



MARYLAND COMMISSION on CLIMATE CHANGE

Annual Report 2017

An update on the status of the State's climate change efforts

WHAT IS CLIMATE CHANGE?

The climate of a region is defined by its long-term average temperature and precipitation trends, which shape many of the physical, chemical, and biological components of ecosystems as they develop. Significant and rapid changes in the climate, therefore, are expected to have pervasive and in some cases devastating impacts to ecosystems, and consequentially to the resources and services upon which humans rely.

Scientific evidence has demonstrated with a very high degree of certainty that global climate change is occurring, and the dominant cause is human activities, particularly the emission of heat-trapping greenhouse gases (GHGs) into the atmosphere.

MARYLAND IS FACING THE CONSEQUENCES OF CLIMATE CHANGE

INCLUDING, BUT NOT LIMITED TO:



Changes expected to negatively impact water quality may alter how water resources can be used, such as for irrigation, recreation, or human consumption.



More frequent disruptions to roads and bridges caused by extreme weather events and sea-level rise may impact the economy by restricting the flow of goods and affecting days worked.



Common stressors caused by changes in temperature and precipitation; extreme weather events; and increased pressures from weeds, diseases, and pests, will impact ecosystems, agriculture, fisheries, and forestry.



Changes are expected in the severity, frequency or distribution of human health issues which are affected by climate, including impacts on food and water supplies, air quality, and extreme weather events.



Individuals and communities that are more sensitive to the expected changes, or have less ability to adapt or respond to impacts, are at a greater risk.

WHAT'S IN THE REPORT?

The report includes:

- An update on the science of climate change
- How climate change is already impacting Maryland
- How climate change is expected to impact the State in the future
- Progress made by the State to reduce future impacts
- The Commission's recommendations to continue the path forward

In order to protect Maryland's economy, the local environment, and the health of its citizens, it is critical that the State maintains its aggressive course of mitigation and adaptation actions. At the same time, climate change is a global problem, and Maryland's programs and policies must be part of a larger climate action plan in order to be broadly effective at preventing many of the costs of unmitigated climate change to the State.

THE COMMISSION'S RECOMMENDATIONS INCLUDED:

- Enhancements to the Emissions Inventory, due in 2018
- Considerations for the 2020 manufacturing study
- Considerations for the development of the 40 by 30 Draft Plan, due in 2018
- Collaborating locally and regionally on strategies to reduce emissions in the transportation sector
- Supporting the Healthy Soils Initiative
- Defining vulnerable populations and incorporating environmental justice, related to climate change, into the 40 by 30 Plan
- Understanding the impact of Federal actions on Maryland
- Improving public outreach on climate change and the 40 by 30 Plan
- Increasing partnerships among agencies, researchers, and the affected communities

The full suite of recommendations is contained in Chapter 4 of the report.

WHAT DOES THE COMMISSION DO?

The Maryland Commission on Climate Change first created the 2008 Climate Action Plan that led to the Greenhouse Gas Reduction Act (GGRA) of 2009, and a goal for the State to reduce its GHG emissions 25 percent from 2006 levels by 2020.

The Commission is currently working with the Maryland Department of the Environment and other State entities to develop a plan to reduce its emissions 40 percent by 2030, as required by the updated GGRA of 2016.

WHAT CAN YOU DO?

- Public involvement is crucial to the Commission process, especially as work is concluded in 2018 to make recommendations related to MDE's draft 40 by 30 Plan, due in December.
- Share your thoughts on areas of interest with the Commission by emailing: climate.change@maryland.gov
- Attend meetings to learn about the activities of Commission and its working groups.
- Provide comment on draft recommendations during the public comment section of Commission meetings.

For more information and to read the complete report, please visit the Maryland Commission on Climate Change website, which can be accessed at: www.mde.maryland.gov