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IS PLEASED TO

## ANNOUNCE & INTRODUCE

the addition of 30 year industry representative, Scott Melton of KMK Sales, to help expand Vapor Armour, Evapcold and DOW's growing market presence as building envelope experts, joining Vapor Armour to eliminate vapor drive in every thermal-controlled facility.

Scott Milton at KMK Sales is headquartered in Omaha, Nebraska with offices in Mount Calgry, WI, Palatine, IL and Hartford, WI will be representing Vapor Armour, Inc. in the Middle-United States (Illinois, Minnesota, Michigan, Nebraska, Wisconsin, Iowa, Kansas and Missouri). "As a trusted source of information for owners, architects, engineers, design build & specialty contractors, my goal is to focus on high performance building envelope products that are sustainable, innovative & cost effective and that add value. Vapor Armour™ is exactly the type of application the cold storage industry has needed for 25 years." — Scott Milton



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# LEADOFF

MESSAGES FROM GCCA LEADERS

## Even the Incas needed cold storage!

**A**T THE CONCLUSION OF the GCCA Latin American Congress in Peru this past November, WFLO Chairman Paul Henningsen of Henningsen Cold Storage and I had the unique opportunity to visit the Inca ruins at Machu Picchu.

This historic site was amazing for many reasons, but what struck me the most was how many of the 200 structures were devoted to food storage. An extensive road and trail system, irrigation canals, and agricultural terraces supported food production to feed the people who lived there, and food was preserved in stone structures that regulated air flow and temperature.

We could not help but project passion for our industry (and annoy our fellow tourists) by reflecting on our industry's role in this society more than 500 years ago. I'm sure we were the only tourists that day excited about examining the food storage facilities at these ancient ruins. It drove home to me how essential our industry is in everyday life, even hundreds of years ago. Yet it remains nearly invisible to most people today, even as it supports their daily existence. Prospective employees simply see our jobs as a cold, harsh environment rather than the larger contributions we are making to society.

The importance of the cold chain industry is undeniable. In the "Protecting the Foods Families Love" promotional campaign we launched last year, our popular two-minute video highlights how we connect and support every link in the cold chain to ensure that everyone has safe, reliable food. We preserve more than food – we preserve trust. The trust that consumers – families like yours – have in manufacturers, producers, cold storage companies, shippers, and other companies that comprise the cold chain.

Our video was designed for customers, but an unintended value has been that member companies are showing it to prospective employees to help them understand our



crucial role. (See the promotional campaign and the video at [www.gcca.org/protecting-foodsfamilieslove](http://www.gcca.org/protecting-foodsfamilieslove).)

Developing talent is one of the objectives of the GCCA Strategic Plan, and in 2019 we will deliver resources to help build an employer brand to attract young people to cold chain careers. Every issue of COLD FACTS now includes at least one article or column devoted to this critical area. See page 22 of this issue for an article, "HR Professionals Add Strategic Approach to Workforce Challenges," that shows how human resource departments can enhance company operations and build employee productivity.

GCCA also remains committed to professional development programs to build talent in the industry. You will recognize the extension of the WFLO brand to all training activities in 2019, including the webinars and online training that we trust you are using with your associates. Many may not realize that there are three WFLO Institute locations: WFLO Institute East in Atlanta, WFLO Institute West in Los Angeles, and WFLO Institute Latin America in Mexico City.

As children, we may have not aspired to work in the cold chain industry, but few careers can match the passion that I see for our industry among members. I call on all of us to amplify to prospective employees and young careers explorers the message of the important role we play in feeding the world. We have a great story... let's tell it! ☞

COREY ROSENBUSCH  
GCCA PRESIDENT AND CEO

## 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 temperature-controlled products industry. The GCCA Core Partners are:

The **International Association of Refrigerated Warehouses (IARW)**, which promotes excellence in the global temperature-controlled warehouse and logistics industry.

The **World Food Logistics Organization (WFLO)**, which delivers education and research to the industry and empowers economic development by strengthening the global cold chain.

The **International Refrigerated Transportation Association (IRTA)**, which cultivates, fosters and develops commercial and trade relations between all those engaged in the transportation and logistics of temperature-controlled commodities.

The **Controlled Environment Building Association (CEBA)** represents the design and construction industry specializing in temperature-controlled facilities that prioritize product safety best practices. We are the source for best practices of building and maintaining the thermal envelope.

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# ASSOCIATION HEALTH PLANS AND THE COLD CHAIN

*Survey indicates strong member interest in GCCA-led AHP.*

By Lowell Randel

The Trump Administration has taken actions to make the development of association health plans (AHPs) more available for groups in the United States. In late 2017, President Trump issued an Executive Order entitled “Promoting Healthcare Choice and Competition Across the United States.” The Executive Order directed the Department of Labor (DOL) to explore proposing regulations to expand access to health coverage by allowing more employers to form AHPs. DOL moved quickly to propose and finalize a new rule that establishes additional criteria under the Employee Retirement Income Security Act (ERISA) for determining when employers may join together in a group or association of employers that will be treated as the “employer” sponsor of a group health plan. The regulation establishes a more flexible “commonality of interest” test for the employer members of a group health plan to enable broader use of such plans.

The Final Rule was published on June 21, 2018, and became effective on August 20, 2018. The rule is applicable as of September 1, 2018, for fully insured AHPs, January 1, 2019, for existing self-insured AHPs complying with the Department’s pre-rule test, and April 1, 2019, for new self-insured AHPs formed pursuant to the final rule.

The policy change is intended to facilitate the adoption and administration of AHPs and expand access to affordable health coverage, especially for employees of small employers. The new AHP policy will allow small businesses, including self-employed workers,

to band together by geography or industry to obtain healthcare coverage as if they were a single large employer. AHPs can also strengthen negotiating power with providers from larger risk pools and greater economies of scale.

It is important to note that under the new policy, AHPs will not be able to charge different premiums to employees based on their health status. AHPs cannot charge higher premiums or deny coverage to people because of pre-existing conditions or cancel coverage because an employee becomes ill. Additionally, AHPs under this rule will not be able to charge



employers different rates based on the health status of their employees. Consumer protections and healthcare anti-discrimination protections will also apply to AHPs organized under this rule.

## **GCCA Member Survey**

In light of the new AHP rules, GCCA issued a survey to its U.S. warehouse members to determine whether there is interest for a GCCA-led AHP. Fifteen warehouse companies participated in the survey. Thirteen of the fifteen companies currently offer healthcare to their employees, 12 of which offer group insurance. Seven responding companies are fully insured, while three are level funded and three are self-funded. Only one respondent purchases health insurance online through the ACA SHOP Marketplace, while the remaining 12 work through a broker or insurance company. Similarly, only one respondent offers payment/reimbursement of premiums under a small-employer Health Reimbursement Account (HRA).



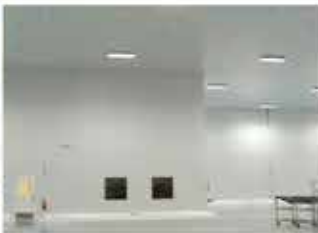
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Each of the companies that currently offer healthcare to all of their employees pays at least some portion of the cost for employee insurance. The levels ranged from 40 percent to 100 percent.

Percent Paid by Company	Number of Respondents
100%	1
90%	1
80%	5
70%	2
50%	3
40%	1

Of the companies that answered the survey, the average number of full-time employees was 141. However, 70 percent of respondents had 50 or fewer full-time employees.

#### Member Perspectives on AHPs

- 93 percent of respondents stated they would consider using an AHP if the association could provide access to health insurance that met the company's needs.
- The top three reasons why a company would be interested in using an AHP:
  1. Lower cost – 87 percent
  2. Administrative simplicity (get it off

your plate) – 60 percent

3. Holistic product offerings – 27 percent

- When asked what benefits they would like the association to provide, the top five responses were:

1. Medical/prescription – 100 percent
2. Dental – 93 percent
3. Vision – 80 percent
4. Life/Accidental Death & Dismemberment – 73 percent
5. Disability – 40 percent

- 73 percent of employers would contribute at least 50 percent towards the cost of medical coverage, while 27 percent would not.
- 87 percent of respondents would consider AHP coverage even if it required them to change networks. The same number would be willing to consider committing to the association's program for two or three years in order to help ensure the program remains stable.

The results of the survey show a strong interest from participating companies in the development of a GCCA led association health plan. While the business community and some states have embraced the new AHP policy as an opportunity to help employers provide more affordable health insurance,

there is growing opposition from other states and interest groups. Twelve states have filed a lawsuit against the DOL, alleging that the AHP rule violates federal law because it conflicts with existing regulation. In addition, some states are adding new restrictions to their state rules governing AHPs. For example, the states of Vermont and Connecticut have increased their minimum coverage requirements for association health plans and added other requirements that make AHPs less attractive. California has passed a law that prohibits self-employed individuals from joining an AHP.

As the policy around AHPs evolves, GCCA will continue to explore options for establishing an AHP and better understanding member needs and demands for such a program. GCCA will also continue to work on AHPs at the policy level. GCCA recently joined the Coalition to Protect and Promote Association Health Plans, a new group dedicated to addressing attacks on AHPs and preserving the AHP option for associations such as GCCA and its members. ☞

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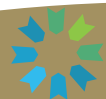
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Tim Nguyen addresses members from the podium at the CEBA Conference & Expo held in November 2018, in Las Vegas.

