

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;
- Lower refrigerant charge sizes and eliminate leaks; and
- Adopt green refrigeration technologies, strategies, and 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

ACME Markets Lucky

Albertsons McQuade's

Bel Air Markets

Bloom

Bottom Dollar

Buehler's Fresh Foods

Lucky

McQuade's

Marketplace

Nob Hill Foods

Organic Valley

Price Chopper

Cub Foods

Down to Earth

Farm Fresh Food & Pharmacy

Pharmacy

Publix

Raley's

Reid's

Shaw's/Star Markets

Food Lion Shop 'n Save, St. Louis
Food Source Shoppers Food &

Fresh & Easy
Giant Eagle
Sprouts Farmers Market

Hannaford Stater Bros.
Harris Teeter Supervalu
Harvey's Sweetbay
Hornbacher's Target

Hy-Vee Weis Markets
Jewel/Osco Whole Foods
King Kullen Wild by Nature

Advanced Refrigeration Systems Manufacturers

ARNEG Hussmann
Hill PHOENIX Kysor/Warren

Zero Zone

Chemical Manufacturers

Arkema Honeywell

Dow Chemical ICOR International

DuPont 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 \$108 million across the industry while preventing the annual emission of 22 million metric tons of carbon dioxide equivalent and 240 ozone depletion potential (ODP) tons.

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

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Why Join the GreenChill Partnership?

The majority of the approximately 35,000 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 equipment indefinitely, HCFC-22 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, including a theoretical study on advanced refrigeration technologies and EPA/industry field tests on substitute refrigerants and advanced refrigeration technologies.