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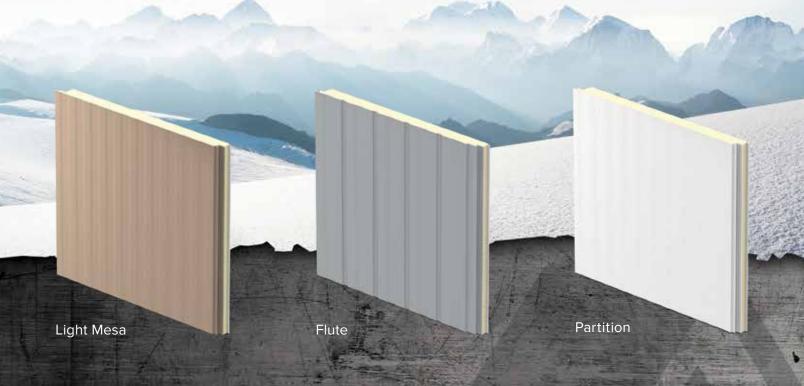
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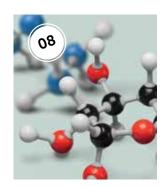
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LEADOFF

MESSAGES FROM GCCA LEADERS

Opportunity Is Knocking

T HAS BEEN AN HONOR TO BE YOUR GLOBAL COLD CHAIN FOUNDATION (GCCF) AND GLOBAL COLD CHAIN ALLIANCE (GCCA) CHAIRMEN THIS PAST YEAR. IN OUR ROLES, WE HAVE SEEN CLEARLY OVER THE PAST YEAR THAT IF TODAY'S GLOBAL COLD CHAIN MARKET WERE TO BE SUMMED UP IN A WORD -IT WOULD BE OPPORTUNITY.

Last year, several exciting initiatives the Foundation Board was working on were announced. Those included rebranding the organization from the World Food Logistics Organization to the Global Cold Chain Foundation. In addition, the WFLO Institutes were renamed the Cold Chain Institutes and the Foundation created its own mission, vision and strategic plan that better reflected the initiatives and programs.

The new strategic plan for GCCF focuses on three areas: Discover, Train, Apply. By focusing on these three areas, the Foundation can increase its ability to deliver intelligence and research that allow members to make informed business decisions, train the next generation of cold chain industry leaders and support the development of a robust and efficient cold chain globally.

The Cold Chain Institutes provide the best opportunities to train the future leaders with classes taught by senior experts who have decades of experience in the industry. It's not surprising that these classes draw more than 400 students who receive the only cold storage educational programs specifically designed for our industry.

The Foundation also just recently held three Cold Chain Connections - one day events that connect the industry in Canada, Latin America and Singapore. The Singapore Cold Chain Connection alone attracted more than 50 cold chain professionals from China, Australia, Philippines, Indonesia and Cambodia.

Back in the United States, the reauthorization of the Farm Bill in the U.S. Congress provided a great opportunity to promote the cold chain through legislation. Drawing on GCCA's experience with international development of the cold chain, we developed an initiative to strengthen the U.S. Department of Agriculture's current trade programs by adding a new component that would fund training and technical assistance to strengthen the cold chain in developing markets.

We also had a very successful Policy Forum in Washington, D.C. this past summer. GCCA members took our message to Capitol Hill and met with more than 30 House and Senate offices to advocate for our legislative proposal. We're excited to say that our efforts have resulted in the bipartisan introduction of the FRIDGE Act in both the House and Senate.

One of the most exciting aspects of serving as board chairs is the ability to connect with cold chain professionals around the world. One great example is the GCCA European Cold Chain Conference, which hosted more than 200 attendees in Barcelona, Spain.

Members of the GCCA and GCCF Boards were also able to attend as we scheduled the Strategic Board Meetings in conjunction with the European Conference. It was an invaluable opportunity for members from across the globe to experience an event they may not normally attend, meet their peers from other regions, and learn more about similar and unique challenges and opportunities that are facing their fellow members.

As we transition to immediate past chairmen, we would like to thank all of the GCCA and GCCF staff who have gone above and beyond during an extremely busy and stressful year. We are also grateful for our fellow board members and the membership at large for their commitment and support to the industry.



GREG LAURIN CHAIRMAN GLOBAL COLD CHAIN FOUNDATION BOARD (GCCF)



MIKE MCCLENDON **CHAIRMAN** GLOBAL COLD CHAIN ALLIANCE/WAREHOUSE **BOARD**

COLDFACTS

COLD FACTS magazine is published every other month by the Global Cold Chain Alliance (GCCA), an organization that unites partners to be innovative leaders in the temperaturecontrolled warehousing, transportation and logistics industry.



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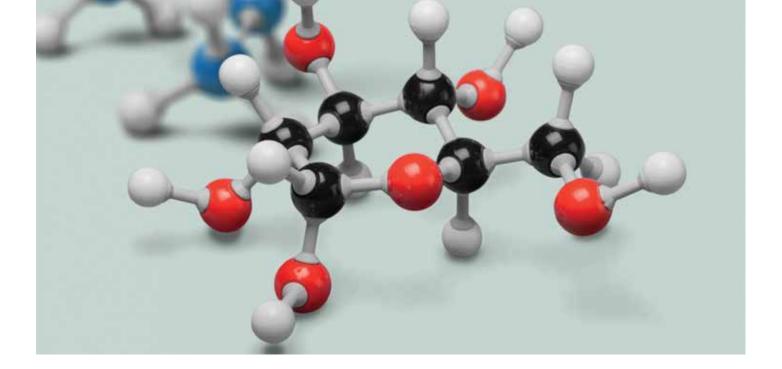
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HFC PHASE DOWN FINAL

EPA signs Technology Transitions Rule to restrict hydrofluorocarbons.

By Lowell Randel

n October 5, Environmental Protection Agency Administrator Michael Regan signed the Final Rule Technology Transitions authorized under the American Innovation and Manufacturing (AIM) Act and designed to phase down hydrofluorocarbon (HFC) use.

The AIM Act authorizes EPA to address HFCs in three main ways:

- 1. Phasing down their production and consumption.
- Promulgating certain regulations for purposes of maximizing reclamation and minimizing releases of HFCs from equipment, and ensuring the safety of technicians and consumers.
- 3. Facilitating the transition to next-generation technologies through sector-based restrictions. The Final Technology Transitions Rule restricts the use of higher-GWP HFCs in new aerosol, foam, and refrigeration, air conditioning and heat pump (RACHP) products and equipment.

The rule provides three mechanisms to restrict HFC use:

1. Prohibiting the manufacture and import of products that use higher-GWP HFCs.

- 2. Prohibiting the sale, distribution and export of those products three years after the manufacture and import restriction.
- 3. Prohibiting the installation of new RACHP systems that use higher-GWP

In most subsectors, including cold storage warehouses, EPA has set a maximum GWP limit on HFCs or HFC blends that can be used. In a few subsectors, such as some transportation applications, EPA has listed the spe-

cific HFCs or HFC blends that are restricted. Restrictions begin for many categories on January 1, 2025, with the latest restrictions going into place on January 1, 2028.

Below and on page 10 are provisions specific to cold storage warehouse and transport.

It is important to note that this rule does not restrict the continued use of any existing products or RACHP systems. EPA has stated that allowing existing systems to continue to operate to the end of their useful life is important to ensuring a smooth transition in the phasedown of HFCs. The rule clarifies that a product or system may be serviced and repaired throughout its useful life; this includes replacing components, as needed. Components needed to repair existing RACHP equipment may continue to be manufactured, imported, sold, distributed or exported.