# WELCOME CEBA

*IACSC changes its name to the  
Controlled Environment Building Association.*

In an effort to better align with a changing industry and the expanding expertise of its members, the International Association for Cold Storage Construction (IACSC), a Core Partner of the GCCA, has transitioned to a new name – the Controlled Environment Building Association (CEBA). The name change for the 40-year-old trade association was unanimously approved by members during a vote at the annual CEBA Conference & Expo, held in November 2018, in Las Vegas.

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“Our new name reflects the full scope of what our members specialize in, and that is the design and construction of controlled environment facilities,” says Tim Nguyen, Regional Vice President of ESI Group USA and Chair of CEBA. “CEBA members have the expertise and experience in designing and building facilities that take into account product integrity, quality, and safety. Our breadth of expertise provides a full service to our global cold chain network consisting of retailers, foodservice, third-party logistics, and processors.”

“Our members do so much more than just cold storage and so our old name was a bit misleading,” explains Corey Rosenbusch, President & CEO of GCCA and its Core Partners, including CEBA. “We hear from companies that they hire a general contractor without controlled environment experience and must bring in a CEBA member down the road to fix mistakes. CEBA members are the go-to place for expertise in the thermal envelope.”

## The Process

“We felt for some time that the organization had significant potential to grow and increase membership, and not just in raw numbers, but also in the type of members,” says Brian King, President, A.M. King Construction Company and Immediate Past Chair of CEBA. “There are two ways to think about growth – trying to achieve growth and then planning for growth. We thought the organization was going to grow regardless, so we needed to anticipate, and plan for, that growth.”

Changing the name wasn’t easy and it didn’t happen overnight, admits Vince Free, Vice President, Thermal Division, SubZero Constructors and Vice Chairman of CEBA. “Tim Nguyen, Brian King and I started talking several years ago about the future of IACSC. We put our heads together at the Board of Director meetings and always seemed to be short on time. So in an effort to develop a strategic plan and a name change while not feeling rushed, we started holding strategic planning retreats over a long week-ends at remote locations and it has been very successful.”

King agrees that the strategic planning meetings were paramount to the whole process. “The strategic planning retreat allowed us to step away from the day to day and be in an atmosphere where we could just focus on the organization and where we wanted to take it.”

King says that GCCA staff were always involved in the meetings and provided facilitation, along with the occasional outside



*The name change for the 40-year-old trade association was unanimously approved by members during a vote at the annual CEBA conference.*

consultant to do market testing and help with planning, but that the consultants were kept to a minimum.

“The Board is pretty self-governing and cohesive,” King acknowledges. “We take pride that the Board members are a very good representation of the membership and they are all committed to making the process work. Once we came together and agreed on goals and initiatives, we worked diligently. Certainly there were conflicting discussions and opinions, but at the end of the day, we found consensus.”

Free says that everyone was in agreement that the “cold storage construction” phrasing seemed siloed and limited. “If I’m an end-user with a processing plant that produces juices and required a clean/washdown environment, I wouldn’t necessarily need my building to be a freezer. I might require clean environment rooms because I’m doing heavy washdown. So as the end user, I wouldn’t necessarily go to a cold storage construction tradeshow. However, a majority of the qualified builders that specialize in clean environment/processing rooms attend our show.” Free sums up that capturing the entire market of end users with controlled environment, captures everything.

Kings recounts that the Board wanted a name as holistic as possible, that encompassed the entire industry in which they work, was a nice acronym, and rolled off the tongue a little easier. “There was a lot of brainstorming



around names, but at end of the day, our group focused on facilities and all aspects of those facilities, while retaining the ‘building industry’ phrasing. We felt ‘controlled environment,’ was reflective of the type of facility in which we’re involved. And we thought it was important that ‘building’ is both verb and noun so – it’s left open to interpretation. “

Kings says the Board really believes the new name encompasses who they are and what they do on a daily basis.

## Mission and Vision

The CEBA mission, as approved by the Board, is to represent the expert builders who specialize in the design and construction of con-



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## History of CEBA

In 1978, a small group of insulation contractors gathered to discuss the formation of an association representing contractors who serve the specific needs of the cold storage industry. Within a year, the National Association of Cold Storage Insulation Contractors was incorporated and its founding Board of Directors was named. The purpose and objectives were soon refined, and in 1981 the first annual conference was held, as well as other educational programs. A Technical Committee was formed to serve the membership, and industry studies, a building code, and specific publications were developed.

In 1987, the name was changed to International Association of Cold Storage Contractors, and soon the bylaws were amended to allow the creation of a United Kingdom Division. In 2002, another name change was made to International Association for Cold Storage Construction to invite a broader membership and give all members equal status.

Over the last 10 years, CEBA has grown its membership as well as its conference and has matured as an organization, achieving recognition as the authoritative source for expertise in the unique best practices of building and maintaining the thermal envelope in buildings of all types.

trolled environment buildings, including cold storage warehouses, food processing facilities, clean rooms, pharmaceutical facilities, and foodservice and retail distribution centers.

CEBA's vision is to be the association where anyone looking to build, renovate, or mod-

ernize a first-rate, innovative facility comes to find the most experienced designers, contractors, and manufacturers and suppliers.

"We are still in our infancy when it comes to determining what the full CEBA brand will be but we know the direction we want to take

is to be the staple of controlled environment buildings. When you have CEBA next to your name, end users will know what you want to build," Free points out.

## Next Steps

The association also unveiled a new logo and refreshed strategic plan that focuses on achieving recognition as the authority in designing and building temperature-controlled facilities. It also includes objectives to build future talent, offer recruitment and retention programs and explore other opportunities for talent development; and to implement plans for developing expertise and increase engagement with MEP (mechanical, electrical and plumbing) engineers, refrigeration engineers, and customers.

"Guiding CEBA to the future, bringing additional value to the CEBA annual conference, getting end users to attend the show and getting them to hire CEBA members, and developing CEBA certification is all an ongoing process. That's why the majority of the board is still attending these strategic meetings as we continue to chart our course forward," Free says.

King calls on his fellow members to embrace the changes and become evangelists for the new name and the new vision of the association.

"We are in a period of growth, both among our members, and in what we have to offer – we have the ability to do some really great things within the industry and it's a very exciting time to be involved in CEBA," King notes. "I would say to CEBA members, take on a leadership role, serve on various committees, or recruit new members from among your clients, colleagues or people who work for you. Let's all do something for the organization and for the industry, and this in turn will benefit each of us individually." @

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# GCCA PREPARES FIRST-EVER COLD CHAIN INDEX

*Data on industry cost structures will aid in negotiating with customers.*

By Stephen Neel, Ph.D.

Historically, achieving annual rate changes from customers reflective of the shifting costs of operating refrigerated warehouses have been challenged as arbitrary, or countered with indices that do not reflect cold storage businesses.

To equip members with resources to aid in those conversations and remove subjectivity, the Global Cold Chain Alliance commissioned the first-ever Cold Chain Index (CCI), which was designed to improve the economic information available to all industry participants.

This idea was an initiative of the board of directors to help facilitate industry growth and mitigate concerns of commoditization.

Corey Rosenbusch, the President and CEO of GCCA, explains that the CCI tracks the growth rates of costs, using actual expense classes from the IARW Productivity and Benchmarking tool. Labor, electric power, supplies, repairs, and rent are the five expense categories included in the model and references official sources of economic data for changes in those expenses.

“The reason the board made this a strategic priority comes back to the concept of growing the industry,” he says. “One of the challenges was the constant pressure from customers on pricing and rates as it applies to the services they provide. Being equipped with some tools that will allow us to better educate and inform customers about cost structures in our industry will allow members to be more productive in negotiating annual rate changes.”

To that end, the Cold Chain Index utilizes a customizable template that members can use to provide justification to their customers

during discussions. This was something that wasn’t available before because of the uniqueness of the cold warehouse industry.

“A customer might reference CPI or PPI in contracts for rate changes and those indices don’t represent our cost structures,” Rosenbusch says. “Labor and energy are our two biggest cost drivers and they aren’t necessarily accounted for in those indexes. We also have a tremendous amount of invested capital in our assets that is often not factored into customers’ calculations. We were able to build a model that more accurately reflects that cost structure and then apply commonly accepted indices to measure the growth or increases in those costs quarter over quarter.”

Vicky Salin, Ph.D., the researcher who put the index together, says the data came together through public economic information. That information was then tracked throughout the general economy attached to specific details of refrigerated warehouses and then monitored, compiled, and aggregated into this service that an end-user can utilize to understand costs and how to use the information for making pricing decisions.

She set the data from U.S. official sources, primarily the U.S. Bureau of Labor Statistics Employment Cost Index (ECI) with the “Transportation and Material Moving” occupations and the industry “Transporta-

tion and Warehousing” sections combined in equal weights to generate the cold chain labor cost indicator.

