

# DRAFT GLOBAL WARMING RESPONSE ACT RECOMMENDATION REPORT

DECEMBER 15, 2008

## Chapter 3: Actions Now for Future Impact

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**Develop and implement recommendations to address the other highly warming gases:** In addition to CO<sub>2</sub>, there are several other GHGs, including methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs) and some other halogenated gases. Some of these gases, while released in much smaller quantities than CO<sub>2</sub>, have higher global warming potentials, making control of these gases critical to any comprehensive climate control plan. However, because CO<sub>2</sub> makes up the bulk of the GHG inventory, its control strategies are considered “low hanging fruit” for obtaining significant and timely reductions and, therefore, are the primary focus of most GHG reduction plans, at least for the short-term (through 2020). As a result, considerable research and effort is needed into developing strategies to reduce and control the other highly warming gases. The state of California continues to lead this area, outlining six early action measures to reduce GHG emissions with high global warming potentials from the stationary source sector. These measures include:

1. Sulfur Hexafluoride Reductions from the Non-Electric Sector
- 2. Alternative Suppressants in Fire Protection Systems**
3. Specifications for Commercial Refrigeration
4. High Global Warming Potential Refrigerant Tracking, Reporting and Recovery Systems
5. Residential Refrigeration
6. Foam Recovery/Destruction Program

As part of this recommendation, the NJDEP commits to 1) monitor the development of California’s actions and consider if they appropriate to be implemented in New Jersey; 2) acquire better information on quantities of sulfur hexafluoride (SF<sub>6</sub>) released in New Jersey from the electric generation sector, in order to determine the appropriate measures necessary to minimize or eliminate such releases; and 3) consider the following additional actions for implementation in the 2020 timeframe:

- . Broaden scope of building codes to address high-global warming potential (GWP) gases - In conjunction with other modifications to New Jersey’s building codes to foster greater

energy efficiency, the State will include requirements that new building Heating, Ventilation and Air Conditioning (HVAC) systems be designed to minimize or eliminate use of ozone-depleting substances and replacement substances, including HFCs. **Also, the State will require fire suppression systems to minimize or eliminate use of high-GWP gases.**

- *Add high GWP gas requirements for HVAC contractors* - The State will add a continuing education requirement covering high GWP gases to the licensing requirements for HVAC contractors. Further, the State will seek a legislative amendment to allow only licensed HVAC contractors or licensed plumbers to purchase any high GWP refrigerants.
- *Institute a Leak Detection and Repair program for high-GWP gases from commercial and industrial refrigeration equipment* - The NJDEP will develop a Leak Detection and Repair (LDAR) program for high GWP gases used in commercial and industrial refrigeration equipment that exceed a threshold size. The NJDEP will also consider high-GWP refrigerant tracking, reporting, and recovery programs, consistent with CARB's findings from their early reduction strategies.
- *Reduce HFC emissions from motor vehicle air conditioning systems* – State action would be targeted to ensure that HFC releases are identified and addressed during motor vehicle air conditioning servicing through use of the existing motor vehicle inspection and maintenance program and through enforcement of federal regulations on capturing and re-using HFCs during motor vehicle air conditioning servicing and dismantling. The most effective state action is likely to include a combination of state certification of air conditioning repair technicians, requiring single use cans to be resealable and requiring a deposit on single-use cans with mandatory recovery of unused refrigerant by retailers, expanding the current on-board diagnostic inspection and maintenance test to include a check for motor vehicle air conditioning-related diagnostic trouble codes as part of the inspection and maintenance test and improving compliance with the USEPA federal regulation (40 CFR 82.154) that prohibits the venting of certain types of refrigerant, including HFCs, to the atmosphere when motor vehicle air conditioning equipment is serviced or dismantled.