

NASRC 2019 Annual Report

The North American Sustainable Refrigeration Council



A LETTER FROM OUR EXECUTIVE DIRECTOR



In 2019, we saw the power of our network and our growing influence translate directly to meaningful impact. With the support of our members and partners, we made unprecedented progress towards our mission to eliminate the barriers preventing the widespread adoption of natural refrigerants in supermarkets.

Together, we identified new funding sources to reduce upfront costs, created new training resources for contractors, initiated data collection and technology validation projects, and coordinated with regulatory agencies to improve proposed refrigerant regulations.

Since our founding as a 501c3 nonprofit four years ago, our membership network has been the driving force behind our mission, contributing their time and resources towards our initiatives. In 2019 our membership network grew by nearly 20%, and now represents over 24,000 supermarket locations in North America and over 125 organizations from every sector of the commercial refrigeration industry. The growth of our network has positioned us to scale our influence and accelerate our progress like never before.

We also welcomed new members to our Board of Directors in 2019 - Frank Davis of Grocery Outlet, Todd Ernest of Climate Pros, Paul Conlon of BITZER US, Darren Russell of Carter Retail Equipment, and Mark Schmalz of Parker Hannifin - each of whom offers valuable expertise to drive our mission forward.

Our goal is to bring natural refrigerants on par with other refrigerant options, allowing supermarkets to seamlessly navigate refrigerant regulations, select the refrigerants that best meet their needs, and ultimately contribute to the number one global climate solution. We look forward to leveraging our network and the momentum we have built together to drive us closer to that goal in 2020.

Sincerely,

Danielle Wright Executive Director NASRC

OUR MISSION: NASRC is an environmental 501c3 nonprofit taking action to advance natural refrigerants and shape a more sustainable future for supermarket refrigeration.

OUR VISION: To significantly lessen the environmental impact of refrigeration through widespread adoption of natural refrigerants and other innovative technology.

NASRC BOARD OF DIRECTORS



Bryan Beitler, President/CEO *CoolSys*



Peter Dee, Chair *Danfoss*



Brad Person, CFO SEER2



Todd Washburn, Secretary *True Manufacturing*



Keilly Witman H-E-B



Aaron Daly Whole Foods Market



Tristam Coffin Whole Foods Market



Todd Ernest Climate Pros



James McClendon Walmart Stores Inc.



Michael May Hillphoenix



Paul Conlon BITZER US, Inc.



Mark Schmalz Sporlan Division of Parker Hannifin



Darren Russell
Carter Group International



Frank Davis Grocery Outlet



2019 ACCOMPLISHMENTS

Throughout 2019, NASRC mobilized our members and partners - including over 125 commercial refrigeration organizations and over 24,000 supermarket locations in North America – to take action in the following areas:



COST PARITY

- Funding Coordination: Coordinated funding for low-GWP technology installations, including a grant that allowed one retailer to open its first CO2 transcritical store.
- State Incentives: Mobilized members & coordinated with partners to secure funding for California's Incentive Program; Worked with other states to explore incentive opportunities.
- Utility Programs: Collaborated with utilities
 & partners to advance modeling tools & expand utility incentive opportunities; Initiated studies to evaluate emerging technologies.
- **Carbon Financing:** Designed Carbon Financing Pilot Program for natural refrigerant technology installations.



EDUCATION & ENGAGEMENT

- Industry Resources: Contributed to industry knowledge sharing & best practices through resource development & distribution, webinars & events, and roundtable discussions.
- State Engagement: Facilitated coordination between US Climate Alliance States & industry stakeholders to establish less burdensome, more effective regulations; Provided resources to help industry stakeholders prepare for and participate in rulemaking processes.
- Public Awareness: Launched our Naturally Cool Movement to expand support for the industry through public awareness; Developed resources to educate the media & public, including our animated Naturally Cool video.



SERVICE READINESS

- Training Resources: Contributed to the development & distribution of training resources; Finalized & published RETA CO2 Handbook; Curated library of existing CO2 training resources.
- Workforce Development: Established partnership with ESCO Group & mobilized members to launch CO2 curriculum development project to address root causes of training gaps.



ACCESS TO DATA

- Performance Validation: Initiated energy validation studies of low-GWP technologies; Identified and coordinated new opportunities for energy monitoring.
- Data Distribution: Facilitated data sharing and industry case studies through NASRC webinars, events, and roundtable discussions; Evaluated data to identify industry gaps and opportunities.

2019 EVENTS

NASRC specializes in intimate events that offer unique & valuable content and are designed to establish actionable solutions to the barriers to natural refrigerant adoption. Read about our 2019 events below:



California Low-GWP Refrigerants Workshop

San Francisco, California: Co-hosted with PG&E, this workshop brought together supermarket stakeholders, utilities, and CARB to optimize for energy efficiency with low-GWP refrigerants and establish a pathway for incentives in the context of pending California HFC regulations.

Sponsors: Climate Pros, BITZER US, AHT Cooling Systems, Hillphoenix



New York Low-GWP Refrigerants Workshop

Albany, New York: Co-hosted with the New York Dept. of Environmental Conservation (DEC), this workshop engaged supermarket stakeholders early in the HFC rulemaking process to identify industry challenges and actionable solutions towards an energy efficient & low-GWP future for New York.

