



GreenChill Partner Spotlight: Hannaford

Managing Refrigerant to Protect the Environment

Many of the roughly 38,000 U.S. food retailers¹ use refrigerants that can deplete the ozone layer, contribute to climate change, or do both when emitted. As part of the U.S. Environmental Protection Agency's (EPA's) GreenChill Partnership, 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.

Hannaford Supermarkets is committed to reducing its impact on the environment. Environmentally friendlier refrigerants and leak reduction are key strategies for achieving this objective. Hannaford joined the GreenChill Partnership as a founding Partner in 2007. This document highlights several of the company's refrigerant management achievements.



- Founded in 1883
- Headquarters in Scarborough, Maine
- 184 stores in five states

Key Strategies

Hannaford is taking several actions to manage refrigerant in its stores to improve its environmental sustainability and save money.

Transitioning to environmentally friendlier refrigerants

To meet its sustainability goals, Hannaford emphasizes piloting new refrigeration and technologies that rely on refrigerants with lower-global warming potentials (GWPs). In 2013, Hannaford [opened the first transcritical carbon dioxide \(CO₂\)-only grocery store](#) in the United States in Turner, Maine, to learn more about the benefits and challenges of using a low-GWP, high-pressure refrigerant. In 2016, Hannaford undertook the [first transcritical CO₂ retrofit project](#) in the United States at its store in Raymond, N.H. More recently, Hannaford became one of the first U.S. grocers to use the same system in a [refrigerated warehouse](#). This warehouse represents one of the world's largest refrigerated spaces to use a transcritical system.

¹ Includes supermarkets, grocery stores, food cooperatives, supercenters, and wholesale clubs.

Preventing and reducing refrigerant leaks

One of the primary benefits of CO₂ is that it has one of the lowest GWPs of any refrigerant, so any leaks from the system have much lower environmental impacts. In addition, Hannaford has implemented new hand-held leak detection instruments to ensure leaks are caught and addressed more quickly.

Achievements

Since joining the Partnership, Hannaford's efforts to manage refrigerant emissions have earned the retailer recognition from GreenChill, its peers, and the industry as a whole. Hannaford has:

- Reduced its company-wide refrigerant emissions rate by approximately 21 percent and maintains a rate well below the GreenChill Partnership average; and
- Reduced its refrigerant emissions rate per store by more than 15 percent.



Recognition from GreenChill

Store Re-Certification Excellence: Berwick, Maine (2019);
Turner, Maine (2017)

Superior Goal Achievement (2014, 2009)

Best of the Best: Turner, Maine (2012)

Learn More

- [Explore Hannaford's commitment to sustainability](#)

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](#).