SECTOR: COLD STORAGE WAREHOUSES			
Systems	Global Warming Potential Limit	Installation & Manufacture and Import Compliance Date	
With 200 or more lb. refrigerant charge, excluding high temperature side of cascade system	150	January 1, 2026	
With less than 200 lb. refrigerant charge	300	January 1, 2026	
High temperature side of cascade system	300	January 1, 2026	



SECTOR: REFRIGERATED TRANSPORT			
Systems	Global Warming Potential Limit	Installation Compliance Date	
Intermodal containers with refrigerant temperature entering the evaporator below -50 $^{\circ}$ C (-58 $^{\circ}$ F)	Not covered	Not covered	
Intermodal containers with refrigerant temperature entering the evaporator equal to or above -50 $^{\circ}$ C (-58 $^{\circ}$ F)	700	January 1, 2026	
Road – self-contained products	R-402A, R-402B, R-404A, R-407B, R-408A, R-410B, R-417A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R-424A, R-428A, R-434A, R-438A, R-507A, R-125/290/134a/600a (55/1/42.5/1.5), RS-44 (2003 formulation), GHG-X5	January 1, 2026	
Marine – self-contained products	R-402A, R-402B, R-404A, R-407B, R-408A, R-410B, R-417A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R-424A, R-428A, R-434A, R-438A, R-507A, R-125/290/134a/600a (55/1/42.5/1.5), RS-44 (2003 formulation), GHG-X5		

In the rule, EPA defines the distinction between maintenance of a system and installation of a new system. Specifically, the following actions, upon charging the system to full charge, are considered a new installation of a RACHP system and thus subject to the relevant HFC use restrictions:

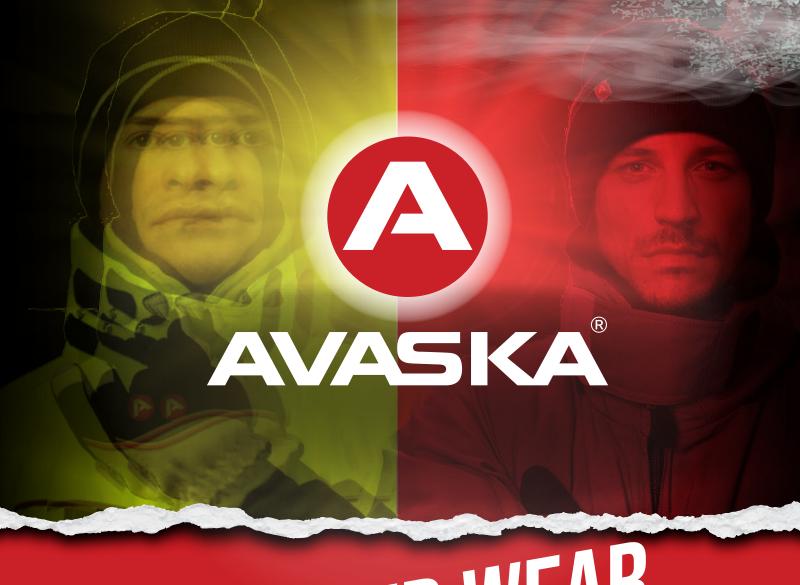
- Assembling a system for the first time from used or new components
- Increasing the cooling capacity, in BTU per hour, of an existing system
- Replacing 75% or more of evaporators (by number) and 100% of the compressor racks, condensers and connected evaporator loads of an existing system.

GCCA members are encouraged to familiarize themselves with the rule and EPA's other policies related to HFCs. Additional information on the Technology Transitions rule and the AIM Act can be found on the EPA website at: https://www.epa.gov/climate-hfcs-reduction.

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By Alexandra Walsh

COVER STORY



THERE'S A NEW CONSUMER COMING: ARE YOU READY?

Artificial intelligence and influencer marketing, served up spicy, are a few of their favorite things.

uturist and consumer guru J. Walker Smith, Knowledge Lead for the global consulting and strategy practices at Kantar, had a message to deliver at the GCCA Convention in September. Consumers are in control ... and they mean business.

Following is an interview with Smith about attitudes and generational marketing and spicy communal eating and how they are shaping the future of the consumer marketplace.

Q: How is consumer consumption changing?

J. WALKER SMITH (JWS): After the pandemic, consumption shifted back to the long-term trend of increasing spending on services. Spending has yet to fully catch up, though this will probably happen in 2024.

The biggest pandemic spending boost was for non-durables, and this is where the impact will be felt going forward. Additionally, there is increasing interest in all things related to health and wellness, across all categories. As part of that, sleep-related products are a trending sub-category.

Consumers are also increasingly interested in products that feel comfortable culturally. Sometimes, this spills out as politics, but it's really just a desire to feel that brands are authentic to the ways people live. Part of this is reflected in a growing interest in culturally distinctive foods. Part of this shows up as an appreciation of local involvement by brands and retailers. And part of the trend is about ways of shopping that feel more socially engaged and interactive.

Q: What macro consumer marketing trends are you seeing?

JWS: The biggest macro trends are economics. Households have been feeling pressures but have not been under pressure. Consumers have had pandemic-accumulated savings to help them through, so far. This will become a question for next year.

Hybrid digital shopping is growing with click-and-pick and omnichannel outlets. Part of this is about people spending more time at home, which is a big shift for the long term. Demographically, there is an ongoing shift

ADM 2024 Flavor and Color Trends

ADM has announced its outlook on the flavor and color trends that will drive product innovation in 2024. The company describes the trends as, "Transcending traditions and breaking the status quo, the new year's top flavors and colors represent consumer resolve to boldly choose products that appeal to their personal aesthetics and reflect their unique values.

ADM has identified four trends that illustrate evolving consumer behaviors. These include *luxe self-expression*, *dare to dupe*, *health without stealth* and *breaking boundaries* of taste and color.

Luxe self-expression enables consumers to express themselves through the food and beverages they consume. For example, consumers are interested in luxurious fully flavored and vibrantly colored products.

Digital experiences also play a part in *luxe self-expression* but have shifted to real-life experiences as well. For example,

viral food trends have merged to consumerpackaged good spaces, the study found.

Dare to dupe focuses on affordability as a main factor driving the trend. Consumers are finding more economical versions of their favorite products or reinventions of nostalgic products and are empowered to be led to sensory experiences that are authentic to their memories, regardless of brand, the report said.

Health without stealth has taken away the functional aspect of products and has shifted to just products, the report said. Taste and visual appeal also must resonate with consumers as well. Products that feature relaxation, energy or hydration attributes are ways consumers seek healthy lifestyles and share it with others.

Breaking boundaries trend consists of embracing tastes and colors that were previously thought of as unconventional, such as lychee and Chinese shacha.

Courtesy of ADM

in the overall mix of household types, with a relative drop in traditional family households.

And then, of course, there's artificial intelligence (AI).

Q: What are generational marketing trends, and do they apply to food consumers?

JWS: Younger generations feel greater economic pressures than prior generations at the same age. But they have been coping surprisingly well.

In terms of taste, spicy foods seem to have more resonance with this group, and there is more dining as groups, so foods that fit that experience are preferred. Plant-based alternatives will grow as younger generations come into the marketplace as heads of household. Street foods, too. And portable foods for more dynamic lifestyles.

Younger consumers will also rely more on AI to help them discover and buy.

Q: What is the importance of baby boomer consumers?

JWS: Boomers continue to consume. They are healthier and more numerous in both absolute and relative numbers than older consumers in the past.

Boomers have lots of money and a willingness to spend it. Boomers are traveling and trying to remain active, so they are pushing marketplace trends in these directions. Perhaps most of all, classic Boomer culture still matters, such as music, old TV shows and current movies set in the 1970s.

Q: What impact do you see social media having on the way consumers discover, select, purchase and consume food?

JWS: Influencer marketing is here to stay. That's the biggest social media impact. Additionally, negative feedback on social media can drive consumers away – often more than positive feedback can bring consumers in. Short videos are increasingly how people want to learn and be entertained.

Social media has made authenticity of style and presence more important and easier to verify.

But it's not just social media as a new medium of discovery. Very soon, AI will work in conjunction with social media, and AI will take over much of the discovery and evaluation that consumers do with social media. Being AI-friendly is a new brand imperative (similar to being Google-friendly in years past).



Q: What will be the impact of AI and automation on consumer marketing trends?

JWS: The biggest impact is likely to be on how people learn about brands and products. Instead of digging in themselves, consumers are going to hand that off to AI interfaces and then decide based on what AI tells them.

AI will be reading and watching as much if not more than consumers. And even when consumers read and watch, they will come to depend more and more on AI to make sense of it all.

Q: What are the costs and benefits of consumer engagement.

JWS: The biggest risk of high engagement is disappointing consumers, and this is worsened by the fact that much engagement today angers people who are frustrated with how we respond and remedy complaints. The impact on brands is negative social media, which can be punishing for brands. But the benefits of strong engagement are significant, the biggest of which is pricing power.

Brands that can build a strong position with consumers command more ability to sustain and earn higher prices and thus higher margins.

Q: What will the supply chains and logistics that get products to consumers look like in the future?

JWS: I don't know the answer to this question. But there is growing interest in products with some sort of local connection and craft products that have more of a special feel to them.

Consumers are also concerned increasingly about carbon footprint, so this will be a factor as well.

Q: How do you create community and connection in the face of hyperpersonalization and polarization?

JWS: Zero in on the core mission of the brand.

People will come together around the benefit a brand delivers, whatever else might be going on. The risk of alienating customers is heightened when brands broaden beyond a mission focus. This is not to say that brands should eschew purpose. Consumers have come to expect that of brands. It is merely to say that what people want most, and what brings people around a brand, is the core benefit promised by a brand.

ALEXANDRA WALSH is a Senior Publishing Consultant with Association Vision and Editor-in-Chief of COLD FACTS.

