



California Air Resources Board Regulation of High-GWP Refrigerants

Regulations & Standards Session



ARB Refrigerant Regulations Background

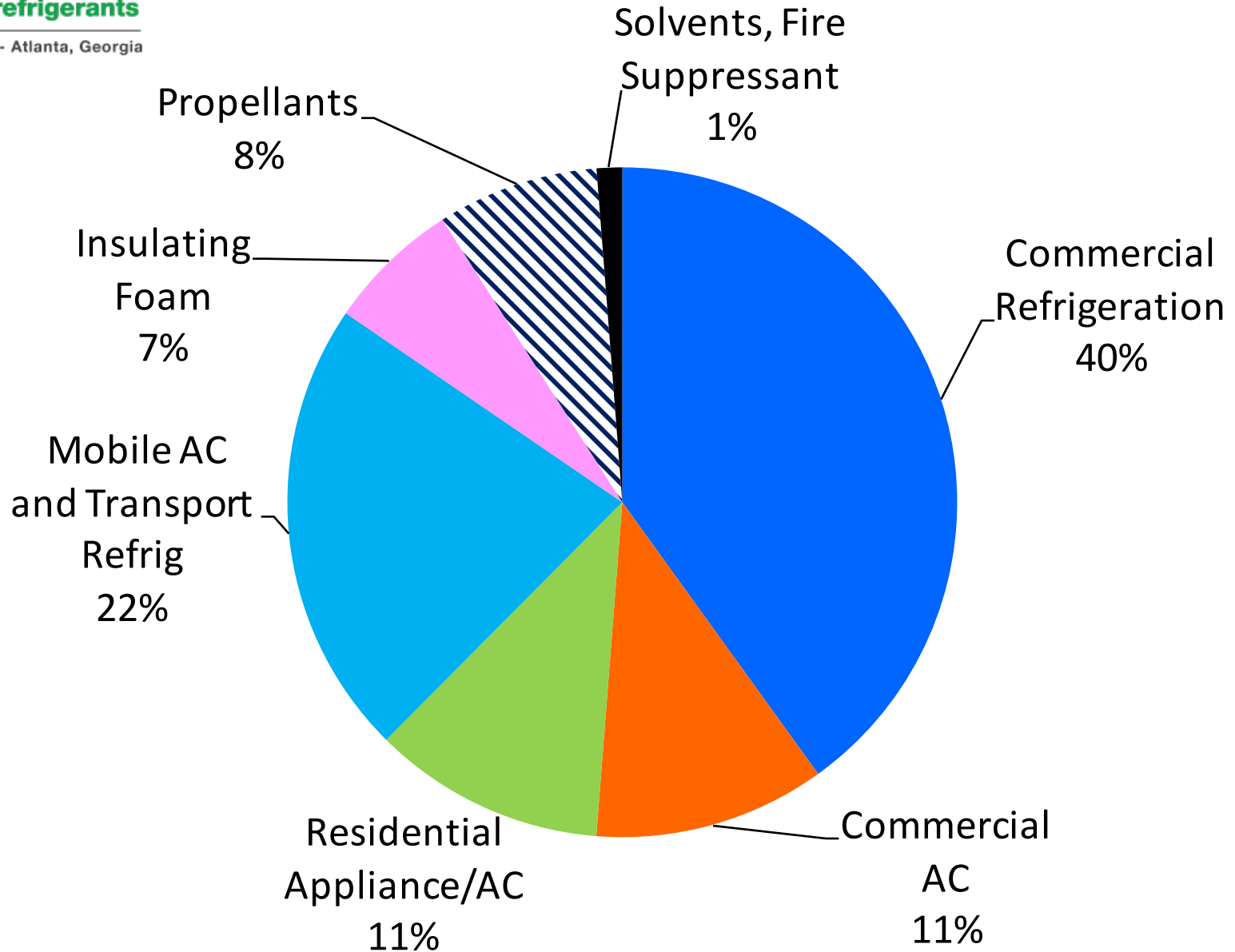
AB 32: Reduce GHGs to 1990 levels by 2020

Governor's Executive Order of 2015:

- 1) Reduce all GHGs 40% by 2030
- 2) Reduce all GHGs 80% by 2050

By end of 2015, complete plan to reduce Short-lived Climate Pollutants (SLCPs):
F-gases, methane, and black carbon (soot)

Sources of HFCs in California



Reduction Measures Proposed 2015

(As of June 2015, no final decision has been made)

1. Stationary Refrigeration (All sectors - Commercial, Industrial, Residential) (New Equip Only):
No refrigerants with GWP 150 or greater* to begin January 1, 2021 *(limited exceptions)
2. Stationary AC (All sectors - Commercial, Industrial, Residential) (New Equip Only):
No refrigerants with GWP 750 or greater to begin January 1, 2022

Reduction Measures Proposed 2015 (cont.) (As of June 2015, no final decision has been made)

3. Very-high GWP refrigerants: No sales/distribution of refrigerant with GWP 2500 or greater** to begin Jan 1, 2020
**(exception for certified recycled refrigerant)
4. Spray foams (not otherwise covered by U.S. EPA): no foam expansion agent with GWP 150 or greater to begin Jan 1, 2021
5. Grant funding incentive program for early adopters of low-GWP retail food

ARB Refrigerant Regulation Guidelines

- ARB is technology neutral & chemical neutral
- Refrigerant must meet low (or lower) GWP threshold, and be U.S. EPA SNAP-approved
- Aligns with EU F-Gas Regulation GWP limits, and accelerates the start dates of “Placing on the Market Prohibitions”

Other ARB F-Gas Measures to be Studied

- Additional ARB F-gas measures considered, but not included in SLCP at this time to allow further study:
- High-GWP fee on purchase of HFCs
- HFC production-import phasedown at California level

ARB Needs Your Professional Feedback

Please Comment on Proposed F-gas Measures

Summer 2015	Initial draft of Strategy to Public; Public workshops on draft report
Fall 2015	Release 2 nd draft proposed Strategy
Fall 2015	Present draft proposed Strategy to Air Board
Spring 2016	Present final Strategy to Board for approval

SLCP home page & to join email list-serve:

<http://www.arb.ca.gov/cc/shortlived/shortlived.htm>



Thank you very much

Glenn Gallagher
California Air Resources Board
Glenn.Gallagher@arb.ca.gov