

GREENCHILL

TOVANCED REFRIGERATION PARTNERSHI

The GreenChill Partnership

What is the EPA GreenChill Partnership?

GreenChill is an EPA partnership with food retailers to reduce refrigerant emissions and decrease their impact on the ozone layer and climate change.

The 2010 phaseout of certain hydrochlorofluorocarbons (HCFCs), especially HCFC-22, marked a major step in the transition to alternative refrigerants and an opportunity to use improved technologies for supermarkets. Because many alternative refrigerants are greenhouse gases (e.g., hydrofluorocarbons – HFCs), it is important during this transition to consider reducing emissions of all refrigerants, not just ozone-depleting substances.

What are the GreenChill Partnership Goals?

The goals of the GreenChill Partnership are to provide supermarkets and other industry stakeholders with information and assistance to:

- Transition to environmentally friendlier refrigerants;
- Reduce the amount of refrigerant used by stores and eliminate leaks; and
- Adopt green refrigeration technologies and environmental best practices.

Who can Join GreenChill?

GreenChill is a partnership with food retailers, including supermarkets, grocery stores, supercenters, and wholesale clubs. Food retailers sign a Partnership Agreement with EPA and agree to work toward attaining the GreenChill goals.

GreenChill Partners

Food Retailers

ALDI Bel Air BJ's Wholesale Club **Brookshire Grocery** Company **Buehler's Fresh Foods** City Market, Onion River Co-op Coborn's Inc. **Cook County Whole Foods** Co-Op **Copps Food Center Cub Foods Dorothy Lane Market** Farm Fresh Food and Pharmacy Food Lion Food Source **Giant Eagle** Hannaford Hanover Co-op Food Stores Harris Teeter H-E-B Hornbacher's Hy-Vee

King Kullen Kroger Mariano's Fresh Market McQuade's Marketplace Meiier Metro Market Nob Hill **PCC Community Markets** Pick 'n Save Port Townsend Food Co-op **Price Chopper Publix Super Markets** Raley's Roundy's Supermarkets, Inc. Shop 'n Save **Shoppers Food & Pharmacy Sprouts Farmers Market** Stater Bros. Market **SUPERVALU** Target Weis Markets Whole Foods Market Wild by Nature

Advanced Refrigeration Technology Manufacturers

Carnot Refrigeration Hillphoenix Hussmann Kysor/Warren Systemes LMP Zero Zone

Chemical Manufacturers

Arkema Dow Chemical DuPont Honeywell ICOR International Mexichem Fluor National Refrigerants



Benefits of the GreenChill Partnership

GreenChill Partners in the food retail business have refrigerant emissions rates nearly 50% lower than the EPA-estimated industry average.

If supermarkets nationwide reduced emissions to the current GreenChill Partner average, they could generate annual cost savings of over \$100 million across the industry, while preventing the annual emission of 27 million metric tons of carbon dioxide equivalent and 230 ozone depletion potential (ODP) tons.

For more information, visit our website at http://www.epa.gov/greenchill

Please contact: GreenChill@epa.gov, or Kirsten Cappel at (202) 343-9556

Why Join the GreenChill Partnership?

The majority of the approximately 36,000 supermarkets in the U.S. use HCFC-22, an ozone-depleting substance and greenhouse gas, as their primary refrigerant. Further, supermarkets often have high refrigerant leak rates. Leaks are harmful to the environment and costly to supermarkets. However, ozone-friendly alternative refrigerants and improved technology are available, and servicing practices exist that reduce refrigerant leak rates and emissions.

In addition, under the current regulatory framework, a switch from ozone-depleting to non-ozone-depleting refrigerants is a logical consideration when remodeling or constructing a new store. While it is legal to run installed HCFC-22 equipment indefinitely, refrigerant production for servicing that equipment will stop by 2020. The GreenChill Partnership presents an opportunity to prepare for this and other deadlines, prepare for future leak repair regulations, and to be recognized for efforts above and beyond actions required under the Clean Air Act. Benefits of the GreenChill Partnership include:

Environmental benefits	The Partnership helps the environment by decreasing the impact of supermarket refrigeration systems on the ozone layer and climate change.
Benchmarking	A benchmarking system allows Partners to evaluate their progress toward environmental goals in relation to their peers.
Recognition and awards	Awards are given by EPA to recognize outstanding achievements by Partners.
Publicity, marketing, and outreach	Partners have access to a variety of marketing materials to highlight their participation in the GreenChill Partnership.
Assistance with environmental strategies and goals	GreenChill assists Partners in developing and attaining corporate environmental stewardship and sustainability goals, with tools such as best practice guidelines and information on improved technology and servicing practices that help reduce refrigerant charges and leak rates.
Opportunities for information sharing among Partners	GreenChill holds regular meetings to facilitate Partner information sharing on successful emissions reduction strategies and advances in refrigeration technology.
Research	Partners have access to state-of-the-art EPA research and EPA/industry field tests on substitute refrigerants and advanced refrigeration technologies.