megawatts (or 3.3 gigawatts) of photovoltaic (PV) capacity. The industry supported 119,000 jobs in 2012 (a 13.2 percent increase over 2011), and total solar electric installations were valued at \$11.5 billion. By comparison, according to SEIA, in 2012 there were 800 solar industry jobs in Georgia (41st in the nation, per capita), where about 90 companies invested \$18 million to install residential and commercial solar energy systems.



Georgia Trend Magazine devoted a feature story on the business opportunities associated with solar energy

Many states and localities are exploring or implementing clean energy policies and air pollutant emission reductions. For instance, the Metropolitan Washington Council of Governments included renewable energy and energy efficiency measures in its May 2007

State Implementation Plan for the 8-Hour Ozone Standard. These measures are expected to avoid almost 150,000 MWh of generation and 0.17 tons of NOx daily.

Several states have quantified the emission reductions and air and health benefits and determined that the measures are helping them reduce their air pollution and GHGs. The Wisconsin Focus on Energy Program's energy efficiency and renewable energy projects funded by the Utility Public Benefits fund shows that during July 2001 through June 30, 2006, the state displaced annual emissions from power plants and utility customers of about:

- 5.8 million pounds of NOx
- 11.4 million pounds of SOx
- 46 2.6 billion pounds of CO2

The Texas Commission on Environmental Quality evaluated the Texas Emissions Reduction Plan and calculated that it achieves an annual reduction of NOx emissions of 346 tons through energy efficiency and renewable energy.

In less than a year, Georgia's Public Service Commission has approved 735 megawatts through solar power arrays. Georgia Power voluntarily provided the first 210 megawatts that was approved last winter. The PSC voted in July 2013 to require the additional 525 megawatts as part of a broader Georgia Power docket. The 22,359.05 MW of solar energy currently installed in Georgia ranks the state 21st in the country. There are currently 151 companies working in the solar industry throughout Georgia, employing 800; and in 2012, \$18 million was invested in Georgia to install solar on homes and businesses.



Solar Canopy Installation at the Laredo Bus Facility (Atlanta). 220 bus parking stalls feature perforated panels to filter sunlight. The canopies are equipped with light-emitting diodes (LEDs) light fixtures to provide ample lighting for safety and maintenance activities at night and reduce summertime temperatures between 20 and 30 degrees underneath the canopies, lowering bus fuel consumption, reducing the need for air-conditioning and enhancing the general work environment for MARTA operators, maintenance and facilities personnel.

#### **GOAL SEVEN:**

## **DEVELOP PUBLIC-PRIVATE PARTNERSHIPS TO ACHIEVE GOALS**

As the MGCAC very first strategy stated, "Clean air is good business. It reduces health costs, maintenance costs, and it creates opportunities for entrepreneurs to help meet social and civic goals." This is even more true today than when the Strategy for the Future was first developed in 2006. The corporate focus on energy efficiency continues to boost a well-developed business, with an increasing number of energy efficiency products (Ernst Young, Aug 2013). *The Wall Street Journal* list of top 10 clean tech companies in the U.S. named Suniva, a solar-power in Norcross, Ga., its number 2 clean-tech company in the U.S.

The MGCAC will partner with industry to leverage its resources in three different ways:

- Ask five companies to become corporate sponsors of the MGCAC organization.
- Partner with companies to assist the members of the MGCAC in analyzing opportunities to increase efficiencies in operations at no cost to the city or county.
- Develop toolkits for elected officials that will show methods and return on investments in clean technologies.

The MGCAC will reach out to private industry and their associations to determine new public/private partnerships that can reach the public goals.

- A MGCAC meeting will be devoted to private companies briefing on ways they can help achieve the clean air goals of the region.
- Each city and county elected board will be briefed on opportunities, return on investment, and the impacts of such investment.
- A MGCAC meeting will be devoted to case studies of fleet conversions to natural gas, with a complete analysis of the costs and return on investment.
- Host a small business day to brief local businesses on the work of the MGCAC and the opportunities for small business to increase efficiencies and support clean air initiatives in Middle Georgia.
- Develop a branded MGCAC sign to place in storefronts about idling

• Working with private businesses and school boards in the region, develop a plan for funding conversion of school buses to cleaner fuels.



#### **GOAL EIGHT:**

# MONITOR THE EFFECTIVENESS OF ACTIONS

No strategy is successful without knowledge of what is working, what needs to be modified, and identification of actions necessary to achieve targeted goals. Monitoring and assessment objectives include the following:

- Cities and counties and will assess local operations for environmental efficiency and possible implementation of recognized best practices.
- Develop relevant metrics to track actions taken by cities and counties.
- Conduct annual assessment of Strategy for the Future and other applicable planning documents to ensure targeted milestones are being met.
- Research, analyze, and report all sources of air quality standards as a means of assessing effectiveness of actions.

