GreenChill Partner Spotlight: Weis Markets

Managing Refrigerants to Protect the Environment

Many of the roughly 38,000 U.S. food retailers¹ use refrigerants whose emissions can deplete the ozone layer, contribute to climate change, or do both. As part of the U.S. Environmental Protection Agency’s (EPA’s) GreenChill Partnership Program, food retailers across the country are taking action to prevent and reduce refrigerant leaks, reduce the amount of refrigerant their systems use, and transition to environmentally friendlier refrigerants. These actions help protect the environment and reduce operations and maintenance costs.

Weis Markets is committed to reducing its impact on the environment through sustainable business operations. Managing refrigerants is a key strategy for achieving this objective. Weis Markets joined the GreenChill Partnership in 2008 and boasts significant progress in addressing its refrigerant emissions. This spotlight highlights several of the company’s refrigerant management achievements.

Key Strategies

Weis Markets undertakes several actions to manage refrigerant in its stores to improve its environmental sustainability and save money.

Preventing and reducing refrigerant leaks

Weis Markets’ leak prevention and reduction efforts are focused on training and supervision, high quality equipment, and a technician incentive plan. Key features include:

- Weis Markets’ in-house refrigeration team is comprised of a Refrigeration Engineer, Refrigeration Maintenance Manager, Service Supervisors, Service Technicians, and Administrative Assistant. This team collaborates to identify best practices, review new

¹ Includes supermarkets, grocery stores, food cooperatives, supercenters, and wholesale clubs
technologies, and track individual technician metrics such as completed service calls, refrigerant usage, and current leak rates. These data are compiled into bi-weekly reports that are compared against overall company goals.

- On a monthly basis, Weis Markets’ technicians use hand-held infrared leak detectors to conduct leak detection and preventative maintenance activities. The technicians repair faulty equipment and replace components that are susceptible to leaks or in poor condition. Additional stationary leak detectors with automated alarming are installed in stores’ mechanical rooms to alert technicians of refrigerant leaks even if they are offsite.

- In 2012, Weis Markets began a cash bonus incentive plan for service technicians based on the combined leak rate of the stores they service. On multiple occasions Weis Markets has presented on its Refrigerant Leak Reduction Plan and technician incentive program, including on GreenChill’s 2020 Recognition webinar. Weis Markets attributes lower refrigerant use and lower maintenance and refrigerant costs to this program.

**Transitioning to environmentally friendlier refrigerants**

Wherever possible, Weis Markets is moving away from the use of hydrochlorofluorocarbon (HCFC) and chlorofluorocarbon (CFC) refrigerants that deplete the ozone layer. To date, over 90% of Weis Markets’ stores no longer use ozone-depleting refrigerants.

Weis Markets follows GreenChill’s Best Practices Guideline Ensuring Leak-Tight Installations of Commercial Refrigeration Equipment. Eligible Weis Markets stores seek GreenChill Store Certification. In 2020, 10 previously certified Weis Markets stores earned GreenChill certification, including five Silver-Level and five Gold-Level stores. Two of these stores achieved their fifth year of certification, and the store in Hanover, Pa., was certified for the twelfth consecutive year, maintaining its streak as the longest continuously certified store in GreenChill’s history.

**Testing advanced refrigeration technologies**

Weis Markets strives to reduce total store refrigerant charge through changes in systems design. In 2018, Weis Markets opened a store in Randolph, N.J., with the company’s first transcritical carbon dioxide refrigeration system. The store’s advanced refrigeration technologies reduce refrigerant use by 60 percent compared to conventional systems. The store also features additional energy-saving technologies such as closed-door cases, adiabatic condensers, and energy control programs to reduce power usage during peak times. Since the store’s opening, Weis Markets reports efficient system performance, even when summer temperatures reach over 100° Fahrenheit. In 2021, Weis Markets opened two new stores using transcritical carbon dioxide refrigeration systems in Macungie, Pa., and Bethlehem, Pa.
Achievements

Since 2008, Weis Markets has:
- Reduced its company-wide refrigerant emissions rate by 61 percent, and maintains a rate well below the GreenChill Partnership average;
- Reduced its refrigerant emissions per store rate by 51 percent; and
- Reduced its use of ozone-depleting substances by 60 percent by using environmentally friendlier refrigerants.

Recognition from GreenChill


Distinguished Partner: 2013


Most Improved Emissions Rate: 2016

Exceptional Goal Achievement: 2017, 2020

Learn More

- Explore Weis Markets’ four pillars of sustainability and 2020 sustainability report.

The GreenChill Partnership

EPA’s GreenChill Corporate Emissions Reduction Program is a voluntary partnership with food retailers, refrigeration system manufacturers, and refrigerant manufacturers to reduce refrigerant emissions and decrease Partners’ impact on the ozone layer and climate change. GreenChill Food Retail Partners commit to reducing their corporate-wide refrigerant emissions by annually setting reduction goals, measuring corporate stocks and emissions, and reporting their data to EPA. Learn more about the GreenChill Partnership and the benefits of joining.