



MARYLAND COMMISSION • on • CLIMATE CHANGE

Maryland is a Leader in Reducing Greenhouse Gas Emissions

What the state's Greenhouse Gas Reduction Plan means for you

Maryland is taking aggressive, sustained action to achieve the goal of reducing greenhouse gas emissions in a manner that also protects Maryland's economy and jobs. University of Maryland research has shown that the impacts from climate change in Maryland could be significant. Maryland is putting teeth, not just words, into achieving real reductions in greenhouse gas emissions.

MARYLAND'S PLAN

Maryland has set some of the strongest greenhouse gas reduction targets in the nation. The General Assembly passed the **Greenhouse Gas Emissions Reduction Act (GGRA) of 2009**, which required Maryland to develop a plan to reduce greenhouse gas emissions by 25 percent from 2006 levels by 2020.

The legislation also required actions to achieve this goal that promote balance between environmental benefits and economic prosperity. The state developed the comprehensive, multi-sector, multi-agency plan with input from more than a dozen state agencies and non-governmental organizations. This plan was released in 2012 and lays out a blueprint that, when fully implemented in 2020, will achieve the 25 percent reduction goal with positive job and economic benefits.

The 2012 plan also outlines Maryland's commitment to implement smart environmental and economic strategies, such as increasing clean energy use that helps customers save energy and money. For example, Maryland participates in the broader **Regional Greenhouse Gas Initiative**, a cooperative effort by nine states in the Northeast and Mid-Atlantic region that aims to reduce carbon emissions from the electric generation sector. Maryland's **EmPOWER program** sets efficiency targets for utilities and provides resources and incentives citizens can use for energy conservation and efficiency.

THE GREENHOUSE EFFECT EXPLAINED

Gases in the atmosphere, such as water vapor and carbon dioxide, act like a natural blanket to warm the Earth and prevent some of the earth's heat from radiating back into space. This process helps preserve a delicate balance that makes our planet livable; without this natural greenhouse effect, our planet would be too cold for humans to survive.

However, too much carbon dioxide and other greenhouse gases caused by human activities upset this balance. Gases released from burning fossil fuels for energy and transportation are thickening the blanket-like effect, which warms the Earth's surface above the normal range of temperatures, causing a rapid change in global and regional climate patterns. Scientists call this climate change.

Maryland is likely already experiencing some of the impacts of climate change — such as extreme heat waves, sea-level rise and more heavy downpours and flooding — and they are expected to become more intense and occur more frequently. These changes will affect our property, crops, economy and health.

Maryland's balanced approach to climate change includes improvements to the economy, new and retained jobs and continued progress in reducing greenhouse gas emissions.



In 2015, the Maryland Department of the Environment reported that due to a number of actions, the state is on track to meet or exceed its 25 percent by 2020 reduction goal while simultaneously supporting tens of thousands of new, well-paying jobs.

The “40 by 30 Plan” will provide a balanced, science-based approach to reduce greenhouse gas emissions; it will help our environment, protect public health, improve Maryland’s economy and create and maintain tens of thousands of jobs.

HOW WILL THIS BENEFIT YOU?

While Maryland contributes only a small part of annual global greenhouse gas emissions, reducing global greenhouse gas emissions will substantially benefit our state, protecting public health, lowering energy bills and creating jobs. Further, if global emissions can be reduced by mid-century, we would very likely experience lower sea-level rise, reduced public health risks and fewer extreme weather events. We would also better protect agricultural and forest productivity and important Chesapeake Bay plants and wildlife.

Achieving the goals of the 2012 GGRA Plan will result in reduced emissions and a more sustainable economy. Estimates show the plan is expected to benefit the state’s economy by between \$2.5 billion to \$3.5 billion by 2020 and help create and maintain between 26,000 and 33,000 jobs. In fact, Maryland is well-positioned to become an economic leader in the growing renewable energy industries like offshore wind and solar.

FUTURE ACTIONS OF THE MARYLAND COMMISSION ON CLIMATE CHANGE

Governor Larry Hogan signed the landmark Greenhouse Gas Emissions Reduction Act of 2016, which renewed the 2009 Maryland law and also further extended the emissions goal to a 40 percent reduction from 2006 levels by 2030.

The Maryland Department of the Environment will publish the draft “40 by 30 Plan” in 2018 and the final plan in 2019.

WHAT CAN YOU DO TO REDUCE GREENHOUSE GASES?



- **Less use. More money.**
Reduce hot water, heat and air conditioning use to save on energy bills.
- **Drive green. Save green.**
Buy a fuel-efficient vehicle and conserve money on gas.
- **Bike more. Pay less.**
Bike or walk instead of driving to save money and get more exercise.
- **Plant a tree. Cool your home.**
Plant a tree near your house to absorb carbon dioxide and reduce AC use.
- **Use efficient light bulbs. Save money.**
Replace one 60-watt incandescent light bulb with an LED light to save \$30 over the life of the bulb.
- **Recycle more. Waste less.**
Recycle or compost at home to reduce waste and methane emissions.

For more information, including meeting calendars and contact information, please visit the Maryland Commission on Climate Change website at: www.mde.maryland.gov/mccc