

## GLOBAL WARMING POLLUTANTS IN NEW JERSEY: Beyond carbon dioxide

New Jersey Clean Air Council Annual Public Hearing

> April 10, 2019 9 a.m.

New Jersey Department of Environmental Protection 401 East State Street Trenton, NJ 08625

## How to testify:

The New Jersey Clean Air Council has invited guest speakers to address the issues outlined in this brochure at a public hearing. Anyone can submit detailed written comments to be incorporated into recommendations to the DEP Commissioner. Written statements in Microsoft Word format will be accepted until May 3, 2019, via email to Heidi.Jones@dep.nj.gov or mailed to New Jersey Clean Air Council, Mail Code: 401-02, 401 E. State Street, 2<sup>nd</sup> Floor, P.O. Box 420, Trenton, NJ 08625-0420. Those who wish to address the council should contact Ms. Jones at (609) 777-0598 or via email before April 5. To learn more about the Clean Air Council, visit www.state.nj.us/dep/cleanair/

## Background

Governor Phil Murphy's Administration has undertaken efforts to combat climate change through the regulation of greenhouse gas emissions. Notably, on December 17, 2018, the DEP issued proposed regulations for New Jersey's re-entry into the Regional Greenhouse Gas Initiative (RGGI), a cooperative effort among participating states in the region to cap and reduce carbon dioxide emissions from power plants. While carbon dioxide represents the largest proportion of greenhouse gas emissions, there are other greenhouse gases that have a higher global warming potential than carbon dioxide, such as hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride and methane. Emissions of some of these gases throughout the U.S. have increased steadily since 1990 due to their use as replacements for the widely used ozone-depleting substances, specifically chlorofluorocarbons and hydrofluorocarbons. Emissions of substitutes for ozone-depleting substances in the U.S., primarily from hydrofluorocarbons, have grown from 0.3 million metric tons in 1990 to 159.1 million metric tons in 2016.<sup>1</sup> Overall, 6,511 million metrics tons of greenhouse gas were released in 2016. Ozone-depleting substance substitutes are commonly used in solvents, residential and commercial refrigerants, firefighting agents, aerosol propellants, semiconductor manufacturing and double-pane window insulation.

The New Jersey Global Warming Response Act requires the state to pursue efforts to reduce greenhouse gas emissions, including New Jersey's participation in RGGI, which is expected to cap and reduce carbon dioxide emissions. However, the sources and impact of higher global warming potential greenhouse gases in New Jersey has not been fully explored. There is now a greater need to better understand the extent of the inventory of these substances and their use throughout New Jersey to better gauge the adverse health and environmental impacts from climate change that they may be causing, both globally and throughout the state.

## **Focus of Public Hearing**

For the 2019 New Jersey Clean Air Council hearing and report, the Clean Air Council is undertaking an effort to better understand and appropriately prioritize emissions of higher global warming potential gases throughout the state.

To help the New Jersey Clean Air Council make recommendations to the DEP, we invite you to join us for presentations and discussion following expert testimony by several key presenters. Below is a sample of questions that will be considered by the council during the discussion:

- What entities in New Jersey manufacture, import, store, sell, use and emit high global warming potential greenhouse gases? What quantities are typically released from these sources?
- To what extent are high global warming potential greenhouse gases already regulated by the DEP, U.S. EPA and other federal agencies?
- What are emitters of these gases doing in terms of best practices to eliminate, reduce and control these emissions?
- What are the alternatives (safe substitutes) to using these gases?
- Are there potential environmental and public health impacts from releases of these gases on at-risk populations?
- 1. Inventory of U.S. Greenhouse Gas Sources and Sinks: 1990-2016" U.S. Environmental Protection Agency. EPA 430-12-18-003. Published April 12, 2018.