“We examined the regions and particular areas of the country that had differences compared to the national average and then we account for those differences in making a template for members so they can adjust for their particular situations,” Salin says. “Costs of labor in the last decade have been very stagnant, though recently it has seen some differences and the segments of the labor force that matter to the refrigerated warehouse industry—trucking for instance—have been increasing. We felt it necessary to observe them and make this as specific as possible to our industry.”

The Index revealed that labor was the largest share of expenses on average, at 35 percent of the total, property rent or lease expenses representing nearly one-third and power accounting for 8.4 percent. The “other” category included the leases on material handling equipment, utilities other than electric power, and unspecified other expenses.

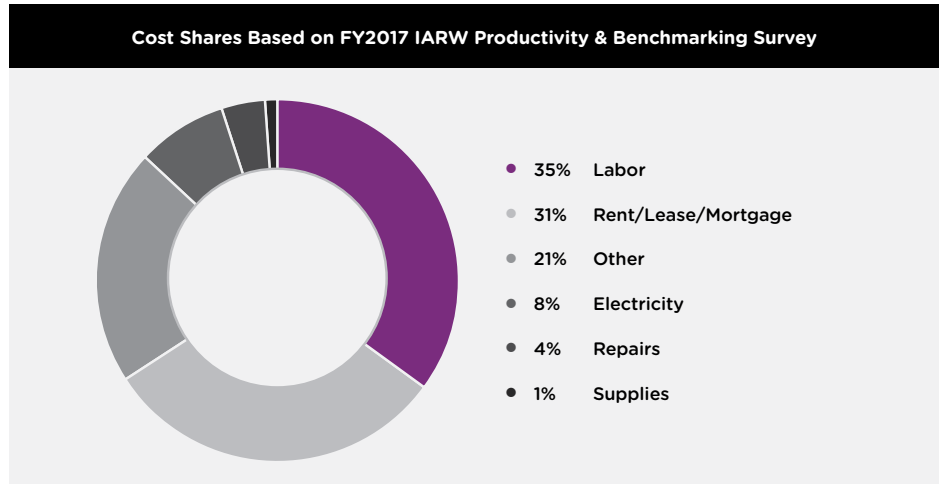
To account for energy, data was collected from the U.S. Energy Information Administration Electric Power Prices, by state. Rent data was collected from a combination of the Construction Cost Index for industrial property (Census Bureau) and the CBRE Global Industrial-Logistics Prime Rents report. For supplies, repair and other, the Producer Price Index for core goods final demand (excluding food and energy) was used.

There are limits with any attempts to standardize, especially related to geography and labor issues in different regions. The plan is for GCCA to publish a baseline index

for the nation and for different regions. The quarterly adjustments to the baseline index data fields will be updated annually and easily integrated into the users' file so that the custom dashboard the user has created will be updated. The model can also be extended to international markets as well once adequate benchmarking data is acquired and similar indices in those countries to measure change.

The index will get stronger over time. The more data entered year over year or quarter over quarter will offer a more robust data set to reveal trends. And, it's flexible enough so the warehouse can enter its own cost shares related to its operations and capture the data for a custom analysis.

The association adheres to an antitrust policy that requires each member to make its own pricing decisions and prohibits members from making such decisions collectively. The index contains historical, aggregate data representing annual percentage changes in costs



and can be considered by members in establish their prices based on their geographical and other factors.

While there's still some work to do on the CCI, the plan is for GCCA to release the first index in February 2019, when a full year's worth of data will be ready. Although the index will initially be available in the United States, the goal of GCCA is to expand it glob-

ally and provide these tools for Canadian, Mexican, Australian, and other international warehouses in the future. @

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# WHY TRANSPORTATION SECURITY DEVICES ARE CRITICAL

*Food safety and quality, value of goods and assets, and new regulations top the list.*

By Karen E. Thuermer

**T**ransportation security is critical to the overall supply chain. By using security devices, end users can be confident that the goods they acquire have not been tampered with and are safe and reliable for consumption or use. Those businesses that manage cold chain transportation find security important not only for food safety reasons, but to maintain food quality.

Nevertheless, bad actors continue to commit theft, sabotage shipments or be involved in terrorism.

"While we would like to think that these are new problems, they are not," remarks Robert H. Fay, President of Florida Freezer and Chairman of the International Refrigerated Transportation Association (IRTA). "Cyber-crime issues are a new manifestation of the same problem, but the root cause is the same. There are bad people in the world, and the good people need to protect themselves with security measures."

Consequently, shippers, receivers, loaders, and carriers have been utilizing security devices such as sealing and locks, GPS tracking and routes, and possibly temperature control and tracking, to protect against these bad people. But ever since the US Food and Drug Administration (FDA) finalized the Food Safety Modernization Act (FSMA) rule in

2016 on Sanitary Transport of Human and Animal Food (STF), regulations have been introduced by which all parties throughout the cold supply chain must adhere.

"While most of these practices were already in place prior to FSMA, the new regulation required better documentation of the process," comments Keith Mowery, Vice President of Transportation and Logistics at United States Cold Storage, Inc.

Training of carrier personnel in sanitary transportation practices and documentation is a key requirement of the rule. In response, IRTA developed a training program to help temperature-controlled truck drivers meet these compliance requirements.

"With information being more readily available in terms of data, both from a security and quality perspective, manufacturers and consumers want to ensure that their product is safe and protected throughout the shipping pro-

cess," Mowery says. "Technology is advancing so quickly in this space that the data is available in real time. It's just a question of how much information is needed, and what is the cost to receive and maintain that information."

## Security Device Basics

Most receivers will not accept deliveries that are not properly secured. For one, they deter crime, and as Fay adds, "There's the CYA factor."

"The upside [to utilizing them]," says Mowery, "is you are able to be assured of product integrity and quality and are able to make better decisions about what to do as more information is available. The downside is that with more data received, there is a better chance that data may be taken out of context and good product destroyed without proper research being done."

For example, a receiver may keep a door of a trailer open for an extended period in 100-degree heat, which could cause the air temperature to exceed a certain threshold.

"That may not mean the temperature of the product exceeded the threshold, but some shippers may decide to discard product without properly investigating and filing a claim against the carrier," Mowery says. "Someone needs to assure that proper investigation is still completed rather than just using this data without investigating. Without a proper investigation, they

may not be at fault. Relationships can be damaged due to improper research and poor use of the data received.”

Fay points to several reasons that necessitate the use of transportation security devices: 1) cold chain providers often deal with food/pharma so the risk to human health is far greater should there be an event; 2) the value of the goods transported tends to be higher so there is value in stealing it, and hence a value in protecting it; 3) the value of the assets (capital investment) being tracked tends to be higher than the dry goods counterpart; and 4) there are benefits gained in fleet management that transcend security.

### Worth Noting

A host of devices are available that provide transportation security. Seals and padlocks are standard, and GPS and temperature monitoring are becoming more widely used.

But not all GPS and temp monitoring devices offer real-time monitoring. “Most temperature monitoring is after the fact with either a reefer or temp tale download,” Mowery states. “Newer equipment has the ability to monitor in real time and there are devices that can monitor and relay both GPS and temperature in real time, but for most shipments, they are too costly.”

Devices have other downsides as well, such as costs associated with procuring and installing the devices on each load (seals and locks) and the ongoing expense (including man power) of maintaining systems such as GPS and temperature tracking.

“Seals vary in price,” Fay adds. “The plastic ones I buy in fairly low quantities are about 50 cents each (printed with our name and sequential number). Good locks for trailers run about \$20 each. Time to install on each trailer/railcar takes only a few moments, which over time adds to minutes and hours. Round number for me with my labor costs is \$0.53/unit shipped (x2 for each unit received as we must cut them off and verify against paperwork). My GPS/E-Log Temp tracking system runs about \$1,800 per month for 12 trucks and 18 refrigerated trailers.”

Ultimately, he says, the risk/reward assessment of security is almost identical to that of assessing insurance.

“If you thought you have enough, you might not, and you are better having some coverage than not having any coverage,” Fay adds. “The challenge is determining how much security will prevent the crime, versus how much professional criminals/terrorists can get around virtually any system they want, no matter how much money we throw at the problem.”

