

Chapter 11: MDE Recommendations

Frequently Used Abbreviations and Acronyms

GGRA: Greenhouse Gas Emissions Reduction Act

GHG: Greenhouse Gas

MCCC: Maryland Climate Change Commission

MDE: Maryland Department of the Environment

Background

The GGRA requires MDE to include recommendations in the *2015 GGRA Plan Update* on how the State should move forward to continue making progress on Climate Change.

The GGRA requires MDE to provide:

“Recommendations on the need for science based adjustments to the requirement to reduce greenhouse gas emissions by 25% by 2020”

The GGRA further requires that:

“On review of the study required in Section 2-1207 of this subtitle (the *2015 GGRA Plan Update*), the General Assembly may act to maintain, revise or eliminate the 25% greenhouse gas emissions reductions required under this subtitle.”

Section 6.7 of the Act states:

“And be it further enacted, That Section 2 (*see below*) of this Act shall take effect October 1, 2009. It shall remain in effect for a period of 7 years and 3 months, and at the end of December 31, 2016, with no further action required by the General Assembly, Section 2 of this Act shall be abrogated and of no further force and effect.”

Section 2 of the Act, in total, states:

“The State shall reduce statewide greenhouse gas emissions by 25% from 2006 levels by 2020.”

This chapter provides the MDE recommendations required by the GGRA.

This chapter also provides more technical recommendations from MDE on several emerging issues that will need to be considered in the future.

Meeting the 2020 Requirements: Reducing GHG Emissions by 25% by 2020

The GGRA requires MDE to submit the *2015 GGRA Plan Update* to summarize the State's progress toward achieving the 25% GHG emission reduction goal by 2020 established by the GGRA. This report shows that Maryland is on track to meet this goal.

As described earlier in this report, the 25 percent reduction in Statewide GHG emissions from 2006 levels by 2020 goal of the GGRA has been calculated to be 34.66 MMtCO₂e. The combined emissions reductions of all programs in the *2015 GGRA Plan Update* will yield a total of 38.37 MMtCO₂e in emissions reductions. This will exceed the GGRA 2020 goal by 3.71 MMtCO₂e.

Meeting the 2020 Requirements: Maryland Jobs and the Economy

Continued implementation of the programs included in the *2015 GGRA Plan Update* will support new industry and will accelerate investments in green technologies in Maryland by encouraging investments in the energy, transportation, and land use sectors of our economy. Implementing the *2015 GGRA Plan Update* will lead to increased investments in energy efficiency, green buildings, renewable energy and low emission vehicles. Investing in Maryland's green economy now will encourage smarter investments and support more sustainable economic growth for generations to come.

Current analyses project that the *2012 GGRA Plan* will result in estimated economic benefits of between \$2.5 billion and \$3.5 billion in increased economic output by 2020 and help create and maintain between 26,000 and 33,000 new jobs.

An Update on the Science of Climate Change

The *2015 GGRA Plan Update* includes an update from the MCCC's Scientific and Technical Working Group on how climate change is already impacting Maryland and what additional future GHG reductions need to be considered to continue the States progress in reducing GHG emissions.

MDE Recommendations on Continuing Progress

The GGRA requires MDE to provide recommendations in the *2015 GGRA Plan Update* on how the State should move forward on climate change. The law requires the General Assembly to take an action in 2016 or the key requirements of the GGRA sunset. The *2015 GGRA Plan*

Update is intended to provide the Governor and the General Assembly with the information they need to determine how the State should move forward. MDE's recommendation includes the following:

- Continue to implement and enhance the programs in the *2012 GGRA Plan* with a increased focus on finding ways to continue emission reductions that also support economic development and job creation.
 - MDE recommends that the 2020 goal be maintained and that additional enhancements to the GGRA Plan be considered, as long as those enhancements have a clear positive impact on Maryland's economy and job creation in Maryland while also protecting Maryland consumers.
 - MDE would work through the MCCC and the MCCC working groups to develop these enhancements where appropriate.
- Move beyond 2020 by adopting a "next step" of incremental progress towards the deeper science-based reductions needed by 2050. This next step should also increase the emphasis on improving Maryland's economy by establishing quantitative goals for economic growth, job creation and wages linked to the States GHG reduction efforts.
- Continued efforts should expand the "true-up" process in the current law to not only include an every three year check-in on achieving the GHG emission reductions goals, but to expand this check-in process to include economic and job goals. The purpose of the true-up process is to make sure that the programs are achieving the projected emission reduction, economic and job creation goals in the real world and to adjust programs appropriately when needed.
- Continue efforts to analyze emerging issues linked to continuing the progress the State has made in reducing GHGs that have been identified by MDE over the past six years, the MCCC working groups and stakeholders. These emerging issues include, but are not limited to:
 - Enhanced efforts on renewable energy, energy efficiency and transportation that seek to further reduce emissions in a way that fosters economic development, creates new jobs and protects consumers
 - Continuing analyses of new scientific and technical opportunities like life-cycle analysis, hydraulic fracturing and other natural gas related topics, fast acting climate changers, and other emerging issues related to the scientific, mitigation and adaptation efforts needed to continue the State's progress in addressing climate change.
- Increased efforts on climate resiliency to insure that the State is focusing not just on GHG emission reductions but on community preparedness and adaptation for extreme weather and other changing climate conditions.

MDE Recommendation on the Manufacturing Sector

The GGRA exempts the manufacturing sector from control under the law unless those controls are required by federal law or regulation or part of existing State law adopted prior to 2009.

The GGRA states:

“Unless required by federal law or regulations or existing State law, regulations adopted by State agencies to implement the final plan may not:

1. Require greenhouse gas emissions reductions from the State’s manufacturing sector; or
2. Cause a significant increase in the costs to the State’s manufacturing sector.”

The GGRA requires MDE to complete an analysis of the manufacturing sector as part of the *2015 GGRA Plan Update*. The law reads:

“An institution of higher education in the State shall conduct an independent study of the economic impacts of requiring greenhouse gas emission reductions from the State’s manufacturing sector.”

This analysis of the manufacturing sector, performed by Towson University, is summarized in Chapter 8 of this report. The full analysis can be found in Appendix I.

Based upon this work and the MDE inventory analyses that show that GHG emissions from the manufacturing sector are significantly less in 2015 than they were in 2009, MDE recommends that the manufacturing sector exemption contained in the GGRA be maintained as part of any future efforts to continue progress reducing GHG emissions.