



#NASRCEXpo

Low-GWP & Energy Efficiency Expo

January 15-16, 2020

*Southern California Edison Energy Education Center
6090 Irwindale Ave, Irwindale, CA 91702*

Low-GWP & Energy Efficiency Expo Program

Wednesday, January 15th

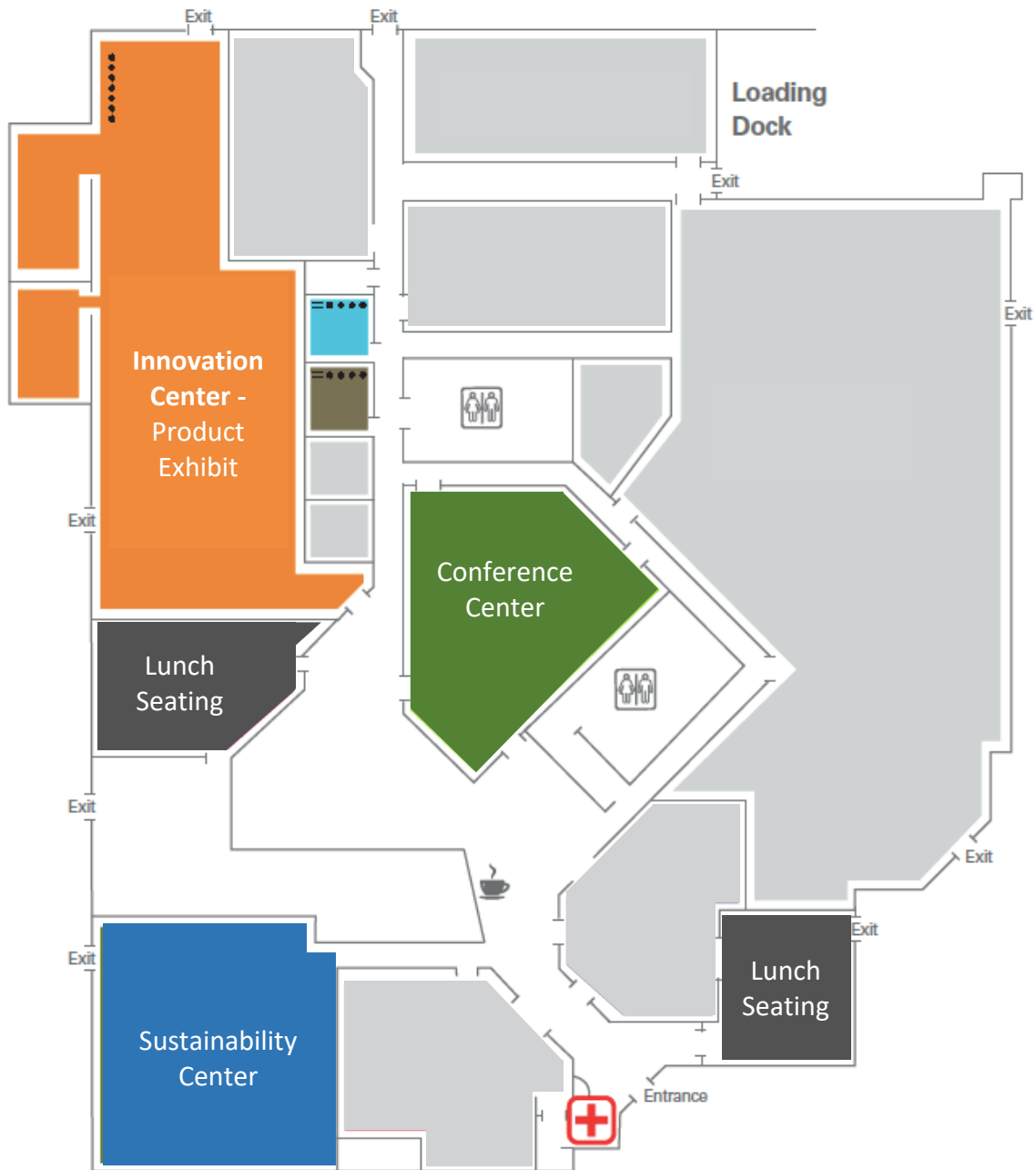
Start Time	End Time	Session	Description	Presenters	Location
8:00 AM	8:50 AM	Registration & Breakfast			Innovation Center
9:00 AM	9:45 AM	Welcome & Introduction	Overview and objectives	NASRC, Southern California Edison (SCE)	Sustainability Center
9:45 AM	12:00 PM	Product Exhibit: Connect with manufacturers offering solutions that meet energy and low-GWP needs Innovation Center	10:00 AM - Technomercial 1: Trillium Adiabatic Condenser	Baltimore Aircoil Company (BAC)	Conference Center
			10:20 AM – Technomercial 2: CO2 Compressors: CD-CDS Ranges	Dorin	Conference Center
			10:40 AM – Technomercial 3: Mini Purity CO2 Condensing Unit	Systems LMP	Conference Center
			11:00 AM – Technomercial 4: VARISTEP for CO2 Compressors	BITZER US	Conference Center
			11:20 AM – Technomercial 5: CO2 Racks with Ejector Defrost	Carnot Refrigeration	Conference Center
			11:40 AM – Technomercial 6: R290 Packaged Systems	Emerson	Conference Center
12:00 PM	1:00 PM	Lunch			
1:00 PM	2:30 PM	Emerging Technologies “Shark Tank”	Learn about the latest refrigeration innovations in our “Shark Tank” format.	Panelists: Whole Foods Market, Walmart, SCE, Ultra Capital Presenters: Axiom Exergy, Pure Cold, Systems LMP, Carel	Sustainability Center
2:30 PM	3:00 PM	Break			
3:00 PM	4:30 PM	Energy & Utility Policies	Understand energy code & policy impacts on low-GWP technologies	Presenters: kW Engineering, VaCom Technologies, SMUD	Sustainability Center
4:30 PM	5:30 PM	Product Exhibit Innovation Center	4:35 PM – Technomercial 7: Thermal Energy Storage	Viking Cold Solutions	Conference Center
			4:55 PM – Case Study 1: Sustainable Refrigeration Capital Project Development	VaCom Technologies	Conference Center
			5:15 PM – Technomercial 8: Refrigerant Management for Ref. & Energy Savings	Bacharach	Conference Center
5:00 PM	6:30 PM	Networking Reception			Innovation Center