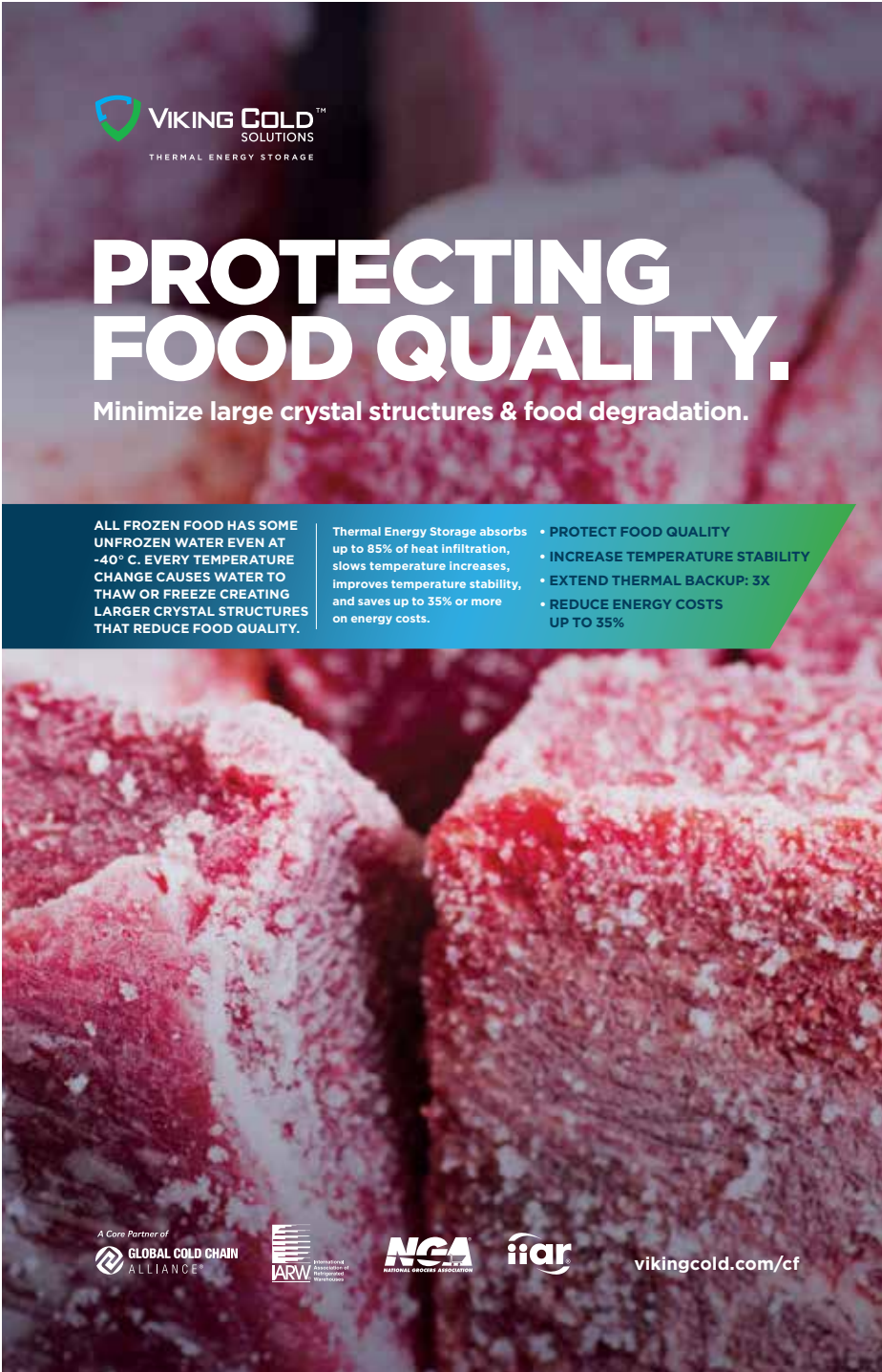
### Looking Forward

As technology in this space continues to develop at an increasing pace, Mowery maintains that soon, all shipments will have the ability to incorporate real time monitoring of temperature and location at a relatively inexpensive price. “The challenge shippers or 3PL companies will face is taking the multiple sources of data and bringing them to one centralized point so you can review this information quickly and manage by exception,” he says.

Meanwhile, Fay recommends being constantly vigilant. “You cannot afford to be complaisant, as an industry or a society, when it comes to the protection of our transportation network, especially the food/pharma supply chain,” he says. @

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# HR PROFESSIONALS ADD STRATEGIC APPROACH TO WORKFORCE CHALLENGES

*Cold storage companies of all sizes benefit from expertise of dedicated HR staff.*

By Sheryl S. Jackson

Labor challenges are not new to the cold storage industry, but the current economy with record low unemployment rates exacerbates the challenge as temperature-controlled warehouse leaders look for quality employees to fill positions.

## The Case for Dedication

Although a majority of cold storage companies do not currently have a formal, dedicated human resources staff comprised of HR professionals, the trend to hire HR professionals to oversee recruitment, retention, and training is growing, says Jeremy Lurey, Ph.D., President and CEO of Delta Plus Consulting and the GCCA's Talent Management Service Partner. "I would guess that only 10 to 20 percent of cold storage companies have HR staff that focus only on HR responsibilities exclusively, but more companies are

evaluating the move," he says. "Even if these companies continue to use temp agencies and outsourced recruitment firms, tasks such as onboarding, training, staff development, and employee retention are best handled by HR professionals."

When Lori Cogit, Vice President of Human Resources at RLS Logistics, joined the company three years ago, there had been an HR presence onsite for 10 years. The CEO of RLS wanted to expand the impact of HR to position the company for continued growth and success, she says. "The Vice President of

HR position was created to position HR as a strategic partner rather than a support organization," she explains. "HR has a 'seat at the grownup table' at RLS."

Cogit's previous experience that included a refrigerated cold storage and transportation company as well as a food manufacturing company made the transition to RLS an easy one. Experience in cold storage, however, is not necessary to be an effective HR professional.

"I came from the hospitality industry where I focused on the training and development side of HR for companies that included Ritz Carlton and Hilton International and from healthcare where I worked with a large nursing home company," says Karen Whiddon, Director of Human Resources for NOCS Corporate, which has four locations and over 300 employees. Although her background didn't include cold storage, she understood what it takes to staff, train, and retain blue-collar

employees who work day and night shifts – like cold storage employees.

“I was the first HR professional hired for NOCS,” explains Whiddon. “Human resource activities had been split up between warehouse managers recruiting and hiring people and accounting staff handling payroll and benefits – all as a part of their overall job,” she says. Along with a second person who handles HR administration tasks, Whiddon is focused on building programs to train and engage employees.

### Retention Strategies

“Retention of good employees, especially those with leadership potential, is an area of focus for us because we anticipate a large group of long-time employees will be retiring in the next two to five years,” says Whiddon. “While we don’t have a lot of different levels for promoting people, we have created a Next Gen University and identified a group of employees with leadership potential to take the program as a way to enrich their current position.”

The University allows employees to learn about the business, customer service, management, safety, and other issues related to the company. The second phase of the program is spent applying new knowledge to their positions and sharing those lessons with others. “It’s important that we teach people to share their knowledge so that the knowledge stays with the company regardless of promotion, retirement or leaving the company,” explains Whiddon. “By showing appreciation of their efforts by investing in their development, we are more likely to retain good people.”

Other retention strategies implemented in the past three years include a streamlined, consistent interview process that includes recorded phone interviews to ensure that candidates are fairly assessed, says Whiddon. By expanding their recruitment efforts to include employee referrals, temp agencies, social media, online job boards and warehouse manager efforts, the pool of talent to consider has expanded, which means managers can be a bit pickier about who they hire, she adds.

“We have also done a better job during the 90-day probationary period of identifying candidates who are not meeting the needs of the warehouse,” says Whiddon. “In my first two years, this meant that our turnover rates did not drop because we were letting people go while still building our recruitment talent pool, but in my third year, our turnover rate

dropped between 8 and 10 percent because we’re able to hire the right people initially.”

Strategic thinking about the causes of turnover led to the practice of checking in with new employees on a regular basis, says Cogit. Her HR team of four contact new employees at the 30-day, 90-day and one year point of employment for a casual conversation about how things are going.

“The conversation can be face-to-face or via telephone and they ask if the employee has received the training they need, about the relationship with the manager, and if there is any information they need,” explains Cogit. “This is a time commitment, but it is during these conversations that we learn that a line worker wants to become a forklift operator.” The HR staff was able to get the employee’s supervisor onboard with a plan to allow the employee to work toward certification as a forklift operator. “Employees feel safe expressing their goals to us when they are concerned that supervisors will misunderstand the desire for another job as a negative comment on their work.”

### Culture Fit

Todd Drass, Director of Talent Management and Culture at Lineage Logistics, was hired in 2016. “Lineage was a conglomeration of acquired companies at that time, many of which handled their own HR activities just as they had always done,” he explains. “In 2016, the company really became focused on integrating our culture and upgrading our talent throughout the company, which led to my hiring as well as other HR professionals.”

Susan Williams, Director of Talent Acquisition at Lineage Logistics, points out that she and Drass are good examples of their own philosophy of whom to hire for HR positions. Williams came to Lineage with experience in the IT staffing industry but brought a wealth of knowledge about strategic planning in relation to HR and vendor relations. Drass came to his position after handling a broad range of HR responsibilities in the auto industry.

“When we hire for HR and other positions at Lineage, we look for the right fit with our culture – people who can work as a partner with many different areas of the company,” says Williams. She also points out that in addition to hiring the right people, it also takes a good onboarding program to improve retention.

“In addition to the traditional five-day onboarding training, we’ve created a consistent program throughout the company that allows new employees time to learn the job by staging their production targets so they can succeed as they learn, ensuring they obtain the right MHE (Material Handling Equipment) certifications and providing mentors to guide them,” says Drass. While the larger sites have HR teams in place to provide training on safety, company policies, and other items, Drass and his team have created a two-day program that smaller sites can use to be sure that employees throughout the company receive the same training. The combination of hiring right and onboarding consistently has led to a significant reduction in turnover across Lineage Logistics’ largest warehouses, he adds.