EMAIL: awalsh@associationvision.com

Whole Foods Market's Top Food **Trend Predictions for 2024**

Put the "plant" back in "plant-based" The original plant-based cuisine is

Use the whole cacao Utilizing by-products like cacao pulp

Buckle up for buckwheat A superfood seed containing protein, carbs and fiber

Fancy faux fish Plant-based seafood brands are stepping up

Clean & conserve: water stewardship Brands across the aisles are promoting water conservation, and consumers are

Complex heat

Complex heat continues its evolution with global peppers taking off in every

Noodle news

As people seek simple and instant meals, noodles are bringing ease and comfort

Little luxuries

TikTok creators have made the "Little Treat Culture" a fan favorite and brands are getting in on the trend

Women's health: from taboo to top of mind

products to support women's health

A better boost

Combining a boost with benefits, clean coffee and energy drinks with added mushrooms, probiotics and more

Courtesy of Whole Foods Market



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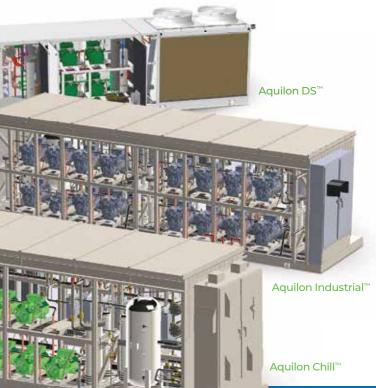
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- Packaged cascade ammonia/CO $_{\!2}$ Systems from 40–200 tons at -20°F to -60°F pumped CO $_{\!2}$







- Transcritical CO₂ industrial chillers from 50–500 tons at -40°F to 40°F outlet fluid
- • Transcritical $\rm CO_2$ condensing units from 10–85 tons at -40°F to 40°F SST
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INNOVATIVE **DESIGN AROUND** THE WORLD

A look at the nine 2023 CEBA Built by the Best finalists.

By Keith Loria

ow in its seventh year, the Built by the Best Award, created by the Controlled **Environment Building** Association (CEBA), honors innovative construction or renovation projects in controlled environment buildings across the world.

This year there are nine finalists selected to compete for the 2023 best-in-class build/ design. And, for the first time, the award is truly global with contenders from South Africa and Italy.

There will be one winner for projects under \$35 million and one winner for projects over \$35 million.

Here's a snapshot of this year's finalists and their work.

Under \$35 Million

Core X Complete Facility



(Photo courtesy of Ti Cold.)

Core X Complete provides frozen and refrigerated warehousing and truckload shipping solutions throughout New England and the Northeast United States.

Looking to expand, it brought on Ti Cold to create a master plan for a high-density, 83,000-square-foot cold storage facility with 18,000 pallet positions in Sturbridge, Massachusetts. And as it had to be built on only 7.05 acres, there were some logistical challenges.

For one, Massachusetts is known for its rocky soil, and blasting was required on the site. Added to that, winter conditions froze the subgrade, and it required a high level of coordination to progress permitting.

Ti Cold also needed to add complex storm drain construction in lieu of a retention pond. Plus, COVID-induced supply chain shortages demanded proactivity to ensure switchgear delivery, so the project schedule stayed intact. Therefore, spot-on sequencing was necessary for intricate concrete and rail installation for mobile racking and coordination with prepunched beams for in-rack sprinklers.

The project was also halted by the Massachusetts Department of Transportation, but overcame all challenges, including supply chain disturbances, and the budget was sustained.

The completed facility offers convertible rooms cooled by transcritical CO2 refrigeration, allowing for easy adaptation to Core X's needs. There are also three underground storm basins engineered in order to coordinate the necessary above-ground space (truck parking, employee parking, fire loop, and water tower) while maximizing the facility's square footage.

Vortex Cold Storage Convertible Cold Storage Facility

WDS Construction



(Photo courtesy of WDS Construction.)
To fill a huge need for more cold storage availability in the U.S. Upper Midwest, WDS Construction collaborated with Vortex Cold Storage to develop a new 173,400-square-foot convertible cold storage facility in Albert Lea, Minnesota. It would be utilized by JonnyPops ice cream products.

The ice cream company had been utilizing a leased production facility and needed more room for its continued growth.

WDS Construction designed a new building that allows for that growth. It offers safe, quality food-certified storage space across four cells with temperature ranges from 38 to -20 degrees Fahrenheit. Some of the building's main features are 34,888 pallet positions, 12 truck docks operating at 15 degrees Fahrenheit, four cells with convertible temperature zones, and 40 feet to top of product with a push-back rack system.

WDS introduced various elements in the Vortex project aimed at promoting environmental sustainability and adherence to environmental, social and governance (ESG) principals. For instance, to help with energy conservation, the company utilized a CO2 refrigerator system.

The project was complicated by COVID-19 and global supply chain delays. However, the team responded with agility and had the facility ready to receive product only 10 months after initial groundbreaking.

The Vortex Cold Storage facility is also home for the company's own corporate offices, and displays high quality employee areas and trucker lounges.

OVER \$35 MILLION

Pick n Pay Eastport Logistic Park Distribution Center AMC Engineers



(Photo courtesy of AMC Engineers.)

Pick n Pay, a well-known national supermarket chain in South Africa, hired AMC Engineers to build its new distribution center in Eastport Logistics Park in Gauteng, South Africa. This new center would more than double the space of the distribution center it

was replacing, and would serve Pick n Pay's entire inland market.

The result was the largest single-phase warehousing development in South Africa. In fact, the project broke a world record for having the longest roof span covered by a single metal corrugated sheet (called Sky

Forming). The sheet stretches 3,014 square feet across the widest portion of the Pick n Pay roof.

The overall site measures 3.8 million square feet, with 40% (1.6 million square feet) comprising the distribution area, of which nearly 485,000 square feet is the chilled distribution area. That is expected to lower the cost-percase by 12% over the next five years.

The project qualifies for EDGE Green Building Certification for its commitment to incorporating green and sustainable practices, including incorporating a 3-megawatt peak solar photovoltaic system, a 1-million liter rainwater storage tank and having automation throughout the facility.

By delivering such a large project, AMC Engineers helped make Pick n Pay's supply chain more centralized and aided in fulfilling its customer value project. In addition, the distribution center will enable the company to deliver key logistics and supply chain innovations and grow its market share.

Riverbend Meats Processing Plant

Big-D Construction



(Photo courtesy of Big-D Construction.) A leading U.S. purebred Angus cattle operation known for its ethical livestock management and protection of the environment, Riverbend Ranch brought in Big-D Construction to build its new meat processing plant in Idaho Falls, Idaho.

It's goal was to have new building reflect its values. After all, Riverbend Ranch focuses on all-natural, hormone-free beef cattle that have never been fed or treated with antibiotics. Its new facility needed to adhere to this sustainable philosophy.

Big-D Construction went to work using primarily precast concrete walls and insulated metal panels with a cast-in-place concrete basement. The facility includes a large fabrication area with state-of-the-art equipment, 28-degree box cooler, -10-degree freezer, multiple Hot Box chillers, a cold dock with eight dock-height doors, order fulfillment space, a two-story office, and various support spaces. In total, the facility offers seven temperature zones.

As a major contributor to the project's success, Big-D utilized 3D modeling and other tools in the early stages of design and construction.

Completed at the end of 2022, the Riverbend Ranch Meats plant is a modern processing facility with the capability to process animals from harvest to finished packaged product.

NewCold Indianapolis Automated Cold Storage Facility

Fisher Construction Group



(Photo courtesy of Fisher Construction Group.) NewCold, a Netherlands-based company that specializes in temperature-controlled warehousing and distribution, wanted to build the largest automated cold storage facility in Indiana. It brought in Fisher Construction Group for the job.

The 464,646-square-foot Indianapolis, Indiana, cold storage facility was designed for state-of-the-art technology, including automated storage and retrieval systems (ASRS) to automatically move and store products in the dark highbay warehouse.

The project was divided into three sections: the 250,000-square-foot highbay, dispatch area and layer pick area, and each presented its challenges.

One of the biggest challenges of the project was the thermal principles separating areas by zones.

With multiple elevations connecting separate portions of the building and environments, ranging from -19 degrees to chilled 40 degree environments to an exterior that can have a heat index well over 100 degrees, it took a lot to ensure everything was done perfectly.

Fisher's thermal team designers and onsite team conducted multiple thermal detail reviews prior to construction. They collected insight from various members of both companies to create a working value engineered solution that made sense to both parties.

While traditional cold storage environments are primarily run by forklifts, NewCold decreased the forklift traffic by utilizing a single landing point for products.

At 141 feet high, half the size of the mammoth Lucas Oil Stadium, home of the Indianapolis Colts football team, the completed facility offers more than 100,000 pallet positions, and its advanced cold chain solution ensures that processes are sustainable and traceable.



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Cold Summit Development Multi-tenant Cold Storage Facility



(Photo courtesy of FCL Builders.) Cold Summit Development enlisted FCL Builders to create Cold Summit Chicago I, a 212,375 square-foot, capable of -20 to 55 degrees Fahrenheit, multi-tenant cold storage facility on an 11.2-acre site, in Bedford Park, Illinois.