Thursday, January 16th

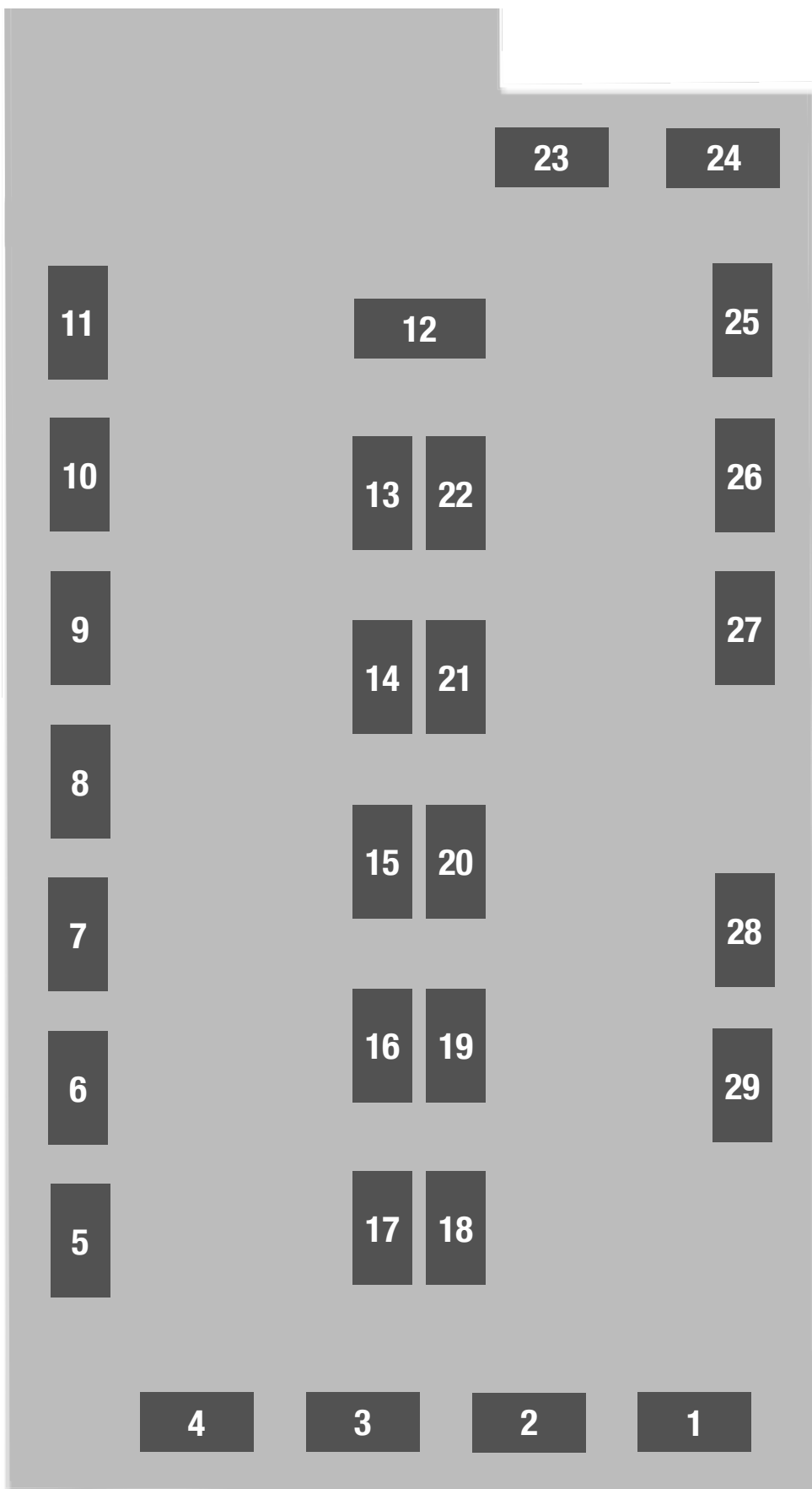
Start Time	End Time	Session	Description	Presenters	Location
7:30 AM	7:50 AM	Networking Breakfast			Innovation Center
8:00 AM	8:45 AM	California Refrigerant Regulations	Update on California's HFC reduction measures & low-GWP incentive program	CARB	Sustainability Center
8:45 AM	10:00 AM	Product Exhibit Innovation Center	9:00 AM – Technomercial 9: Advanced CO2 Roadmap	Hillphoenix	Conference Center
			9:20 AM – Case Study 2: Whole Foods Cascade CO2 Low Temp Retrofit	SEER2	Conference Center
			9:40 AM – Case Study 3: Low Charge Hybrid Design	Zero Zone, SEER2 & Whole Foods Market	Conference Center
10:00 AM	11:30 PM	Existing Facilities Session	Explore options to transition existing facilities to refrigerants below 150 GWP from an expert engineering team.	Panelists: Whole Foods Market, Kroger, Target, Stater Bros, H-E-B Presenters: DC Engineering, Cushing Terrell (CTA)	Sustainability Center
11:30 AM	12:00 PM	Closing Remarks	Summarize takeaways & next steps	NASRC	Sustainability Center

Southern California Edison Energy Education Center – Map

