



The GreenChill Advanced Refrigeration Partnership



What is EPA's GreenChill Advanced Refrigeration Partnership?

GreenChill is an EPA cooperative alliance with the supermarket industry and other stakeholders to promote advanced technologies, strategies, and practices that reduce refrigerant charges and emissions of ozone-depleting substances and greenhouse gases.

The 2010 phaseout of certain hydrochlorofluorocarbons (HCFCs), especially HCFC-22, marks 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 organizations supporting this industry with information and assistance to:

- transition to non-ozone-depleting refrigerants;
- reduce refrigerant charges;
- reduce both ozone-depleting and greenhouse gas refrigerant emissions; and
- promote supermarkets' adoption of advanced refrigeration technologies.

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

Acme Markets
Albertsons Intermountain West
Albertsons/Lucky Southern California
bigg's
Cub Foods
Farm Fresh
Food Lion
Giant Eagle
Hannaford Brothers
Harris Teeter
Hornbacher's
Jewel/Osco
King's
Mr. Z's
Price Chopper
Publix
Shaw's/Star Markets
Shop 'n Save St. Louis
Shoppers Food & Pharmacy
Supervalu Inc.
Weis Markets
Whole Foods
Hill Phoenix
Hussmann
Kysor Warren
Zero-Zone
Arkema
Dow
DuPont
Honeywell
Ineos Fluor



Benefits of the GreenChill Partnership

Potential annual industry-wide greenhouse gas emissions reductions of almost 6 million metric tons of CO₂ Equivalent, which is like removing 1 million cars from roads every year.

Potential annual reductions in ozone-depleting refrigerant emissions of 70 ODP-Tons.

Potential annual industry-wide savings of about \$30 million from reduced refrigerant costs.

For more information, visit our website at

<http://epa.gov/greenchill/>

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Why Join the GreenChill Partnership?

The majority of the approximately 35,000 supermarkets in the U.S. uses 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 currently legal to run existing 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.