According to FCL Builders, it was one of the most flexible cold storage facilities ever conceived.

The project, which was completed in summer 2022, includes 7,000 square feet of fully convertible temperature-controlled office suites. The facility was designed to accommodate two tenants and includes four initial cooler/freezer spaces, with future planning for up to 10 separate cooler/freezer swing rooms, offering maximum flexibility. It also houses a battery charging room with scrubber dump, future battery charging points, electrical gear and three manual tap boxes, ensuring operational continuity during outages.

The development encompasses a multifaceted design tailored for cold storage needs, showcasing efficient space usage, strategic partnerships and advanced systems integration.

For instance, FCL Builders installed an innovative refrigeration system that contributed to 10 dock roof-mounted penthouses to regulate freezer temperatures, and two penthouses for dock cooling.

The entire facility is fortified with a Quell (k-17 head) fire protection system designed by Shambaugh & Sons, which includes a 200,000gallon bolted tank and a 2,500 GMP diesel fire pump in an on-site pump house for enhanced safety measures.

NewCold Fiorenzuola d'Arda Automated Facility

NewCold



(Photo courtesy of NewCold.)

As a global leader in temperature-controlled warehousing and advanced food logistics, NewCold set out to build its own \$70 million automated facility in Fiorenzuola d'Arda, near Piacenza, Italy.

The company partnered with Isopan to supply 409,000 square feet of insulated sandwich panels for the casing of the facility to ensure superior thermal efficiency. These panels increased the energy efficiency of the facility, exceeding 60% compared to corporate competitors.

The completed automated warehouse has a capacity of more than 72,000 pallets and a state-of-the-art automated logistics system designed for frozen goods. The facility consists of a 130-foot highbay, a dispatch center for receiving and deploying items and an area for picking.

The building boasts jointless concrete slabs with 1-mm differential deflection tolerance; multiple evaporators located on service platforms at high levels of the highbay facility; and a concrete structure with a suspended concrete pick-floor level.

The entirety of cold storage included in the dispatch area is kept at -25 degrees Celsius to guarantee the integrity of the cold chain. In addition, products are all stored in areas that are only accessible by automation, ensuring the top food safety standards.



With an industry-leading R-Value of 9.0 per inch in controlled environments, Kingspan Insulated Panels with QuadCore® Technology are the most thermally efficient panels on the market.



KS Shadowline



Maersk Cold Storage Distribution Site

Primus Builders Inc.



(Photo courtesy of Primus Builders.)

RL Cold is a real estate development company focused exclusively on cold storage distribution projects. When Maersk, one of its clients, was looking to expand in North American, RL Cold was brought in to help identify a site

that would best maximize its earning potential with easy access to rail, port and highway.

RL Cold had already started earthwork on a spec project in Baytown, Texas, and recommended the site for what would become Maersk's first cold storage distribution project

in the United States.

To make it happen, Primus Builders met with the two companies and set the plan in motion. Using Revit, Primus' building information modeling (BIM) software, the team got to work creating a design that met Maersk's goals for budget, quality, sustainability and safety while also serving the building's function - cold storage.

The 283,000-square-foot facility includes 30,000 pallet positions, 45 dock doors, 90-foot, temperature-controlled loading dock – the biggest in the industry – 58 drop trailer positions, state-of-the-art blast freezing technology and on-site USDA import/export inspection services.

The facility also has convenient access to both BNSF and Union Pacific rail lines, the Port of Houston and major highways.

Sierra Supply Chain Operating Facility Expansion



(Photo courtesy of Ti Cold)

Sierra Supply Chain Services was looking to expand its operating facility in Mississauga, Ontario, Canada. The company turned to Ti Cold to add 36,000 pallet positions and transform the warehouse from 86,000 square feet to 250,000 square feet, with 30,000 square feet designated for food processing.

The state-of-the-art addition completely transposed the 65-foot-tall temperature-controlled warehouse, despite a host of challenges Ti Cold faced along the way. Some of the hurdles included COVID distancing protocols, material shortages, union strikes and closed national borders. Yet, the project finished on time and without going over budget.

Among Ti Cold's innovative design ideas was combining very narrow aisles, extended ceiling heights and 2-deep, push-back RBI racking to maximize density, decrease footprint, and increase storage capacity to more than three times the pallets per square foot. That means that a standard 100,000-squarefoot footprint can go from 10,000 to 36,000 pallet positions.

In sustainability, the builders implemented energy-saving features such as modular QFM with dashboard optimization, an Evapco low charge ammonia system and ensured highyield heat recovery throughout the facility.

These efforts helped Sierra merit the largest seven-figure government rebate to date, a special operational permission resulting in lessened operational cost and the facility to conserve an approximate 13,000,000 kilowatthours per year, resulting in steep monetary savings. @



2023 Judges

The CEBA leadership would like to recognize the 2023 Built by the Best Award judges and thank them for their time and their excellent work.

- Bobby DeGregorio, VP Business Development – ESI Group USA
- Burnie Taylor, Chief Development & Solutions Officer - Arcadia Cold Storage & Logistics
- Jim Romine, VP, Engineering Design & Development – Lineage Logistics
- Steve Hansen, President Hansen Cold Storage Construction
- Zach Norris, Vice President of Food & Beverage - Evans General Contracting



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Strongest Shipping and Manufacturing Gains in Southwestern Metros



Notes: Airport cargo volumes based on preliminary 2022 estimates; employment, rail and truck freight comparing monthly totals as of May of each year; sea freight comparing quarterly totals for 1Q of each year. Sources: Marcus & Millichap Research Services: Department of Transportation; Federal Aviation Administration: Bureau of Transportation Statistics; Bureau of Labor Statistics; U.S. Census Bureau

Competition for industrial space is strongest across CRE spectrum. At 4.0 percent, the vacancy rate in the U.S. industrial sector was at least 30 basis points below every other major commercial real estate segment in March. The pandemic's jolt to online consumer spending, as well as the shipping backlogs that occurred thereafter, structurally altered many businesses' risk management planning and led them to buttress industrial footprints. A

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The World's Best Cold Chain Logistics Training Program

his year marks the 59th anniversary of the first World Food Logistics Organization's (WFLO) Institute held in Norman, Oklahoma – the home of The University of Oklahoma. The three-year, industry-specific training program put on by WFLO, the foundation arm of the Global Cold Chain Alliance (GCCA), is for professionals engaged in temperature-controlled logistics, and offers more than 40 classes taught by leading experts in the industry. The curriculum takes students through cold chain management, customer service, employee safety, food safety, warehouse operations, transportation operations and professional development.

By 2009, the Institute had outgrown Norman and moved to a new home at the Georgia Tech Hotel & Conference Center in Atlanta, Georgia. This new facility allowed for more students to participate in the Institute and offered a connection to Georgia Tech's renowned Logistics and Supply Chain Program. Over the years, it has provided opportunities for Georgia Tech students to participate in the Institute as way to generate broader interest in a career in the cold chain.

In 2014, due to strong interest from members in the region, the first Latin America Institute was held in Costa Rica. The Institute Latin America is now held each year in Mexico City, and while the 2020 Year 1 and Year 2 programs had to be postponed to 2021, WFLO was able to run the Year 3 program virtually and graduate 12 individuals from the program.

Over the years the growth of the program in the United States continued and by 2017,

the Institute had grown so much that the foundation Board made the decision to hold two Institutes in the United States to allow for a valuable onsite experience while allowing for more participation. Thus was born the East and West Institutes. The Institute East is continuing at Georgia Tech and the West Coast Institute is held at the Tempe Mission Palms Hotel and Conference Center adjacent to the campus of Arizona State University where the top ranked W. P. Carey School of Business in located. The East and West Institutes now host well over 500 students each year.

In 2019, the first Australian Institute was held in Melbourne, with more than 35 students participating in Year 1 courses. The Institute returned in May 2023 and held courses for both Year 1 and Year 2 students. It will return in May 2024 to host all three years with the first ever Institute Australia graduates.

In 2023, the foundation changed its name from WFLO to the Global Cold Chain Foundation (GCCF) and the name of the Institute program changed from WFLO Institutes to GCCF Cold Chain Institutes. GCCF is expanding the classroom experience by launching two new Institutes in 2024, one in Sao Paulo, Brazil in August 2024 and one in

Amsterdam, Netherlands in September 2024. It is fast becoming the world's best cold chain logistics training program to develop your company's most important asset - talent.

GCCF Cold Chain Institutes East and West

When the challenges are steep and the competition fierce, Robyn Benincasa, this year's Institute East and West Keynote Speaker, provides individuals and organizations the tools they need to inspire themselves and one another to their greatest heights and to cross their most challenging finish lines.