Cold storage companies don’t have to be large to benefit from professional HR experts, points out Lurey. “Evaluate the need by considering who is doing the function now as part of their broader responsibilities and what opportunity costs are lost by taking the person away from their primary duties,” he says. “If there are more than 50 employees, a full-time HR professional is justified. If there are more than 100 employees, a seasoned HR professional at vice president or director level is likely needed to provide more strategic guidance.”

Companies with fewer than 50 employees have options to benefit from the expertise of an HR professional, says Lurey. “A part-time HR manager or an HR consultant on a retainer basis who may onsite one day a week, for example, or on call as needed, can help with HR issues,” he says. No matter which route is taken, Lurey does recommend tapping into an HR professional’s strategic expertise. He explains, “Engaging an HR professional to help develop strategic solutions to today’s workforce issues leads to a higher performing company.”

**SHERYL S. JACKSON** is a freelance writer based in Alpharetta, Georgia, who specializes in industry issues and trends.

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# BRUSSELS TO HOST 22ND GCCA EUROPEAN COLD CHAIN CONFERENCE

*Learning, networking, exhibits and more await attendees  
at the 22nd GCCA European Cold Chain Conference  
in March 2019 in Brussels, Belgium.*

**By Julie Hanson**

**T**he Global Cold Chain Alliance (GCCA) will hold the 22nd European Cold Chain Conference from March 20-22, 2019 in Brussels, Belgium.

Approximately 100 professionals representing temperature-controlled third-party logistics companies will gather to participate in this year's event. The focus of the event is to provide delegates with a better understanding of market trends, industry challenges, business solutions, and technological innovations.

There will also be ample networking opportunities to allow attendees to meet, connect/re-connect with professionals from throughout Europe and around the world.

## **Plenary Sessions**

The keynote speakers are leaders in their industries – whether it be logistics, automation, economics or talent management. Their stories will inspire attendees to think outside the box and widen their perspectives. With the support of the European Advisory Committee, GCCA is building a program that aims to be transformative, innovative and practical.

## **Learning Opportunities**

The conference education program will offer sessions highlighting organizations that are

implementing innovative ideas in the areas of human capital development, automation, cost and time savings, information technology and data, crisis management, and more. The session formats will provide attendees a chance to share ideas, ask questions, and solve problems with their peers.

Back by popular demand, the Cold Chain Café will be a feature of the 2019 conference. The Café is a roundtable discussion component of the educational program where attendees participate in valuable dialogue with their peers. It is a unique way of sharing ideas and innovations. By the end of the session, each participant will have spent 20 minutes discussing three different topics/issues/questions. Topics may include:

- Food Safety Regulations and Compliance/Standards and Certification
- Impact of e-Commerce on the Supply Chain
- HR - Successfully Managing the Trio: Recruiting, Hiring and Onboarding
- Reducing Energy Costs: Low-Cost and No-Cost Solutions
- Automation

## **THANKS TO THE EUROPEAN ADVISORY COMMITTEE**

GCCA thanks the members of the European Advisory Committee for their hard work and dedication in putting together the educational program for the 2019 GCCA European Cold Chain Conference. They include:

**Andrew Baldwin**  
Managing Director  
Reed Boardall Cold Storage Ltd.  
United Kingdom

**Tasos Charitonidis**  
Warehouse Assistant  
Alaska Cold Stores  
Greece

**Ben van Leeuwen**  
Transport Manager  
Frigolanda Cold Logistics  
Netherlands

**Manual C. Kabana**  
Director  
Friopuerto Investment, SLU  
Spain

**Xavier Haspeslagh**  
Managing Director  
Stockhabo b.v.b.a  
Belgium

GCCA President and CEO Corey Rosenbusch speaking at a recent European Cold Chain Conference.

#### NEW FOR 2019: PRE-CONFERENCE AUTOMATED FACILITY VISITS

Interested in touring automated facilities in Europe?

GCCA is conducting visits to automated facilities in and around the Brussels metropolitan area. Join your fellow warehouse/3PL professionals as they visit these facilities on Tuesday, March 19 and Wednesday morning, March 20.

This program is being held in conjunction with the 22nd GCCA European Cold Chain Conference, which is taking place March 20-22, 2019 in Brussels. A registration for the European Cold Chain Conference, including a facility tour of The Brussels Perishables Center on Friday, March 22, is included in the Automated Facility Visits fee. More details are available on the conference website at [www.gcca.org/europeancoldchainconference](http://www.gcca.org/europeancoldchainconference).

#### Cold Chain Exhibits

Partnering and working with leading companies in the cold chain industry is essential in providing a complete range of solutions and services to customers. The conference expo will feature the latest technologies, solutions, products and services from some of the most respected companies in the cold chain industry.

Past exhibitors have showed the following products and services: Automation Battery and Power Systems, Doors, Construction, Energy Efficiency Solutions, Fire Prevention, Flooring, Insulated Panels, Lighting, Material Handling, Racking/Materials Handling, Refrigeration Equipment, Roofing, WMS/TMS solutions.

#### Recognizing NextGen Leaders

GCCA has a longstanding commitment to developing talent in the cold chain industry, which needs a constant influx of young people who represent the next generation of cold chain leaders.

To promote talent development, GCCA launched its Global NextGen Future Leader Competition several years ago, which recognizes top candidates from several areas of the world. Candidates from Europe will compete at the GCCA European Cold Chain Conference through interviews with a panel of judges and deliver presentations during a plenary session.

At the end of the conference the judges will recognize one future leader to represent Europe in the global competition taking place at the GCCA's Global Cold Chain Expo, June 10-12, 2019 in Chicago. There the European Future Leader Award Recipient will compete with their counterparts from Latin America, Australia and South Africa for the title of GCCA's 2019 Global NextGen Future Leader.

#### Facility Tour

Immediately following the formal educational program on Friday, March 22, delegates who are interested will be transported to The Brussels Perishables Center at the Brussels Airport for a behind-the-scenes facility tour.

This new cargo center for perishables at the airport is a state-of-the-art facility that enhances its ability to play a leading role in handling, storing and distributing fresh fish, meat, fruits, vegetables, pharmaceutical products and flowers.

#### Networking and More

GCCA is offering numerous networking opportunities for attendees to make new connections and strengthen existing relation-

ships at the conference. Networking programs include a group activity on Wednesday afternoon, March 20 and an Early Arrivers Dinner that evening. A Welcome Reception & Dinner is planned for Thursday evening, March 21. Throughout the event, attendees will have numerous occasions to connect again with peers during coffee breaks, expo time, and a happy hour. ☺

Julie Hanson is European Director at GCCA.

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# THERMAL ENERGY STORAGE REAPS FINANCIAL BENEFITS

*Case study looks at benefits of TES in an ammonia refrigerated low-temperature warehouse.*

Viking Cold Solutions, Inc. conducted a Measurement and Verification (M&V) study of its thermal energy storage (TES) technology installed in an industrial low-temperature cold storage warehouse. The objectives of the M&V study were to determine the effectiveness of TES on energy efficiency and temperature stability with an ammonia-based refrigeration system.

## Facility and Electricity Rate Plan

The host site for the M&V study was a frozen food distribution center owned and operated by Dreisbach Enterprises in Richmond, California. Viking Cold's patented TES system was installed in a 93,000-square-foot low-temperature freezer, part of a facility also comprised of medium-temperature refrigerated storage, dry storage, and office space. Refrigeration for the low- and medium-temperature cold storage rooms was provided by a central ammonia refrigeration plant composed of multiple staged screw compressors and water-cooled condensers.

### Electricity Rate Plan

- **Peak Period** - the entire 13-hour period of increased energy costs from 8:30 am to 9:30 pm Monday through Friday
- **Partial Peak Period** - 8:30 am to 12:00 pm and 6:00 am to 9:30 pm Monday through Friday
- **Full Peak Period** - 12:00 pm to 6:00 pm Monday through Friday
- **Off Peak Period** - 9:30 pm to 8:30 am Monday through Friday and weekends
- **Summer season** is May through October; **Winter season** is November through April (with Partial Peak pricing 8:30 am to 9:30 pm Monday through Friday during winter)

Peak period consumption charges and peak demand charges account for nearly 50 percent of annual energy costs at the Dreisbach facility.

## Phase Change Material

Phase Change Material (PCM) is a substance with a high latent heat of fusion that remains near a constant temperature while storing and releasing large amounts of energy. During its transition between solid and liquid states, Viking Cold's PCM absorbs up to 85 percent of heat infiltration and maintains more stable temperatures to better protect food product. This environmentally friendly, food safe PCM is engineered by Viking Cold to freeze and thaw at the desired temperature setpoint of the customer's freezer.

## M&V Study Design

The M&V study was designed to isolate the temperature and energy benefits of TES in low-temperature cold storage facilities. Three operational variables were measured: temperature as a function of time, power consumption (kWh), and power load (kW). Since Viking Cold has implemented TES systems in many other facilities with significant positive results, this study was designed to understand the efficacy of TES under the conditions and challenges of large ammonia refrigerated freezers.

To establish the baseline performance of the freezer, all refrigeration equipment ran under normal operating conditions without Viking

Cold intervention for three weeks. During this period, the Viking Cold controls equipment measured and captured temperatures, energy consumption, peak demand, and refrigeration equipment status.