6090 Irwindale Ave, Irwindale, CA 91702



Expo Floorplan



Exhibitors

1. Hillphoenix
2. Danfoss
3. AHT Cooling Systems
4. Baltimore Aircoil Company (BAC)
5. Kysor Warren
6. Carel US
7. Hussmann Corporation
8. Emerson
9. Zero Zone
10. Parker Hannifin - Sporlan Division
11. True Manufacturing
12. Axiom Exergy
13. Rivacold America
14. Carnot Refrigeration
15. Officine Mario Dorin Spa
16. Howe Corporation
17. Embraco
18. BITZER US
19. Systems LMP
20. Pure Cold
21. Güntner US
22. Carlyle Compressor
23. Bacharach
24. Viking Cold Solutions
25. VaCom Technologies
26. Mayekawa USA
27. Cushing Terrell (CTA)
28. DC Engineering
29. NASRC

Exhibiting Companies



www.ahtusa.net

AHT Cooling Systems USA, Inc., Table 3

AHT Cooling Systems, USA is a global leader with a long history of plug-in, R290 refrigeration systems for the food retail industry. Our product portfolio is designed to reduce maintenance and energy costs while ensuring the quality and safety of the goods merchandised. AHT continues to focus on environmentally friendly and energy-saving initiatives to reduce GWP and meet current regulations in North America.