For the last 20 years, she and her teammates have been competing at the front of the pack in the most unique and compelling classrooms on earth: the jungles of Borneo, the Himalayan peaks of Tibet, the rivers of Fiji, the rainforests of Ecuador and the deserts of Namibia, studying the good, the bad, and the not-so-pretty of extreme teamwork. It is through these harrowing, life affirming and often hilarious experiences in the world's most grueling challenges that she has emerged with her truly unique perspective on what it takes to build the kind of world class teams that succeed against all odds, triumph in the face of adversity and win as one in times of great challenge and change. Robyn accepts full blame for inspiring people to do insane things like climb Mount Kilimanjaro, run their first triathlon, start their own adventure racing teams, hike across the Grand Canyon with a group of Survivors, or start their own businesses. This is, after all, who she is and what she does: Robyn Benincasa inspires people to grab life with one hand, grab their teammates with the other, and to create that special magic that makes all of us better TOGETHER than we ever would have been alone!

Robyn has made an art form of extreme performance by competing and winning at the highest levels of sport and business; her keynotes are powerful, impactful, and packed with practical, real-world takeaways that inspire peak performance and exceptional leadership. As a plus-20 year veteran San Diego firefighter, a World Champion Adventure Racer, a 2014 CNN Hero, a Guinness World Record Endurance Kayaker, a best-selling author, and founder of The Project Athena Foundation, Robyn Benincasa definitely knows a thing or two about creating human synergy, or as Robyn puts it, "That magic that allows groups of ordinary people to accomplish extraordinary things together."



Robyn's multi-faceted experience inspires people to grab life with one hand, grab their teammates with the other, and to achieve audacious goals that they could never accomplish alone. She is the expert that companies call on to build world class teams, inspire peak performance and create a culture of champions.

Year 1 Courses

- Ammonia Safety
- Business Communications
- Carrier Relationships
- Conflict Resolution
- Customer Service Essentials
- Emergency Response Planning
- Finance 101
- Food Safety: HACCP, STF, GFSI
- Forklift Safety
- Fundamentals of Food Storage & Preservation
- Job Safety Analysis
- Leadership Development
- Risk Management: Warehouse Exposures
- Supply Chain Basics
- Transportation & Warehousing
- **Transportation Basics**
- Warehouse Operations Essentials

Year 2 Courses

- Behavioral Interviewing
- **Budgeting and Financial Controls**
- Customer Recall Simulation
- "Cyber Security (Technology and Information Systems)"
- Dataflow and Freight Documentation

GCCF Cold Chain Institute East Atlanta, Georgia United States February 4-6, 2024

GCCF Cold Chain Institute West Tempe, Arizona, United States February 27-29, 2024

GCCF Cold Chain Institute Australia Melbourne, Australia May 21-23, 2024

GCCF Cold Chain Institute Latin America Mexico City, Mexico July 15-17, 2024

GCCF Cold Chain Institute Brazil Sao Paulo, Brazil August 13-15, 2024

GCCF Cold Chain Institute Europe Amsterdam, Netherlands September 2-4, 2024

- Effective Presentations
- Employee Training for Safety
- · Feedback and Coaching
- "Food Safety in the Modern Warehouse (FSMA and Sanitation Auditing)"
- International Business and the Cold
- Intro to Warehouse Law
- Managing and Motivating Human Performance
- Refrigeration & Energy
- Sanitary Transportation of Food

Year 3 Courses

- Analyzing Refrigeration Systems
- Best Practices in Food Tempering, Chilling and Freezing
- Business Development
- Business Planning & Financial Decision
- · Case Studies in Warehouse Law
- Change Management
- Crisis Management
- Employment Best Practices and Liabilities
- Managing Labor Relations
- Preparing for OSHA Inspections
- Regulations and Your Job
- Trends in Technology in Warehouse Management
- Warehouse/Transportation Security @

COLD CHAIN DEVELOPMENT

NEWS ABOUT GCCF INTERNATIONAL PROJECTS

This column features news about key projects of the Global Cold Chain Foundation (GCCF) and its work with members, aid organizations and international development partners to help emerging economies and lowerincome countries meet the challenges that arise when growing a safe and efficient global cold chain.

ACTIVE PROJECTS

ACES Kenya and Rwanda, 2023

Partnered with Postharvest Education Foundation

In collaboration with the Postharvest Education Foundation (PEF), the Global Cold Chain Foundation (GCCF) has implemented Train the Trainer programs for postharvest management in Kenya and Rwanda. These trainings are some of the first for the "Africa Centre of Excellence for Sustainable Cooling and Cold Chain" (ACES) project in the region. Future activities include site visits to current cold chain operations.

Agricultural Trade and Climate Smart Innovations (ATraCSI) Project, 2023 - 2027

Partnered with IESC

This project is centered on improving the horticultural value chains of El Salvador, Guatemala and Honduras. In November, GCCF implemented a cold chain study tour to Miami, Florida, with a delegation comprised of public and private cold chain stakeholders from each country. Beginning in the first half of 2024, GCCF will conduct a two-year regional assessment of the existing cold chain infrastructure and market with GCCA member LixCap.

Bangladesh Trade Facilitation (BTF) Project, 2020 - 2025

Partnered with Venture37 and LixCap GCCF is completing a cold chain feasibility study in the country at the request of a regional player that is interested in investing in the cold chain in Bangladesh. In September, GCCF implemented a study tour to India for another Bangladeshi company interested in learning more about 3PL models. GCCF Technical Experts Harshal Surange and Manuel Cabrera-Kabana continue to provide refrigerated warehouse design recommendations to



Students at the Train the Trainer program in Kenya are learning best practices in postharvest management from PEF instructors.

several operators in the country.

Dominican Republic TraSa Project, 2021 - 2025

Partnered with International Executive Service Corps (IESC)

GCCF continues to host webinars on new technologies and systems for traceability, energy management and precooling that may be of interest to Dominican cold chain operators. GCCF is also making significant updates to an existing Perishable Manual, first developed by the government of the Dominican Republic. Future training may include sessions on egg handling and storage.

Southeast Asia Emerging Markets Program, 2019 - 2023

GCCF has developed a series of training and networking opportunities for cold chain players in Cambodia, Thailand and Vietnam. Training includes refrigeration and energy efficiency, food safety and handling, warehouse operations and new technologies in the cold chain. This hybrid in-person and virtual training will be delivered in November/ December 2023 by GCCF technical experts

and will also include onsite cold chain consultations for interested companies.

Egypt Rural Agribusiness Strengthening (ERAS) Project, 2019 - 2024

Partnered with Abt Associates Inc. Dr. Elhadi Yahia of the GCCF Scientific Advisory Council traveled to Egypt in September to provide training and technical assistance on best practices for postharvest handling for pomegranates. This should be the final GCCF activity of the ERAS project.

Ongoing Industry Support to Reduce Food Loss and Waste

GCCF member the Farmlink Project presented at the GCCA Annual Convention in Scottsdale, Arizona, United States, as a potential solution for members with food for donation. After this presentation, 25 GCCA members from Australia, Brazil, Canada, Peru and the United States volunteered at St. Mary's Food Bank in Phoenix, Arizona. Membership for foodbanks and other rescue organizations has increased to 43, and GCCF is working with Feeding America and the Global Foodbanking Network on training and webinars on cold chain logistics.

COMPLETED PROJECTS

Cambodia Market Systems Program, 2022 – 2023

Partnered with LixCap and Khmer Cold Chain Company (KCCC)

Since 2019, GCCF has supported a market and feasibility study, provided design and construction advisory services, and aided start-up operations for the Khmer Cold Chain Company facility at the LM17 port on the Mekong River in Phnom Penh, Cambodia. With the conclusion of this project, GCCF is proud that technical experts from GCCA and CEBA have greatly contributed to the success of the new facility, which began receiving product in November 2023.



Twenty-five GCCA members from Australia, Brazil, Canada, Peru and the United States volunteered at St. Mary's Food Bank in Phoenix, Arizona, during the GCCA Convention.

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COLD CHAIN FEDERATION CORNER

NEWS FROM THE UNITED KINGDOM

In April 2022, the GCCA and the United Kingdom's Cold Chain Federation announced a partnership agreement signalling a renewed commitment to building knowledge, networking opportunities and insights across borders.

Here, Cold Chain Federation Outgoing Chief Executive Shane Brennan continues his series for COLD FACTS exploring hot topics for our industry in the United Kingdom and beyond.