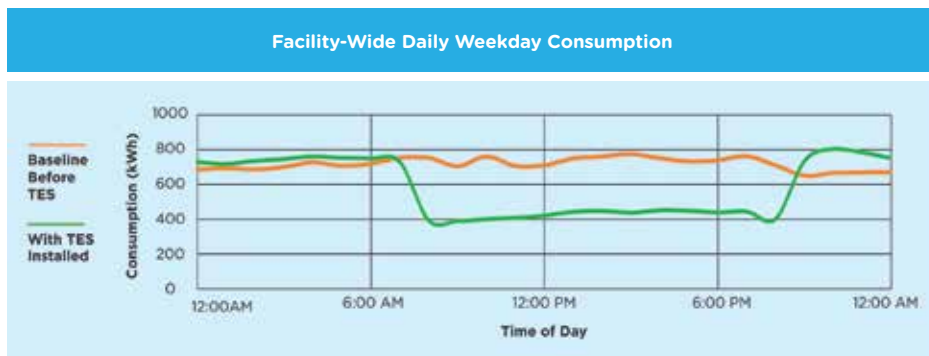
### Thermal Energy Storage Installation and Configuration

After the gathering of baseline data was completed, the TES modules containing phase change material were installed in the freezer. The TES modules were installed on top of the highest cross members of the product storage racking in the direct airflow path of the refrigeration evaporator fans.

The integrated Viking Cold control system was configured to optimize the operating sequence of refrigeration. Multiple temperature sensors within the freezer provide new inputs to the existing refrigeration control sequence to effectively leverage the thermal energy stored in the TES modules. Viking Cold's proprietary algorithms calculate how to best manage the refrigeration system to minimize energy consumption while maintaining stable desired temperatures inside the freezer. The key strategy to reducing energy consumption and peak demand is to run the refrigeration equipment fully-loaded during the lower cost off-peak hours when ambient temperatures are lower, which yields maximum mechanical and condensing efficiency as well as lower energy costs.

As ambient temperatures increase during peak hours of the day and the heat rejection of the condenser is less efficient, the control algorithms reduce or stage the run time of the refrigeration system and allow the fully charged TES modules (frozen PCM) to absorb the heat infiltration and maintain temperature stability inside the freezer.

Temperature and energy data are collected at five-minute intervals and securely stored in a cloud-hosted database. Live data is accessible by the operator to monitor conditions inside the freezer with automated notifications and alarms triggered by events set to customer-defined parameters. The Viking Cold algorithms are programmed by default to prioritize temperature compliance above energy savings and will automatically restore mechanical refrigeration if necessary to maintain temperatures within acceptable ranges.



One year later, the same data set that was recorded during the baseline was captured again and analyzed to conduct the M&V study. In doing so, seasonal weather and business cycle variables were determined not to be a significant factor in the results.

### Energy Consumption Reduction

Looking at total energy consumption across the entire facility, the entire facility experienced a weekday energy consumption reduction of 20 percent after implementation of the TES system. This was slightly offset by a 5 percent increase in off-peak weekend consumption by the freezer in order to fully recharge the TES modules in preparation for the following week. The net result was a 13 percent reduction of energy consumption for the entire facility each week.

When measuring the decrease in energy usage of just the freezers where the TES was installed and in operation, refrigeration energy consumption was reduced by 35 percent. Peak Period billing occurs Monday through Friday, 8:30 am through 9:30 pm, and accounts for nearly 50 percent of annual energy costs for the facility. These expensive peak period hours were targeted for reduction to maximize dollar savings. Peak period kWh consumption across the entire study period was reduced by 43 percent.

Peak Period Energy Consumption ↓ 43 Percent

### Peak Demand Reduction

Peak demand charges are calculated by determining the peak load (kW) of the facility at any point during the peak period. By using the stored thermal energy of the TES system, freezer refrigeration load could be reduced for long periods of time. The TES system lowered peak refrigeration load (low and medium temperature) by 251 kW, a 29 percent reduction for 13 hours each day.

Peak Demand During All Peak Periods ↓ 29 Percent

### Greater Temperature Stability

The energy savings and cost reductions detailed above were accomplished simultaneously with better maintenance of operating temperatures within the customer's specified range. The data showed that the temperature stability inside the freezer improved with the addition of the TES system. The temperatures measured during the M&V study showed significant improvements in two statistics – hourly standard deviation and rate of rise. Even during periods when the refrigeration equipment is not operating, the release of stored thermal energy can better control temperatures in the freezer.

## Hourly Temperature Standard Deviation

The hourly standard deviation during pre-TES baseline measurement duration is consistently about 4° F throughout the day. The hourly standard deviation after TES installation, where the system prioritized performance during the peak period is approximately 2° F, a 50 percent improvement in temperature stability. This demonstrates that even during periods when the refrigeration equipment is not operating, the release of stored thermal energy can better control temperatures in the freezer.

## Rate of Rise

This M&V study also conducted an experiment to quantify the rate of temperature rise with and without TES inside the freezer. Temperatures were measured in multiple locations within the freezer. One set of temperature monitors was positioned vertically at the middle pallet position, and the second set was positioned vertically at the top pallet position to identify and quantify temperature stratification. The same experiment was performed during the baseline period before TES was installed and again after the TES system was installed. For each experiment, refrigeration was completely shut off and temperature data was recorded for 15 hours.

During the baseline rate of rise test without TES, the average temperature in the room exceeded the upper customer specified limit after six hours. Note that the upper pallet positions recorded temperatures above the limit within minutes after refrigeration was shut off. After TES was installed, the average temperature in the room remained within the limit for the entire 15-hour duration of the test, and the upper pallet positions remained within the upper limit even with refrigeration shut off.

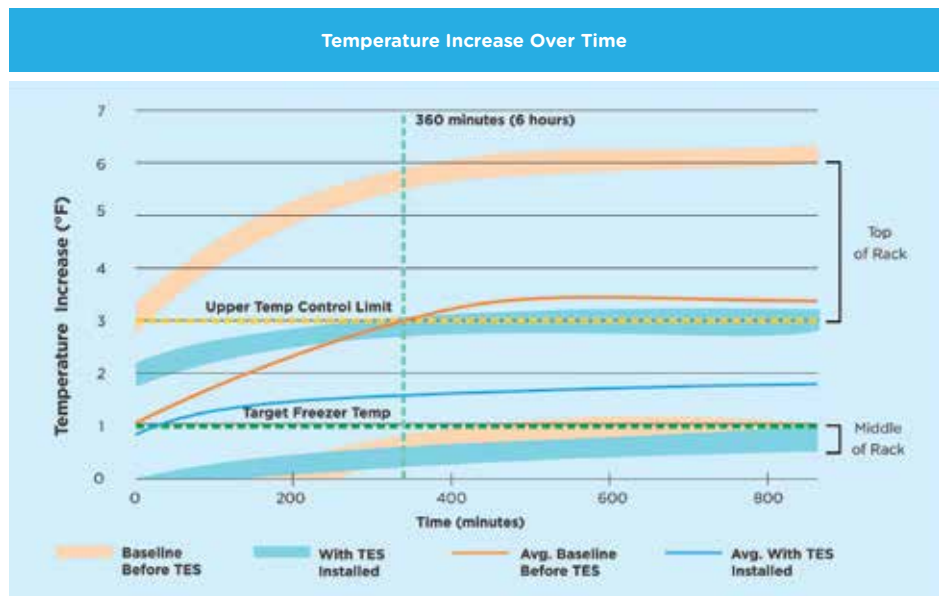
These results illustrate how the TES system is able to maintain the temperature integrity of the products despite temperature stratification inside the freezer while reducing energy usage of the facility for over 15 hours in this case.

## M&V Study Conclusions

The results of the M&V study demonstrate the ability of TES to reduce energy consumption



The Thermal Energy Storage technology installed at Dreisbach Enterprises in Richmond, California. (Photo courtesy of Viking Cold Solutions.)



by 43 percent and reduce peak demand by 29 percent while maintaining 50 percent more stable temperatures in a warehouse.

TES technology has significant operational and financial benefits to cold storage opera-

tors, to the cold storage industry, and to the utilities that are challenged to manage the peak loads on the electrical grid. ☞

### COLD CHAIN CONNECTIONS IN INDONESIA

By Alexandra Walsh

This column features news about key projects of the World Food Logistics Organization (WFLO), a GCCA Core Partner, and its work with members, aid organizations, and international development partners to help emerging economies and lower-income countries meet the challenges that arise when growing a safe and efficient global cold chain.

In October 2018, Amanda Brondy, Director of International Projects, GCCA; Greg Laurin, President of Conestoga Cold Storage and on the WFLO Board of Directors; and Marc Dizon, who works in the cold storage industry in the Philippines and represents the Cold Chain Association of the Philippines (ARPI), traveled to Jakarta, Indonesia, for the second Cold Chain Connection for the SE Asia Emerging Markets Program (EMP). The EMP provides funding for technical assistance activities to promote exports of U.S. agricultural commodities to emerging markets worldwide.