Axiom Energy, Table 12

Axiom Exergy uses Artificial Intelligence to transform the world's thermal systems into intelligent, flexible, and resilient assets. Our mission is to create a more sustainable future by transforming the way that the world's cooling systems interact with the power grid and the atmosphere.



www.mybacharach.com/refrigerant-management/

Bacharach, Table 23

Bacharach provides gas detection and software solutions for ASHRAE 15 safety compliance and EPA 608/CARB emissions reduction for HFCs, HFOs, A2Ls, CO₂, NH₃, and other toxic and combustible gases. The Multi-Zone refrigerant gas monitor allows leak detection levels to 1 PPM. Refrigerant management software from single-site to full-enterprise reporting.



www.baltimoreaircoil.com

Baltimore Aircoil Company, Table 4

For over seven decades, Baltimore Aircoil Company has been dedicated to the development of innovative, cost-effective heat transfer solutions for its customers. This has established BAC as the global leader of factory assembled evaporative heat rejection and thermal storage equipment.



www.bitzerus.com

BITZER US, Table 18

For more than 80 years, the BITZER name has represented the highest quality, efficiency and reliability. BITZER is the only company to produce all three primary types of compressor: reciprocating, screw and scroll. And with its environmentally friendly solutions and innovative electronic products, BITZER is driving the refrigeration and air-conditioning industry around the world.



www.carelusa.com

Carel USA, Table 6

CAREL is a world leading manufacturer of control systems and solutions for foodservice and retail refrigeration. Leveraging our European roots, we bring the most energy efficient, connected solutions to the North American market. We deliver the technology you need to protect your business, customers, and the environment.



www.carlylecompressor.com

Carlyle Compressor, Table 22

COUNT ON CARLYLE®

Carlyle is a world leader in compressor technology. Our products can be found around the world – from the first nuclear sub to your grocer's freezer to entire bus fleets. That's because when it comes to refrigeration and air conditioning, the world relies on Carlyle.



www.carnotrefrigeration.com

Carnot Refrigeration, Table 14

Carnot Refrigeration is a pioneer in the development, engineering, and manufacturing of CO2 refrigerant-based products and systems that include distributed systems, parallel racks, chillers, and condensing units for commercial-industrial cooling and refrigeration applications for Cold Storages-Warehouses, Distribution, Food Processing, Wineries, Ice Rinks, Supermarkets and Data Centers.



www.cushingterrell.com

Cushing Terrell (CTA), Table 27

Cushing Terrell was founded in 1938 by a pair of architects. Ralph Cushing and Everett Terrell acted on the belief that integrating architecture, engineering, and design opened doors for deepened relationships and enhanced creativity: the beginnings of our design practice and what still defines us today. Driven by empathy, our team works together to design systems and spaces that help people live their best lives, achieve their visions, and enjoy healthy, sustainable built environments.



www.danfoss.us

Danfoss, Table 2

Since 1933, Danfoss has been engineering technologies to help build a better, smarter, and more efficient tomorrow. Today our innovative solutions are used around the world to help meet the need for energy-efficient infrastructure, a safe food supply, and reduced climate impacts.



www.embraco.com

Embraco - Nidec Global Appliance, Table 17

With over 14,000 employees across 8 countries, Nidec Global Appliance manufactures Embraco's cooling solutions for a variety of applications, from household to light commercial segments, as well as motors for dishwashers, washing machines and dryers. Its focus is to deliver a broad portfolio capable of meeting customer needs through products with high standards of quality, performance and energy efficiency. It is a division of Nidec Corporation, a global leader in manufacturing motors for a wide variety of applications.