Cold Chain Live! 2023

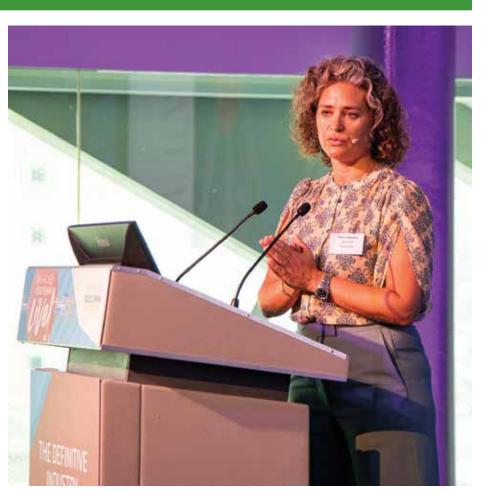
In September, the great and the good of the United Kingdom's cold chain industry gathered in Liverpool for the Cold Chain Live! 2023 conference. It proved to be a tremendous, informative and constructive event.

This is the second time we have held Cold Chain Live! in person. With nearly 500 cold chain professionals joining us for two days of the highest quality discussion and insight, the conference has fast become the definitive event in the U.K. cold chain calendar and the pinnacle of the Cold Chain Federation's busy annual events program.

The theme of Cold Chain Live! 2023 was "resilience and opportunity." Speakers, panelists and delegates examined these concepts with expert knowledge and years of experience alongside new perspectives. We delved into the relationship between resilience and opportunity in temperature-controlled storage and distribution. We also heard from major cold chain customers and from leading food supply chain academics about how their work on resilience will impact the U.K. cold chain's day-to-day operations.

The journey towards a net zero cold chain, including energy efficiency in cold storage facilities and the transition towards emissionfree Transport Refrigeration Units, is at the core of both resilience and opportunity. It featured strongly in discussion and debate at Cold Chain Live! 2023, in terms of both big picture sustainability strategy and the technical detail of delivery in practice.

Delegates were also eager to discuss the key part that recruitment, retention and training of the next generation of cold chain people will play in the future resilience of our industry, and in our ability to grasp the opportunities of the coming years and beyond.



Convention speaker Sofie Lindegaard, Head of Group Sustainability with DFDS. (Photo courtesy of the Cold Chain Federation.)

We are particularly grateful for the conference speakers who brought perspectives on cold chain resilience and opportunity from around the globe, including Trane Technologies' Scott Tew, DFDS' Sofie Lindegaard, ThermoKing's Wouter Roels, La Chaine Logistique du Froid's Valerie Laserre, International Road Transport Union's Raluca Marian, Italian Road Freight Transport and Logistics

Association's Andrea Arquilla and GCCA's Adam Thocher.

The challenges and opportunities we face in the United Kingdom are shared by many of our cold chain colleagues around the world. Cold Chain Live! 2023 not only gave us the benefit of our international peers' experience but also cemented important relationships.

Personally, I came away from the event with full appreciation of the challenges ahead for the cold chain. But I also came away with awe at the innovation, ingenuity and dedication of the cold chain professionals here in the United Kingdom and across the globe. They are not only facing these challenges head on but discovering together how to turn them into new opportunities.

Conferences such as this provide real benefits for operators in coming together to discuss our industry's priorities and to forge new relationships. The Cold Chain Federation team is proud of our role in helping our industry journey into the future with increased knowledge share, regular discussion and stronger collaboration. And planning is well underway for Cold Chain Live! to return in 2024. **②**



Panel session at Cold Chain Live! 2023. (Photo courtesy of Cold Chain Federation.)





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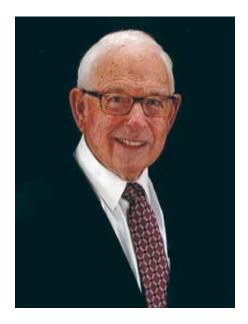
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COOL SOLUTIONS: ABSTRACT

SCIENTIFIC ANSWERS TO COLD CHAIN CHALLENGES



Dr. Charles White, GCCF Scientific Advisory Council.

Dr. Charles White is retiring from GCCF's Scientific Advisory Council after 37 years of service. We are forever grateful for the knowledge and dedication that he has brought to the Scientific Advisory Council and his commitment to furthering food safety knowledge.

Dr. White received both his Bachelor of Science in Dairy Technology and Master of Science in Dairy Microbiology from Mississippi State University, before attending the University of Missouri for his PhD in Food Microbiology. Dr. White has experience working in the food industry (Dean Foods and ADM), in academia as a professor (teaching and research) and as department head at Mississippi State University in the Department of Food Science, Nutrition and Health Promotion.

He worked primarily with dairy products in the area of quality assurance, microbiology, shelf-life extension, and especially with sensory evaluation. As one of the leading dairy scientists, many of his publications have been referred to in a variety of articles, scientific and industry journals, and book chapters.

Dr. White was President of the American Dairy Science Association in 1998, and was active in other key associations, such as the

Institute of Food Technology (IFT). After retiring from Mississippi State University, he remained active in the dairy industry as an Adjunct Professor in the Food Science Department at the University of Tennessee in Knoxville, where his grandkids and great grandkids attend.

During the last two National Dairy Products Judging Championships, his teams won in 2017 and 2019. Over the years, a total of 12 National Championships have been won by his students and 15 of his students have won the First Place Individual trophy. The ability to detect off-flavors in dairy products and how to correct problems proved valuable for job-seeking students.

His entire family has been very supportive of his career activities, including his wife Bonnie Jean, his daughter Amy, and his grandson Rand. Amy was a key member of the 1987 National Dairy Products Judging Championship Team and Rand was similarly a key member of the 2017 Championship Team, continuing the family involvement in the dairy industry.

Thank you, Dr. White, for your years of continued support and service. We wish you the best!





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The Global Cold Chain Foundation (GCCF) Scientific Advisory Council is an eminent group of food scientists, logistics, and packaging experts from around the world. The council provides cutting-edge research and advice to members of the Global Cold Chain Alliance and its Core Sectors.



Dr. Michael Jahncke Virginia Tech University. Fish Products Expert SAC CHAIRMAN



Dr. Brian Fugate University of Arkansas, Supply Chain Management Expert



Dr. Jeffrey Brecht University of Florida, Cool-Climate Fruit & Produce Expert



Dr. Cody Gifford University of Wyoming, Meat Products Expert



Dr. Patrick Brecht PEB Commodities, Refrigerated Transportation Expert



Dr. Dennis Heldman The Ohio State University, Food **Process Engineering Expert**



Dr. Paul Dawson Clemson University, Poultry **Products Expert**



Dr. Faris Karim Kansas State University, Ammonia Contamination & Food **Toxicology Expert**



Dr. Donald Fenton Kansas State University, Refrigeration Engineering Expert



Dr. Barbara Rasco, BSE, Ph.D., JD University of Wyoming, Food Safety & Food Safety Regulations Expert



Dr. S. Paul Singh Michigan State University, Packaging & Labeling Expert



Dr. Kees Jan Roodbergen University of Groningen, Logistics & Operations Management Expert



Dr. Donald Schaffner Rutgers, The State University of New Jersey, Microbiology Expert



Dr. Victoria Salin Texas A&M University, Agriculture **Economics Expert**



Dr. Charles White Mississippi State University, Dairy Products Expert



Dr. Subramaniam Sathivel Louisiana State University, Frozen Food Quality Expert



Dr. Elhadi Yahia Universidad Autónoma de Querétaro, Mexico, Postharvest Technology, Tropical Fruit & Produce

Have a burning cold chain question? Submit an inquiry to the Scientific Advisory Council at www.gcca.org/inquiry

COOL SOLUTIONS

SCIENTIFIC ANSWERS TO COLD CHAIN CHALLENGES

experts on the GCCF Scientific Advisory Council (SAC), the roster of SAC members and abstracts on cool solutions written

We have a customer interested in storing pineapple pulp in our facility, which also handles seafood. Can I store pineapple pulp concentrate together with seafood in our frozen warehouse? We handle a temperature of -18° C. Our customer wants a guarantee that there will be no cross-contamination.

Simply put, yes, they can be stored in the same frozen warehouse room. However, they must be appropriately packaged to prevent cross-contamination, including odor transfer or allergen contamination. The primary packaging should be tested in accordance with ASTM testing methods or

have been approved by FDA or similar certifying body in the country. This way, it will not produce leaks or lead to loss of product.

Maintain all temperature records and ensure that secondary packaging of each product stays on its own pallet. These products should also be stored on separate racks with space between the racks.

For movement within your facility, the same forklift truck can be used, but if mishandling occurs such as penetration of forks in shipping and handling into primary packaging, that product and forklift should be inspected and cleaned. Only containers that have not been compromised can be placed back into pallet slots. To be on the safe side,

you should consider using separate forklifts for the seafood and pineapple pulp pallets.

If these conditions are met, then no crosscontamination should occur.

Answer provided by Dr. Michael Jahncke, Chairman of the Scientific Advisory Council, Fish Products Expert, Virginia Tech University; and Dr. S. Paul Singh, Packaging and Labeling Expert, Michigan State University.

