QUICK FACTS

• HFCs were introduced to replace CFCs, a class of refrigerant chemicals that were phased out because they were depleting the ozone layer.

• HFCs have an extremely high global warming potential, with thousands of times the heat trapping potential of CO2.

• In December 2020, Congress passed legislation to phase down HFCs nationwide by 40% by 2024 and by 85% by 2036. The phase down will be administered by the U.S. Environmental Protection Agency.

BEYOND CARBON

• Reducing refrigerant leakage and replacing HFCs with alternatives is associated with indoor air quality improvements, which has environmental and public health benefits.

• Improved cooling systems can reduce energy bills.

• Issues to watch include the proper installation and disposal of alternative refrigerants, which are still chemical agents.

Refrigerant Management

Hydrofluorocarbons (HFCs) are chemicals used to cool refrigerators and air conditioners. They are also an extremely potent greenhouse gas. Efforts to control leakages, replace HFCs with alternative refrigerants, and to properly dispose of and recycle existing HFCs would lower greenhouse gas emissions.

GEORGIA’S 2030 MEGATON OPPORTUNITY

We could reduce 1 Mt of CO2e in Georgia by reducing refrigerant leakage rates by 8% in all of Georgia’s grocery stores.
Lead Researcher

Dr. Daniel Matisoff
Associate Professor, School of Public Policy
Georgia Institute of Technology
Climate and Energy Policy Lab: www.cepl.gatech.edu