www.emerson.com

Emerson, Table 8

Creating comfortable, controllable indoor environments. Advancing fresh, safe food throughout the cold chain. Supplying energy-efficient technology to build sustainable infrastructures. At Emerson, we see innovative solutions to keep homes and businesses running smoothly.



www.guntnerus.com

Güntner US LLC, Table 21

Güntner is a global supplier and technological leader in heat transfer technology for commercial refrigeration, industrial refrigeration, HVAC, and energy & process cooling applications. Our products include coolers, evaporators, air-cooled condensers, dry coolers, adiabatic coolers/condensers, and evaporative condensers. Güntner manufactures these products in Europe, Asia and the Americas. Regardless of where our products are made, they meet the same high-quality standards that apply throughout our company.



www.hillphoenix.com

Hillphoenix, Table 1

Hillphoenix’s mission is to provide fresh, innovative customer-centric solutions that help their customers stay relevant and competitively differentiated. The leading North American manufacturer of CO₂ equipment, Hillphoenix has expanded its natural refrigerant capabilities with the addition of NXTCold Ultra-low charge Ammonia Systems. Hillphoenix designs and manufactures food retail display cases, commercial and industrial refrigeration systems, provides training services through The Hillphoenix Learning Center and Energy Services through The AMS Group.



www.howecorp.com

Howe Corporation, Table 16

Howe Corporation is a 108-year old manufacturing company specializing in food retail applications. In 2009 we developed CO₂ compatible ice machines for the supermarket industry. We continue to monitor the under 150 GWP market to adjust to your needs. Howe also offers ice storage bins compatible with other ice machines.



www.hussmann.com/propane

Hussmann Corporation, Table 7

Hussmann Corporation promises to continuously provide the most customer-focused solutions in the food retailing industry. Core capabilities include merchandising/shopper engagement, refrigeration, asset optimization, and supply chain management that address the critical needs of food retailers to increase sales, reduce costs, and increase shopper loyalty.



www.kysorwarren.com

Kysor Warren, Table 5

Kysor Warren, a part of the Epta Group, builds refrigerated displays and systems for leading supermarket, warehouse, and convenience stores throughout North America. Our displays and systems solutions are known for their durability, efficiency, and quality in design. At Kysor Warren we continue to focus on improving product quality by focusing on the health, safety, and skills of our workforce. Kysor Warren provides a diverse collection of refrigerated displays and systems for food retailers to display and merchandise refrigerated and frozen foods.



www.mayekawausa.com

Mayekawa USA, Table 26

Mayekawa is an industry leader in the manufacturing of industrial refrigeration compressors and specialty equipment. Known globally for reliability and quality, Mayekawa delivers energy efficient, low maintenance, and cost-effective solutions.



www.dorin.com

Officine Mario Dorin Spa, Table 15

Since 1918 Officine Mario Dorin has offered innovative solutions for refrigeration and air conditioning known all over the world. Thanks to constant research, our solutions offer maximum energy savings and efficiency, and are designed according to customer needs, with the assistance of professionals in engineering, finance and marketing.



www.nasrc.org

North American Sustainable Refrigeration Council (NASRC), Table 29

The NASRC is a 501c3 nonprofit organization focused on taking action to advance the adoption of natural refrigerants for supermarkets. Working directly with over 120 organizations from virtually every sector of the commercial refrigeration industry, the NASRC is dedicated to eliminating the unique set of barriers preventing the widespread adoption of natural refrigerants to bring natural refrigerants on par with other refrigerant options.



www.sporlanonline.com

Parker Hannifin - Sporlan Division, Table 10

The Sporlan Division of Parker Hannifin is a leading solutions provider for natural refrigerant applications. For over 80 years the Parker Sporlan Division has set the industry standard for the development and manufacture of leading-edge high quality HVACR components.



www.purecoldusa.com

Pure Cold, Table 20

Pure Cold is a UK headquartered company with a US subsidiary, and has recently started supplying product to the market in the USA. We design and manufacturer air and water-cooled self-contained display cases for food retail. In the UK we have been designing and supplying hydrocarbon self-contained cases with charge sizes of up to 1kg for over ten years.