Submit your burning cold chain questions to the Scientific Advisory Council at www.gcca.org/inquiry or at inquiry@gcca.org









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 - eco-Air™ Air-Cooled Condensers and Gas Coolers
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2024 GCCA, GCCF and CEBA **Global Events Calendar**

FEBRUARY

59[™] GCCF COLD CHAIN INSTITUTE EAST

4-6 FEBRUARY 2024

Atlanta, Georgia, United States | Georgia Tech Hotel & Conference Center

This event, designed for employees with clear management potential and executives new to the industry, features more than 40 classes in warehouse management and transportation management taught by leading experts in the industry.

Audience: Warehouse managers, operations managers, warehouse supervisors, shift leads, customer service managers, transportation managers, workers with high potential for management, and executives new to the industry.

59TH GCCF COLD CHAIN INSTITUTE WEST

27-29 FEBRUARY 2024

Tempe, Arizona, United States | Tempe Mission Palms Hotel at Arizona State University

This event, designed for employees with clear management potential and executives new to the industry, features more than 40 classes in warehouse management and transportation management taught by leading experts in the industry.

Audience: Warehouse managers, operations managers, warehouse supervisors, shift leads, customer service managers, transportation managers, workers with high potential for management, and executives new to the industry.



27TH GCCA EUROPEAN COLD CHAIN CONFERENCE & EXPO

10-12 APRIL 2024

Brussels, Belgium | Brussels Marriott Hotel Grand Place

Here, delegates gain a better understanding of market trends, industry challenges, business solutions, and technological innovations. The conference also provides ample networking opportunities, enabling attendees to meet and connect with professionals from throughout Europe and around the world.

Audience: Executives and managers from temperature-controlled, third-party logistics companies.



MAY

GCCF COLD CHAIN INSTITUTE AUSTRALIA

21-23 MAY 2024

Melbourne, Australia | Sheraton Melbourne Hotel

This event, designed for employees with clear management potential and executives new to the industry, features more than 40 classes in warehouse management and transportation management taught by leading experts in the industry.

Audience: Warehouse managers, operations managers, warehouse supervisors, shift leads, customer service managers, transportation managers, workers with high potential for management, and executives new to the industry.



JUNE

GCCA BRAZILIAN COLD CHAIN CONGRESS

20-21 JUNE 2024

Sao Paulo, Brazil | TBD

This educational event focuses exclusively on the temperature-controlled logistics industry and features opportunities and solutions for business development.

Audience: High-level executives in temperature-controlled warehousing or logistics.



GCCA COLD CHAIN POLICY FORUM

TBD JUNE 2024

Washington, DC, United States | TBD

The GCCA Global Policy Forum offers education and interaction with government and agency officials in regards to the rules and regulations that impact the cold chain.

Audience: Executives with compliance and regulatory responsibility, members of safety and government affairs committees.



JULY

GCCF COLD CHAIN INSTITUTE LATIN AMERICA

15-17 JULY 2024

Mexico City, Mexico | Hilton Mexico City Reforma

This event, designed for employees with clear management potential and executives new to the industry, features extensive classes in warehouse management and transportation management taught by leading experts in the industry.

Audience: Warehouse managers, operations managers, warehouse supervisors, shift leads, customer service managers, transportation managers, workers with high potential for management, and executives new to the industry.



AUGUST

GCCF COLD CHAIN INSTITUTE BRAZIL

TBD AUGUST 2024 Sao Paulo, Brazil | TBD

This event, designed for employees with clear management potential and executives new to the industry, features extensive classes in warehouse management and transportation management taught by leading experts in the industry.

Audience: Warehouse managers, operations managers, warehouse supervisors, shift leads, customer service managers, transportation managers, workers with high potential for management, and executives new to the industry.



GCCA SOUTH AFRICAN COLD CHAIN CONFERENCE

TBD AUGUST 2024

Cape Town, South Africa

This event is South Africa's one and only venue bringing together cold store operators, controlled-environment builders, equipment suppliers and service providers to discuss opportunities and innovations of this essential sector.

Audience: Executives and managers from temperature-controlled, third-party logistics companies.

SEPTEMBER GCCF COLD CHAIN INSTITUTE EUROPE

2-4 SEPTEMBER 2024

Amsterdam, The Netherlands | TBD

This event, designed for employees with clear management potential and executives new to the industry, features extensive classes in warehouse management and transportation management taught by leading experts in the industry.

Audience: Warehouse managers, operations managers, warehouse supervisors, shift leads, customer service managers, transportation managers, workers with high potential for management, and executives new to the industry.



133RD GCCA CONVENTION

23-26 SEPTEMBER 2024

Bonita Springs, Florida, United States | Hyatt Regency Coconut Point

This annual gathering for GCCA and GCCF features education, networking and business development opportunities for third-party logistics companies and warehouse operators.

Owners, CEOs, presidents, executive leadership teams.



NOVEMBER

GCCA LATIN AMERICAN COLD CHAIN CONGRESS

7-8 NOVEMBER 2024

Panama City, Panama | TBD

This meeting enables GCCA members and leaders in the temperature controlled industry to interact, learn about industry trends and expand their knowledge. The Congress also serves as a discussion forum for issues of interest to multi-regional cold chain industry leaders.

Audience: Senior executives in temperature-controlled warehousing or logistics.



44TH CEBA CONFERENCE & EXPO

11-14 NOVEMBER 2024

Ponte Vedra Beach, Florida, United States | Sawgrass Marriott Golf Resort & Spa

This annual meeting of CEBA members offers education, business development opportunities and networking for company executives managing the building of new cold storage facilities and cold storage builders.

Audience: Chief engineers, regional facility managers, regional facility maintenance leads, construction engineer managers, owners/CEOs who are building or expanding facilities.





ADVOCACY | INDUSTRY PROMOTION | RESEARCH | INTERNATIONAL



GCCA STANDS WITH YOU. THE TIME TO ACT IS NOW.

Never before has our industry faced such uncertainty and vulnerability from America's policy makers, both in the White House and in both chambers of Congress. The Administration and Congress represent challenges and opportunities that we will need to face as an industry, together.

The Administration and Congress are considering a wide range of policies that could impact the cold chain in 2023. Key issues:



FARM BILL

- Congress is working to reauthorize the Farm Bill in 2023.
- GCCA will be actively engaging with Congress to advance cold chain industry initiatives and priorities.



CLIMATE CHANGE

- Pursuing aggressive policies to address climate change, through both executive action and legislation
- Implementation of the AIM Act to phase down HFCs



TAXES

- Increasing the corporate tax rate, phasing out deductions for pass-through entities
- Raising the top marginal income-tax rate



LABOF

- Strengthening worker organizing, collective bargaining and unions through executive action and legislation such as the PRO Act
- NLRB advancing labor initiatives, like 'micro-unit' organizations and joint employer policies



BURDENSOME REGULATIONS

- Revising EPA's Risk Management Program (RMP) regulation and making additional requirements
- Changes to OSHA's Process Safety Management regulation
- Implementation of FDA's Food Traceability Rule

THERE IS SOMETHING YOU CAN DO.

To learn more about how you can contribute contact Lowell Randel (Irandel@gcca.org) or visit advocacy.gcca.org.

Visit ADVOCACY.GCCA.ORG for more information.



MEMBER NEWS

NEWS FROM MEMBERS OF GCCA CORE PARTNERS

AMERICOLD announced the appointment of Bryan Verbarendse as Chief Operating Officer for North America. He brings more than 31 years of experience to the company. Prior to joining Americold he served as Senior Vice President of Distribution and Replenishment for Albertson's.

PLM Fleet LLC dba PLM Trailer Leasing, the nation's largest technology-driven refrigerated trailer fleet management company, has relocated its Boston branch. Now based in Milford, Massachusetts, the new site is a more convenient location for customers.



(Photo courtesy of PLM Fleet.)



MEMBER NEWS

NEWS FROM MEMBERS OF GCCA CORE PARTNERS

LINEAGE LOGISTICS bought eight cold storage warehouses from Burris Logistics. Integrating the eight facilities into Lineage's network will add nearly 1.3 million square feet of capacity and around 115,000 pallet positions. Lineage said the facilities it bought are located near major highways and transportation hubs, and will serve densely populated markets to help the company's direct-to-consumer fulfillment operation.

LINEAGE LOGISTICS opened a new facility in Windsor, Colorado, in October. Built for JBS USA, a global food company, Lineage developed the facility to support the distribution of products to JBS customers. The new warehouse is designed to help lower energy consumption and reduce food waste by storing product in a denser, more energy efficient cube and automating decision-making to optimize loading, unloading and storage tasks. The automated cold-storage is outfitted with proprietary warehouse management systems, computer vision systems, algorithms, visibility platforms and machine learning capabilities that will further optimize its supply chain.

RAYMOND and its solutions and support centers continued their pledge to giving back by supporting local communities throughout North America in 2023. Raymond contributes to nonprofit and educational organizations with monetary contributions, forklift donations and voluntary participation spanning from building bicycles to building out warehouse centers for food pantries.





