



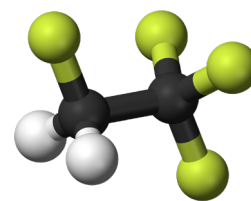
Hydrofluorocarbons (HFCs): Climate Super-Pollutants

What are HFCs?

Hydrofluorocarbons (HFCs) are a climate "super-pollutant": greenhouse gases with hundreds to thousands of times the heat-trapping power of carbon dioxide (CO₂). HFCs are synthetic gases used in air conditioning systems, aerosol propellants, foam blowing agents, solvents, and flame retardants. These gases were first developed as alternatives to ozone-depleting chemicals, but their release to the atmosphere during manufacturing processes and leakage during use, servicing, and disposal of equipment poses a grave threat to our climate.

The Problem

- A thousand times the "global warming potential" of CO₂ means that one pound of some kinds of HFCs can have the same heat-trapping power as one thousand pounds of CO₂
- HFCs are the fastest growing source of greenhouse gas emissions both nationally and globally and could double within 20 years if left unchecked
- The climate forcing of HFCs in the atmosphere could lead to up to 0.9°F (0.5°C) of additional warming globally by 2100 on top of warming caused by other greenhouse gases



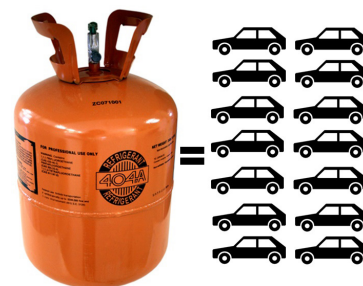
HFC-134a, an HFC gas with a global warming potential of over 1,500. One pound of HFC-134a is equivalent to more than 1,500 pounds of CO₂. LD 2112 would prohibit the use of this climate super pollutant.

LD 2112: Reducing HFCs to Fight Climate Change

- LD 2112 will reduce the use of high-global warming potential HFCs in Maine, replacing them with climate-friendly alternatives where available
- Sets a reasonable and orderly time-table for the transition to climate-friendly alternatives beginning in 2021
- Primary end-uses affected are air conditioning, refrigeration, and foam or aerosol propellants

Economic Impacts

- LD 2112 aligns Maine with rules being developed by other US Climate Alliance states, creating consistency for manufacturers and businesses
- Similar legislation has been introduced at the federal level and gained broad bi-partisan support from Maine's US Senators, the US Chamber of Commerce, national environmental groups, and trade associations
- HFC phase-downs and replacements with US technology are predicted to produce 33,000 new jobs in the US and \$12.5 billion dollars in positive economic impacts



one tank R-404A = annual fuel for 14 cars

A common refrigerant, R-404A, has a global warming potential of 3,900, or nearly 4,000 times that of CO₂. One 30-lb. tank of R-404A is equivalent to driving more than 14 additional cars each year. LD 2112 would prohibit the use of this climate super-pollutant. (Image modified from California Air Resources Board.)

Read the text of the LR 2112, An Act To Limit the Use of Hydrofluorocarbons to Fight Climate Change, at <http://bit.ly/HFCs-bill>

Produced by the Governor's Office of Policy Innovation and the Future
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