Sponsors: CoolSys, Danfoss, Dorin



Commercial Refrigeration & Food Retail Track: IIAR Natural Refrigerants Conference & Expo

Phoenix, Arizona: NASRC curated the first-ever Commercial & Food Retail Track at the IIAR Conference & Expo to expand technical resources and bridge the gap between the industrial and commercial refrigeration sectors.



Natural Refrigerants Seminar & Live CO2 Demo

Baltimore, Maryland: Hosted in partnership with Danfoss, this event explored CO2 technologies and innovations, as well as opportunities for progress in the context of increasing refrigerant regulations.

Sponsors: CoolSys, Danfoss

REGULATORY COORDINATION

In 2019, a group of California retailers that represented the majority of supermarket locations in California approached NASRC with a request to facilitate the collaborative development of an alternative proposal to the California Air Resources Board's (CARB) proposed refrigerant regulations.

The effort resulted in the proposal of two new programs that require retailers to meet chain-wide emissions reductions through lower-GWP refrigerants, charge reduction, or a combination of both, giving them the flexibility to determine which stores to retrofit or remodel to meet the target.

The result was a less burdensome proposed regulation that more effectively meets CARB's goals.

MEMBERSHIP MATTERS

In 2019, NASRC's reach grew tremendously with the support of our membership. Our membership network now represents over 24,000 supermarket locations in North America and over 125 organizations from every sector of the commercial refrigeration industry. See a **full list** of NASRC members at the end of this report.



RETAILER MEMBER INPUT

At the start of 2019, NASRC surveyed our retailer members to attain feedback on the leading barriers and benefits to adopting natural refrigerants in new stores and to shape our strategy moving forward.

Survey results indicated that the leading barriers to natural refrigerants were:

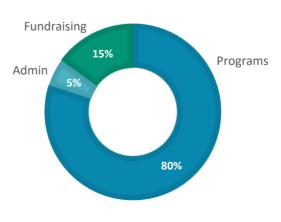
- Upfront cost premiums
- Shortage of reliable data
- Lack of service readiness

2019 FINANCIAL OVERVIEW

2019 REVENUE

Sponsorship 18% 82% Contributions & Membership Fees

2019 EXPENSES



NASRC MEMBERS

Thank you to our members! None of what we do would be possible without your support.

End-User

Albertson's

ALDI

Boulder Organic Foods Brattleboro Food Coop **Brookshire Brothers** Campbell Soup Company Chavez Supermarkets

Cook County Whole Foods Co-op

Costco

Draeger's Supermarkets, Inc. East Aurora Co-op Market

Food Lion Genentech, Inc. Giant Eagle Grocery Outlet H-E-B

Hannaford Harris Teeter LLC Holiday Quality Foods Loblaw Companies Limited

Longos

Lowe's Market

Mom's Organic Market National Co+op Grocers Nature's Path Foods New Leaf Markets New Seasons Market Nugget Market Palace Market Park Slope Food Coop **PCC Community Markets** Publix Supermarkets, Inc.

Raley's Family of Fine Stores Red Bull North America, Inc.

Roche

Sprouts Farmers Market Sugar Creek Packing Co.

Target

The Fresh Market The Kroger Co.

The North West Company Vallarta Supermarkets Walmart Stores Inc. Weis Markets, Inc. Whole Foods Market

Service Contractor

Accutherm Refrigeration Calwest Refrigeration

Clima-Tech LLC

Climate Pros

Compass Refrigeration

CoolSvs

DEEM Mechanical Eastern Refrigeration **Fazio Mechanical Services**

Jack R Gage Refrigeration

Key Mechanical

Omni Mechanical Solutions Prime Refrigeration Systems Professional HVAC/R Services Inc.

RMC Refrigeration South-Town Refrigeration St Cloud Refrigeration The Arcticom Group

Turner Piping & Refrigeration

Consulting

2050 Partners, Inc.

Certified Energy Consultants

CLEAResult

Dalkia Energy Solutions, LLC

Ecology Action Enreps LLC J Vidal Associates

Optimized Thermal Systems, Inc.

OTS Energy

R3 Retail Development

Engineering & Design

Aislamientos Constructivos Cushing Terrell (CTA) DC Engineering

Energy Efficiency Services (e2s)

kW Engineering ripKurrent SEER2 **SESCO**

VaCom Technologies

OEM, Manufacturer, Supplier

Aeropres Corporation

AHT Cooling Systems USA, Inc

Arneg USA Axiom Exergy Bacharach

Baltimore Aircoil Company

BITZER US BITZER Canada CAREL USA Inc. Carlyle Compressor Carnot Refrigeration

Carter Retail Equipment. Ltd.

ClimaCheck Conex Bänninger

Danfoss

ebm-papst Inc.

Embraco Emerson Evapco Inc.

Gas Innovations

Güntner US Hillphoenix **Howe Corporation**

Hussmann Corporation

Kysor Warren

Officine Mario Dorin **Parker Hannifin** Pure Cold

Rebound Technologies

RefPlus Rivacold Secop

Southern CaseArts Systems LMP **True Manufacturing** Zero Zone, Inc.

Trade Organization

HARDI RSES

Software Company

ServiceChannel Trakref

Utility

Efficiency Vermont Northwest Energy Efficiency Alliance (NEEA)

Sacramento Municipal Utility District (SMUD)

Wholesaler & Distributor Refrigerative Supply

Nonprofit

American Carbon Registry Australian Refrigeration

Association

Thermostat Recycling Corporation