#### SUMMARY OF PROPOSED OZONE CONTROL STRATEGIES

# I. Implement Control Strategies through Private Action

- a. Provide access to understanding the sources of ozone and the consequences through speakers, literature, and websites.
- b. Provide a control strategy toolbox that is available to all citizens, businesses and local government
- c. Develop a "Clean Air Force" that all citizens, businesses and governments can join by committing to actions that reduce the precursors to ozone
- d. Publish newsletters and alerts to the Clean Air Force
- e. Publish Op-eds in newspapers twice a year on the status of our path forward

## II. Use Environmentally Sound Practices Our Daily Business

- a. Each city and county will conduct a review of its operations and maintenance and develop plan to reduce NOx and ozone producing chemicals.
- b. Each landfill will be assessed for the potential to capture gas.
- c. Each city and county in the region will have conduct Energy Audits in all city and county buildings.
- d. Replace maintenance and operations equipment with high efficiency equipment wherever there is a payback of less than 36 months.
- e. Review city and county procurement practices for equipment that uses fuels, like lawnmowers, automobiles, and backup energy generators. Provide recommendations to the MGCAC after completion of review.
- f. With mobile source emissions comprising 22 percent of the NOx emissions in Middle Georgia there is a need to reduce mobile source emissions through the increased use of alternative fueled vehicles for clean air. The planning officials of each city and county within the MGCAC will, as a group, coordinate with GA DOT to support their assessment survey of current

- commuter behavior in Middle Georgia and develop a survey to gather information for the design of several commuter programs for the region and select major employers.
- g. Develop procurement policy that favors contractors who use reduced NOx equipment.
- h. The MGCAC will provide technical assistance on all the above initiatives and will send a questionnaire to each member to determine how much assistance they will need.
- i. The MGCAC will provide an overall audit of opportunities in the energy efficiency, lighting and renewable energy potential.
- j. Each city and county will provide department heads an energy efficiency target to meet over the next five years.

# III. Promote and Implement Smart Growth and Sustainable Cities Principles

- a. MGCAC will offer to help review and update all applicable local and regional planning documents to ensure consistency with Smart Growth/Sustainable Communities principles, policies and best practices. Updates will be performed in accordance with timelines established by the Georgia Department of Community Affairs (DCA) Office of Planning and Environmental Management. Applicable documents include local Comprehensive Plans and corresponding Community Work Programs, the Middle Georgia Regional Plan and the Middle Georgia Regionally Important Resources (RIR) Plan.
- b. Promote and implement the appropriate Smart Growth/Sustainable Communities activities identified in local and regional planning documents; investment in infrastructure improvements, development of alternative transportation facilities, land dedicated for parks, recreation areas and conservation uses, transportation and land use alignment.

c. MGCAC will request all members actively participate in the annual update of the Comprehensive Economic Development Strategy (CEDS) for the Middle Georgia Economic Development District ensuring identified strategies are consistent with Smart Growth/Sustainable Communities principles.

# IV. Develop a Toolkit of Reduction Strategies

- Develop a website that will include actions that can be taken by businesses and citizens
- b. Provide a request form that businesses and citizens can seek speakers, literature and a sign for their window that says "I am a Member of the MGCAC Clean Air Force"
- c. Clean Air Talking Points that can help frame discussions about Clean Air and explain to community members, businesses and residents the goals and importance of the program. The talking points can also be used when structuring and facilitating outreach for and to the media.
- d. A draft letter to businesses to solicit MGCAC participation inviting them to participate and support in MGCAC.
- e. A sample insert card for municipal mailings that can be added to weekly, monthly or other patterned municipal mailings to encourage recipients to take part in MGCAC. The card is self-addressed to MGCAC, where interested parties will be guided on how to begin their participation.
- f. Drop-in articles that can be added, at local discretion, to municipal websites, newsletters and other communication mediums to encourage community members to adopt MGCAC strategies.
- g. Sample press releases
- h. Sample ordinances
- i. Case studies

- j. Adopt recognition letters, certificate templates and award plaques to recognize and honor those that participate in and adopt MGCAC strategies.
- k. Sample resolution for businesses

#### V. Obtain Resources to Take Action

- a. Develop Public-Private Partnerships. There are many new instruments available to cities and counties since we initiated the MGCAC. There are many private companies that will use their capital to undertake energy efficiency projects, which is recovered through efficiency retrofits.
- b. Leverage resources within the MGCAC. Finding a balance in the ability and expertise of MGCAC members and partners with the resources available to implement the actions with the greatest potential for emissions reduction is one certain challenge for decision makers.
- c. Develop a Sponsorship category in the membership of the MGCAC. The education and information provided through the Clean Air Coalition is enormously useful to private organizations. Over the last 10 years, many companies have attended the MGCAC meetings regularly and have benefited from these meetings.
- d. Seek federal and state grants. Although federal and state grants have become more competitive with fewer resources available, there are still important and targeted grants that can have an impact. MGCAC should seek out those that have a high likelihood of success, have a good return on investment of time and will make a positive contribution to air quality.
- e. MGCAC will invite five corporate sponsors to be members of the MGCAC.

# VI. Develop a Signature Project

a. Partner with the business community and pursue development of at least one major renewable energy project that will decrease demand of conventional power.

# VII. Develop Public-Private Partnerships to Achieve Goals

- a. Ask five companies to become corporate sponsors of the MGCAC organization.
- b. Partner with companies to assist the members of the MGCAC in analyzing opportunities to increase efficiencies in operations at no cost to the city or county.
- c. Develop toolkits for elected officials that will show methods and return on investments in clean technologies.
- d. The MGCAC will reach out to private industry and their associations to determine new public/private partnerships that can reach the public goals.
- e. Devote a MGCAC meeting to private companies briefing on ways they can help achieve the clean air goals of the region.
- f. Each city and county elected board will be briefed on opportunities, return on investment, and the impacts of such investment.
- g. Devote a MGCAC meeting to case studies of fleet conversions to natural gas with a complete analysis of the costs and return on investment.
- h. Host a small business day to brief local businesses on the work of the MGCAC and the opportunities for small business to increase efficiencies and support clean air initiatives in Middle Georgia.
- i. Develop a branded MGCAC sign to place in storefronts about idling.
- j. Working with private businesses and school boards in the region, develop a plan for funding conversion of school buses to cleaner fuels.