At the Cold Chain Connection, discussions were held to determine recommendations for training and educating local cold chain participants. These included conversations on ways to avoid one-off training to ensure the region benefits in the medium to long term. Two activities that were met with general excitement include development of local operator handbooks and a training of trainers' program to build local capacity to train others.

"In addition, we were able to lead a spirited discussion that touched on many of the common issues facing the group," notes Laurin. "For example, cold storage operators with trucking divisions discussed the struggles of trying to manage deliveries when daytime deliveries are prohibited and major limits on truck weight exist due to the poor condition of many feeder roads."

Laurin explains that in order to support the current population and expected growth in Indonesia, investments in public transportation infrastructure are required on a massive scale. "We drove along the construction site of a light rail project that is aimed at reducing Jakarta's crippling traffic congestion

and reduce commuter traffic into the city. These investments will be critical in order for this megacity to realize its potential but are unfortunately years away from completion, while pollution and congestion remain a daily fact of life. We witnessed firsthand the effects of congestion as short trips into and around the city turned into hours long traffic jams on overcrowded highways."

Laurin recounted that after the Cold Connection meeting, the group was able to get out to visit some of the suppliers and cold storage operators in the area.

"Jakarta is at the beginning stages of creating a complete temperature controlled food chain," Laurin explains. "Most people still shop at local outdoor markets where quality and temperature control are difficult to ensure, especially when temperatures are often over 90F. Large hypermarkets, led by Carrefour, as well as smaller premium grocery stores are beginning to command more market share as people are finding less time to shop and are unable to visit local markets daily for their groceries."

The group met with Harman Siswanto, Director of Ranch Market, and visited one of his premium supermarkets in the area. Ranch Market is known for its variety of imported products and healthy, organic vegetables. "The selection and quality of products would be very familiar to a North American shopper and the shopping experience would be similar to that at a Whole Foods market in the United States," says Laurin. "These new players are demanding a more sophisticated cold chain, creating a new market for cold storage operators in the region."

The group also had the opportunity to visit several cold storages including PT Pangan Lestari and Adib Cold Logistics. Laurin says cold storage facilities in the region are facing issues that would be familiar to North American operators, including difficulties finding and retaining reliable warehouse employees, burdensome government regulations, and ever-higher energy costs. "They are also facing expensive refrigeration upgrades as most facilities in Indonesia are using Freon. These engine rooms will have to be replaced with ammonia as Freon is phased out globally as a refrigerant. Ammonia/CO2 cascade systems are becoming increasingly popular in the region."

Laurin added that they were also able to tour a newly completed engine room built by the Japanese company Mayekawa, where company technicians are able to monitor and support engine rooms from their head office in Japan, reducing the amount of local expertise required to operate and maintain these systems.

Reflecting on his most recent trip, Laurin says he believes he was able to demonstrate the depth and breadth of the organization. "While representatives from the GCCA are deeply committed to issues facing the global cold chain, they lack the hands-on experience that active association members can bring to a project. The respect that warehouse owners from Indonesia to India have for WFLO/GCCA staff is matched by the trust they have for the guidance and expertise of other owners and operators, such as myself. I definitely encourage all members of the association to share their knowledge and experiences with emerging markets to help build and secure the global cold chain for the future." 🌀

**ALEXANDRA WALSH** is a Senior Publishing Consultant with Association Vision and Managing Editor of COLD FACTS.

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# COOL SOLUTIONS

## SCIENTIFIC ANSWERS TO COLD CHAIN CHALLENGES

This column highlights a cold chain question and answers submitted through the GCCA Inquiry Service to the team of experts on the WFLO Scientific Advisory Council (SAC).

To get instant advice from a private, online community of over 4,000 cold chain professionals, simply post your inquiry in the GCCA Online Community. All GCCA Members and their employees can access the GCCA Online Community at [community.gcca.org/home](http://community.gcca.org/home). There are active forums for Construction & Engineering, Government Affairs, and Third Party Logistics.

If you are not a GCCA member, or are unsure how to post in the GCCA Online Community, contact the GCCA Inquiry Service at [www.gcca.org/resources/industry-topics/gcca-inquiry-service](http://www.gcca.org/resources/industry-topics/gcca-inquiry-service). GCCA Members can also browse the full archive of inquiries and responses in the GCCA Inquiry Service Archive. Access to previous inquiries is restricted to members of GCCA core partner organizations.

**Q.** 1. Are U.S. and European cold storage warehouses that do not process or slaughter meat required to have boot cleaning stations?

2. Are US and European slaughterhouses allowed to freeze the meat in their facilities? It seems like an odd question, but Argentine slaughter facilities are required to send the cut meat to an off-premise cold storage warehouse to freeze the product, as they are not

allowed to freeze the product in their own facilities.

**A:** 1. Boot washing stations are not required for cold storage warehouses that are not involved in food processing/packaging operations. Having said that, cross contamination can occur anywhere in the food storage and handling process. Cross contamination from footwear can come from inside or outside the facility. Footwear should be cleaned and sanitized on a daily basis, or

more often if needed, to prevent the introduction of pathogens into the warehouse. This is especially critical for refrigerated facilities. Thus, sanitation programs at facilities should include routine boot cleaning and boot sanitizing. This can be done manually or through the use of boot dips or boot foaming equipment. Regardless of how this is done, it is important to work with your local competent authority to ensure that the boots are properly cleaned and sanitized.

2. With regard to freezing at slaughter, the answer is yes, slaughter facilities in the United States are allowed to freeze on-site and are not required to send their products to a cold storage facility for freezing. I assume that this is also the case in Europe, but I would have to do some checking to be certain. The USDA (United States Department of Agriculture) requires that freshly slaughtered meat be reduced in temperature to 4.4 C (40F) within 24 hours of slaughter, but does not require a freezing step to be made. Please note that freezing is an optional step in the process. It is not required, and there are no time limits associated with it.

*Answer provided by the Scientific Advisory Council's Dr. Michael Jahncke, SAC Chair & Professor Emeritus, Virginia Tech University. ☞*

## SAC MEMBER SPOTLIGHT



**Michael Lee Jahncke, Ph.D.**, is Professor Emeritus in the Department of Food Science and Technology and former Director of the Virginia Seafood Agricultural Research and Extension Center, Hampton, Virginia. Dr. Jahncke joined the Virginia Tech faculty in 1997. His research and extension interests focus on safety and quality of wild caught and aquacultured species, HACCP, sensory evaluation of seafood products, handling and processing of fish and fishery products. It also includes development, implementation and training in Good Aquaculture Practices (GAQPs) to improve food safety and food quality issues associated with imported and domestic aquacultured products. He is the chair of the Scientific Advisory Council. He is also the fishery lead with the Joint Institute of Food Safety and Applied Nutrition (JIFSAN/FDA) providing train-the-trainer courses on GAQPs in Vietnam, Indonesia, Malaysia, China, Thailand and Bangladesh. He has educated thousands of food industry professionals through numerous short courses and workshops in the United States and in numerous countries around the world.



**Vicky Salin, Ph.D.**, is a Professor in the Department of Agricultural Economics at Texas A&M University specializing in agribusiness management and finance. Since 2013, she has been Chair of the Intercollegiate Faculty of Agribusiness with primary responsibility for the Master of Agribusiness program. Dr. Salin is a co-director of the Agribusiness, Food, & Consumer Economics Research Center, leading the research and outreach projects of the Center relating to food safety, traceability, financial markets, and strategic management. She serves on the Board of Trustees of the International Institute of Tropical Agriculture, a unit of the CGIAR System, and is on the Board of the International Food & Agribusiness Management Association. Dr. Salin provides economic and financial research for the Scientific Advisory Council.

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**Dr. W. F. (Will) Stoecker**

University of Illinois, Expertise:  
Refrigeration Engineering

# 2019-2020 CALENDAR

**FEBRUARY 10-13, 2019**

**55th WFLO Institute East**

Atlanta, Georgia, United States

**MARCH 3-6, 2019**

**55th WFLO Institute West**

Los Angeles, California, United States

**MARCH 20-22, 2019**

**22nd GCCA European  
Cold Chain Conference**

Brussels, Belgium

**APRIL 7-10, 2019**

**128th IARW-WFLO Convention**

Santa Ana Pueblo, New Mexico,  
United States

**JUNE 10-12, 2019**

**2019 Global Cold Chain Expo**

Chicago, Illinois, United States

**JUNE 11, 2019**

**GCCA Assembly of Committees**

Chicago, IL, United States

**JULY 15-17, 2019**

**WFLO Institute Latin America**

Mexico City, Mexico

**JULY 28-31, 2019**

**GCCA Policy Meeting**

Washington, D.C., United States

**NOVEMBER 3-5, 2019**

**2019 GCCA Latin America  
Cold Chain Conference**

Mexico City, Mexico

**NOVEMBER 14-16, 2019**

**39th CEBA Conference & Expo**

Miami, Florida, United States

**FEBRUARY 9-12, 2020**

**56th WFLO Institute East**

Atlanta, Georgia, United States

**MAY 5-8, 2020**

**129th IARW-WFLO Convention**

Bonita Springs, Florida, United States

\*For more details go to  
[www.gcca.org/events](http://www.gcca.org/events)

# MEMBER NEWS

## NEWS FROM MEMBERS OF GCCA CORE PARTNERS

**Fisher Construction Group** was named the winner of the Controlled Environment Building Association (CEBA) Built by the Best Award for its project with **NewCold** in Tacoma, Washington. The award was given on November 8, 2018 during a general session at the 38<sup>th</sup> CEBA Conference & Expo.



