



Assemblymember Nancy Skinner

Representing the 14th District
Legislative Director: Liz Mooney
Tel: (916) 319-2014

FACT SHEET - Assembly Bill 1373 **Refrigeration and Air-Conditioning Innovation Review**

The Problem

Refrigerators and air conditioners across California are leaking gases into the air that are potent climate change pollutants. These high global warming potential GWP gases (high-GWP), sometimes referred to as “F-gases,” are typically between 1,500 and 4,000 times more powerful than carbon dioxide at contributing to global warming. Current estimates show there are over 200,000 individual facilities in California that use these substances in stationary applications and emissions equal about 30 million tons of carbon dioxide, an amount equal to over five million vehicles.

Some foreign governments have begun urging the phase out of high-GWP refrigerants from the stationary refrigeration and air-conditioning industry. In response to the pressure to innovate in this sector, many cooling facilities have already begun installing systems that use significantly reduced volumes of high-GWP gases. In addition, many systems using solely low-GWP refrigerants (< 150 CO₂eq) are also being installed. These systems, using “natural” refrigerants like CO₂, hydrocarbon and ammonia, have low greenhouse gas implications and also have the potential to decrease energy consumption compared to the systems they replace.

In California, as with the rest of the United States, cooling systems with significantly reduced refrigerant charges and dedicated low-GWP refrigerants have not achieved market adoption or become industry standard. Recent studies put the total number of CO₂ based systems in commercial applications (grocery stores) nationally at less than ten. This lack of technology adoption shows that California lacks the incentives and regulatory structure to facilitate positive, large-scale change to the stationary refrigeration and air-conditioning industry.

Existing Law

No laws currently limit emissions of high-GWP Kyoto protocol gases in California. Pursuant to AB32 rulemaking authority however, the California Air Resources Board is proposing to promulgate regulations to limit leaks of high-GWP gases. These efforts are projected to reduce emissions by 15 million tons by 2020, leaving 16 million tons still to be emitted. Also proposed is a mitigation fee that will apply an “up-stream” fee on refrigerant sold in California. In addition, though not specific to the GWP nature of charge gases, the California Energy Commission sets energy use and efficiency standards for buildings and appliances.

This Bill

Assembly Bill 1373 (as proposed amended) takes a major step towards increasing the adoption of climate friendly refrigerants in California and decreasing emissions from new refrigeration units. As part of Title 24 efficiency standard updates scheduled for 2011, the California Energy Commission (CEC) would need to, in choreographed coordination with the California Air Resources Board (CARB), undertake a rigorous analysis of the opportunities, costs and barriers associated with reducing emissions from stationary refrigeration and air conditioning systems in California. In addition, recommendations for new incentive programs and pilot programs to facilitate adoption of low-GWP technology must be developed. This information will be instrumental as California seeks to catalyze a shift towards climate friendly and energy efficient cooling within the state.

Assembly Bill 1373 also vests authority in CEC and CARB to develop new programs to promote installation of new state-of-the-art equipment and reduce emissions from in-use equipment across stationary refrigeration and air-conditioning systems in California.

Bill Sponsor

Environmental Defense Fund