www.DCEngineering.net

Refrigerant Management Solutions - DC Engineering, Table 28

DC Engineering is a mid-sized, multi-faceted engineering consulting firm committed the success of our clients, and to serving our communities through innovative, cost-effective engineering solutions. DC's latest venture, Refrigerant Management Solutions, continues this commitment by providing refrigerant compliance reporting, codes and compliance training for service technicians, and consulting directly to end users.



www.rivacold.com

Rivacold America, Inc., Table 13

Rivacold America is the U.S. production and distribution facility for Rivacold s.r.l. With over 50 years of experience and innovation, Rivacold is a leader in commercial and industrial refrigeration. As such, it is important for us to provide the market solutions that utilize natural refrigerants, like CO2 and R-290.



www.lmpinc.ca

Systems LMP, Table 19

Systems LMP specializes in the field of clean refrigeration, using CO2 as a refrigerant. Since 1998 we have been working to develop new products that surpass industry standards. Whether in the supermarket, industrial, commercial, hydroponic, or market gardening sectors, we design each system to the specific needs of the customer, ensuring that we deliver the best product that will satisfy the customer. We are at the forefront of green and energy-efficient technology and have sold many systems across the United States and Canada.



www.truemfg.com

True Manufacturing Co., Table 11

Since 1945, True Manufacturing has been an industry leader in commercial refrigeration products, and True Manufacturing is now the leader in design and development of R-290 refrigeration systems. 90% of our products are available in R-290, and we are committed to surpassing the energy standards while not sacrificing performance.



www.vacomtech.com

VaCom Technologies, Table 25

With deep refrigeration expertise, VaCom Technologies provides non-proprietary control and performance solutions for industrial refrigeration systems, focusing on technologies for energy efficiency, system integration, and performance monitoring to achieve reliable operation and enterprise connectivity.



www.vikingcold.com

Viking Cold Solutions, Table 24

Viking Cold's Thermal Energy Storage (TES) technology includes intelligent controls and Phase Change Material to cut refrigeration energy consumption (kWh) an average of 25% and provide cold storage facilities the flexibility to stage down refrigeration units to avoid demand and time-of-use charges for up to 13 hours per day.



www.zero-zone.com

Zero Zone, Table 9

Established in 1961, Zero Zone is a leading manufacturer of refrigerated display cases and commercial refrigeration systems for supermarkets, drug, dollar, and convenience stores. With display case plants in North Prairie and Waukesha, WI and a refrigeration systems plant in Ramsey, MN, Zero Zone also manufactures industrial refrigeration systems for cold storage, food processing, and ice arenas.



Taking action to advance natural refrigerants for supermarkets.

Who We Are

The North American Sustainable Refrigeration Council (NASRC) is an action-oriented 501c3 nonprofit focused on eliminating the barriers that are slowing the adoption of natural refrigerants in supermarkets to create a more climate-friendly future for refrigeration.

What We Do

We work directly with over 120 organizations from virtually every sector of the commercial refrigeration industry to eliminate the barriers slowing natural refrigerant adoption. Our goal is to bring natural refrigerants **on par** with other refrigerant options.

Together with the industry, we are working to:

- Establish industry best practices, standards, and codes
- Accelerate training for contractors & service technicians
- Partner with utilities and other financing entities to deploy incentive programs
- Lead industry events, workshops, and trainings
- Facilitate connections between experts to make solutions possible
- Advise state and federal agencies on policy and technical applications

Get Involved

Our members include supermarkets retailers, service contractors, manufacturers, utilities, engineering & design firms, consultants, wholesalers & distributors, trade organizations, and nonprofits who benefit from:

- Connecting with the supermarket industry & natural refrigerant community
- Staying up-to-date on the latest policies and regulations
- Participating in our initiatives
- Staying in-the-know through events, trainings and webinars

NASRC Member Network

+120 Member Organizations

24,000 Supermarket Locations

63% US Supermarket Locations

**INTERESTED IN
MEMBERSHIP?**

nasrc.org/join

info@nasrc.org for more information or to join

Notes

Notes



Thank you to Southern California Edison
for generously hosting this event!