(Photo courtesy of Raymond.)

PRIMUS announced Tom Coyne is the new president of Primus Solutions Group, the company's in-house automation division. Coyne joins Primus most recently from viastore, which had year-over-year revenue growth of up to 40% under his leadership as president.







ARE YOU PLANNING TO BUILD OR MAKE CAPITAL INVESTMENTS OR UPGRADES IN YOUR FACILITIES?

- Do you plan to build a new facility or renovate an existing one?
- Do you plan on making any capital investments in refrigeration, material handling, doors or other equipment related to a construction
- Do you plan on fixing any floor, walls, roofs, update your docks or make improvements to anything else inside the building?

If you answered yes, you wont want to miss the Controlled-Environment Building conference & Expo occurring November 11-14, 2024, Ponte Vedra Beach, Florida, United States | Sawgrass Marriott Golf Resort & Spa

FACILITY OWNERS AND EXECUTIVES ANNUALLY SEND THE FOLLOWING EMPLOYEES TO LEARN AND CONNECT WITH THE WORLDS TOP PROVIDERS:

- **Chief Engineers**
- Facility Engineers & Maintenance
- Heads of construction or individual that oversees/liaise with general contractors, refrigeration contractors
- Anyone involved in the procurement or planning for capital investments equipment related to construction projects to the annual conference

BENEFITS OF ATTENDING



CEBA Construction Café is to create an exchange of ideas and stimulate facilitated discussion on critical industry issues. Participants choose from 10 different topics, join the table at which the issue is being discussed, and spend 20 minutes sharing ideas. Participants then switch tables to discuss another topic.



Engage with leading solutions provider in the expo. Over 50 providers of doors, floors, racking, roofing, thermal envelope, refrigeration equipment & contractors, fire protection, automation & material handling





REGISTER ONLINE AT GCCA.ORG/EVENTS

NEW MEMBERS

NEW MEMBER COMPANIES OF GCCA CORE PARTNERS

GCCA WAREHOUSE MEMBERS

Brimich Cold Storage

Brantford, Ontario, Canada

Muscogee (Creek) Nation

Okmulgee, Oklahoma, United States

Novem Pharmaceutical Ltd

Kelowna, British Columbia, Canada

Pilgrim's

Greeley, Colorado, United States

Red Creek Cold Storage, LLC

Webster, New York, United States

GCCA TRANSPORTATION MEMBERS

Coastal Carriers LLC

Troy, Missouri, United States

Mass Logistics LLC

Atlanta, Georgia, United States

Seven Elk Shipping Inc

Oliver, British Columbia, Canada

GCCA ASSOCIATE MEMBERS

Advansor

Santiago de Querétaro, Mexico

Aislopuertas

Agua Fría, Mexico

AR Racking S.A.U.

Zamudio, Chile

Ayga Tecnologia S.A

São Leopoldo, Rio Grande do Sul, Brazil

Danfoss A/S

Singapore, Singapore

Distribution X LLC

Flowery Branch, Georgia, United States

Encore Roofing

Buford, Georgia, United States

Engineered Products

Greenville, South Carolina, United States

Log Smart Tecnologia E Sistemas Ltda

São José dos Campos, São Paulo, Brazil

META Storage Solutions Inc

North Miami, Florida, United States

Peak Construction Corporation

Rosemont, Illinois, United States

PowerShingle

Oakland, California, United States





NEW MEMBERS

NEW MEMBER COMPANIES OF GCCA CORE PARTNERS

Proton Controls LLC

Syracuse, Utah, United States

Providence Engineering

Lancaster, Pennsylvania, United States

Scale Microgrids

Ridgewood, New York, United States

Steel Worx Solutions LLC

Groveland, Florida, United States

System Logistics Corporation

Arden, North Carolina, United States

United Material Handling

Moreno Valley, California United States

Zudek srl

Muggia, Italy

GLOBAL COLD CHAIN FOUNDATION MEMBERS

Banco Internacional de Alimentos

Ciudad Acuña, Coahuila, Mexico

Move For Hunger

Neptune, New Jersey, United States

CEBA MEMBERS

Belmont Concrete Finishing Co. Limited

Concord, Ontario, Canada

D&B Thermal Company Inc.

Malvern, Pennsylvania, United States

Danfoss A/S

Singapore, Singapore

Delta Refrigeration

Anaheim, California, United States

Encore Roofing

Buford, Georgia, United States

Gryphon Engineering

Elgin, Western Cape, South Africa

Iceberg Mechanical

Moseley, Virginia, United States

IHG Mechanical Holdings LLC

Fort Worth, Texas, United States

Lost Creek Construction, Inc

Hahira, Georgia, United States

McShane Construction Company

Rosemont, Illinois, United States

Moy Industrial Electric Inc

Downey, California, United States

Peak Construction Corporation

Rosemont, Illinois, United States

Preston Refrigeration

Kansas City, Missouri, United States

Providence Engineering

Lancaster, Pennsylvania, United States

Refrigerated Structures of

New England

Lakeville, Massachusetts, United States

Scale Microgrids

Ridgewood, New York, United States

Single Ply Systems Inc

Bloomington, Minnesota, United States

Startec Refrigeration Services, Ltd.

Calgary, Alberta, Canada

Steel Worx Solutions LLC

Groveland, Florida, United States

United Material Handling

Moreno Valley, California, United States **②**



ASSOCIATION NEWS

NEWS ABOUT GCCA CORE PARTNERS

GCCA Warehouse, GCCF and CEBA would like to thank the following individuals whose Board terms are expiring at the end of 2023. Please join the associations in recognizing and thanking these individuals for their thought leadership, strategic vision, time and commitment to helping advance the associations as well as the cold chain industry.

GCCA Warehouse - Tim Siddiq, Vertical Cold Storage

GCCF - Sam Charleston, Americold Logistics; Mike Pokel, Midwest Refrigerated Services; Kirk Robertson, Terra Vista Capital,

CEBA - Eric Brown, ALTA Refrigeration; Steve Mauro (formerly of Kingspan); Gary O'Donnell (formerly of United Insulated Systems); Charles Woolley, Controlled Environment Systems

in Indiana and one of the largest in the United States. At 141 feet high (43 meters), the facility spans an impressive 464,000 square feet and holds more than 100,000 pallet positions. The cold storage facility uses state-of-theart technology including automated storage and retrieval systems to automatically move and store products in the "dark" high-bay warehouse. This remarkable achievement has positioned the facility as an industry standout, demonstrating Fisher Construction Group's commitment to excellence and innovation.

Fisher Construction Group received the

\$35MM Category. The award-winning project

automated cold store facility that is the biggest

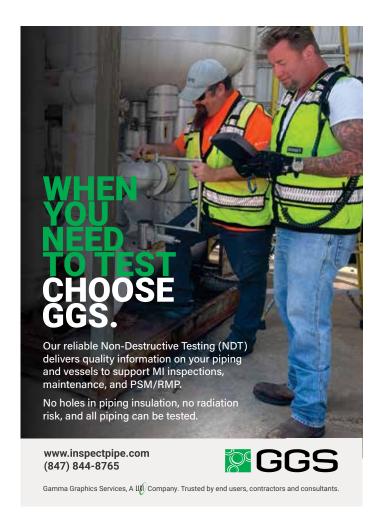
CEBA Built by the Best Award in the Over

with NewCold is an advanced, large-scale

Ti Cold, which was a finalist in both categories this year, received the CEBA Built by the Best Award in the Under \$35 MM Category. The award-winning project was built for CORE X COMPLETE in Sturbridge, Massachusetts. This best-in-class, high-density facility encompasses 83,000 square feet that houses 18,000 pallet positions. In addition, the company has successfully adopted mobile racking technology, utilized a transcritical CO2 refrigeration system and other energy efficient and sustainable technologies, such as powerful heat reclaim, optimized overhead lighting, energy-conserving LOE, office window tint, and more.

GCCA announced it will host its 27th European Cold Chain Conference in Brussels, Belgium, from 10-12 April 2024 at the Marriott Brussels Grand Place Hotel. GCCA's European Cold Chain Conference is the one and only forum where the multiple segments of the cold chain get together at one time: nearly 200 cold chain professionals from warehousing, transportation, construction, technology and equipment companies from across Europe and other regions are expected to attend. Conference details including registration information are now available on the GCCA website.

CEBA proudly recognized Fisher Construction Group for its NewCold Project in Lebanon, Indiana, United States and Ti Cold for its CORE X COMPLETE Project in Sturbridge, Massachusetts, United States as the recipients of the 2023 CEBA Built by the Best Award. The announcement took place during the closing General Session of the 43rd CEBA Annual Conference and Expo held in Palm Springs, California in November. The CEBA Conference attracted a record 430 plus controlled environment building professionals to the event.



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