The project is NewCold's first cold storage facility in the United States and only the second low-oxygen, high-bay freezer in the country. It features a state-of-the-art freezer system and a strictly controlled system, where oxygen is reduced to 16.5 percent saturation. It will allow for efficient customer service, with time from receipt of product to storage under 20 minutes. Picking of a product to loading will be done in the same amount of time – which is nearly three times the efficiency of a normal cold storage facility. NewCold Tacoma is one of the largest cold storage facilities in the United States, containing 103,000 pallet positions.

Thirteen additional CEBA members participated on the 2018 winning project, including:

- All Weather Insulated Panels
- Rite-Hite Corporation
- Twintec USA
- SubZero Constructors, Inc.
- Owens Corning Foamular
- Enviro Cold Storage Doors
- Fastener Systems, Inc.
- Honeywell
- Ricker Thermline
- Shadco, Inc.
- Victaulic
- Metzger/McGuire
- Logix Refrigeration Controls
- EVAPCO, Inc.

Built by the Best Award 2018 Finalist **Primus Builders** also presented at the 38<sup>th</sup> CEBA Conference & Expo, for its new construction

with Dot Foods located in Bullhead, Arizona. Dot Foods is the largest food re-distributor in the country, offering 112,000 products and delivering to all 50 states. The project came with a unique set of challenges due to its desert location with extreme heat, winds, and challenging topography.



**Kool Solutions India** was named the Best Facility for the Danfoss ICE Awards 2018 for its contributions to the cold chain sector.



**MTC Logistics** purchased property located immediately adjacent to the Alabama State Port Authority container terminal, operated by APM Terminals. MTC will build a state-of-the-art international temperature-controlled distribution center focused on both import and export cargo.



**Preferred Freezer Services** opened its Atlanta West facility in Atlanta, Georgia. The facility marks the company's second in the Atlanta area and thirty-ninth in the United States. It is BRC Certified and covers over 169,000 square feet.



**Primus** added seasoned construction professional Robert Ulliman to its team. Ulliman has extensive experience leading complex food distribution and cold storage construction projects. He joins the team as a project executive and will lead Primus projects in Texas and the Midwest. Ulliman was previously director of construction at Ben E. Keith Foods.



**Reed Boardall Group** added 23 single-deck semi-trailers plus seven double-deck trailers as part of its 300-strong trailer fleet. The trailers were supplied by vehicle manufacturer Gray & Adams and are equipped with Carrier Vector 1550 or 1950 refrigeration units and full satellite tracking to enable constant monitoring of the location and temperature of the vehicles.



Graeme Richardson of Reed Boardall (left), and Andrew Brown of Gray & Adams, with one of the company's new trailers.



**RLS Logistics** won the 2018 Wrangler Award presented by Food Cowboy Foundation. Food Cowboy Foundation serves as a strategic partner to GCCA, working to reduce food loss and waste by implementing innovative solutions to redirect food away from landfills. The Wrangler Award is an annual initiative that was launched in 2018 to recognize leadership in reducing waste within the food industry. RLS Logistics demonstrated its commitment to reducing waste by supporting and using Food Cowboy's donation hotline.



**United States Cold Storage** opened its new food distribution facility in Laredo, Texas. **Stellar** designed and built the 232,366-square-foot warehouse. The facility distributes a variety of produce goods, including strawberries and avocados. The \$35-million greenfield project broke ground in August 2017 and was completed in March 2018. The aggressive, eight-month schedule was driven by the timing of the Mexican strawberry harvest. ☎



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# ASSOCIATION NEWS

## NEWS ABOUT GCCA CORE PARTNERS

**GCCA** is excited to launch the new GCCA Advocacy Portal, a tool that members can use to track and stay up-to-date on important cold chain industry legislation. This portal will allow you to explore policy topics, view GCCA-signed coalition letters, and participate in the GCCA Community forums. The portal will also link you to GCCA's Government Connection blog, a useful resource that highlights federal and state regulatory and legislative happenings related to the cold chain. The GCCA Advocacy Portal is located under the Resources tab at [www.gcca.org](http://www.gcca.org).



With the cold weather coming to many parts of the world, it is critical for warehouse operators to take the necessary steps to prevent roofs from collapsing from heavy snow. Each year, **IARW** provides members with important information that prevents warehouse

roofs from collapsing. IARW warehouse legal expert and Strategic Partner John Horvath, an attorney, has outlined the necessary steps to prevent this disaster, including taking reasonable steps to keep drains clear of ice, developing a snow and ice removal procedure, and frequent inspection of roofs. To read the full document outlining precautionary measures, visit the Resources tab at [www.gcca.org](http://www.gcca.org).



In an effort to better align with a changing industry and the expanding expertise of its members, the International Association for Cold Storage Construction (**IACSC**), a Core Partner of the Global Cold Chain Alliance (GCCA), announced that the 40-year-old trade association has transitioned to a new name – the Controlled Environment Building Association (**CEBA**). CEBA's mission is to represent the expert builders who specialize

in the design and construction of controlled environment buildings, including cold storage warehouses, food processing facilities, clean rooms, pharmaceutical facilities, and foodservice and retail distribution centers.



**Controlled Environment  
Building Association**



**IRTA** service partner, Scopelitis Garvin Light Hanson & Feary (Scopelitis), a law firm specializing in transportation legal issues, offers advice and counsel on transportation related issues. By being a member of IRTA, Scopelitis lawyers provide legal assistance at no cost. IRTA members will receive a 10 percent discount on rates if they decide to use them



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as their legal representation. More information can be found on the IRTA section of the GCCA website.



**WFLO** Chairman Dan Kaplan, CEO, Cloverleaf Cold Storage and Harshal Surange, a design-build expert with ACR Project Consultants, traveled to India this past November for a WFLO project and was joined by Amanda Brondy, GCCA Director of International Programs. The team hosted a series of Cold Chain Connections in Delhi, Mumbai, and

Hyderabad which presented the findings of the WFLO assessment on the cold chain in India. The assessment provides an evaluation of India's cold chain infrastructure, identifies key observations and conclusions, and provides recommendations for resource development and training in collaboration with GCCA India. Contact GCCA if you would like a copy of the assessment. 

## COLD CHAIN INNOVATIONS

### VOXWARE AUGMENTED REALITY



**Ti**

TIPPMANN INNOVATION

The latest innovation from Voxware, as part of its Voice Management Suite (VMS), is Augmented Reality (AR). Voxware AR brings multiple technologies, voice and scanning together with vision and image/video capture, so workers have a choice for using the right technology for the task at hand to streamline work throughout the distribution center.

AR users wear smartglasses equipped with cameras, microphones and view screens that add task information to their field of vision. Rather than having to key in data or operate a handheld device to capture information as they work, AR users simply give a voice command to scan a barcode or capture an image they see. This makes tasks far easier and more efficient, with the highest levels of accuracy.

Voxware's AR solution can be utilized for all tasks within a distribution center. Most common uses cases include vision picking, packing and shipping, returns and receiving. For example, in the 'Packing & Shipping' AR workflow, as items are selected in the warehouse and prepared for shipment, a packer will be able to capture a photo with their smartglasses to ensure the correct item is selected, packed properly and leaving the warehouse in pristine condition.



Voxware is currently running a number of AR trials with its customers and expects smartglass adoption to grow at a rapid rate over the next 24-36 months.

*Cold Chain Innovations, a column brought to you by Tippmann Innovation, features the latest technologies, cutting-edge solutions, and innovative practices that the cold chain industry has to offer. Featured in each issue of COLD FACTS Magazine, the Cold Chain Innovations section gives readers thought-provoking ways to optimize their supply chain and improve operational efficiencies. The information presented in the Cold Chain Innovation section is sourced from GCCA members. To feature your news, press releases or submit your idea for a future Cold Innovation article, contact Laura Poko at [lpoko@gcca.org](mailto:lpoko@gcca.org) or call 703.373.4300.*



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# NEW MEMBERS

## NEW MEMBER COMPANIES OF GCCA CORE PARTNERS



### IARW-WFLO WAREHOUSE MEMBERS

#### I Freeze

Fulton, New York, United States

#### ACIT Group Pty Ltd

Virginia, Queensland, Australia



### IARW ASSOCIATE MEMBERS

#### InspiraFarms

Sevenoaks, Kent, United Kingdom

#### TNR Industrial Doors

Barrie, Ontario, Canada



### WFLO MEMBER

#### Alimentos SBF De Mexico S

#### De RL De Cv

Seccion Norte Reynosa, Tamaulipas,

Mexico



### CEBA MEMBER

#### Laudy B.V. Project Management & Consultancy

Sittard, The Netherlands



### IRTA MEMBERS

#### Alimentos SBF De Mexico S De RL De Cv

Seccion Norte Reynosa, Tamaulipas,  
Mexico

#### I Freeze

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