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## FOOD WASTE AND THE COLD CHAIN

Refrigeration plays a huge role  
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# GCCA Focused on Leading the Cold Chain

**A** YEAR AGO WE LAUNCHED OUR NEW STRATEGIC PLAN focused on four key business needs of our members – Grow the Industry, Lead the Cold Chain, Develop Talent and Drive Supply Chain Profitability. Since the debut of the plan, much focus has been on Growing the Industry. However, of equal importance was Leading the Cold Chain.

Our industry has navigated increased compliance and audit requirement not only from our governments but private sector standard-setting organizations such as the British Retail Consortium (BRC) and Food Marketing Institute's Safe Quality Food (SQF) standards. Some of these requirements were dictated without consultation and input, which is why our leadership prioritized GCCA taking a strong leadership role in shaping regulations and standards shaping the cold chain.

We are pleased to share three examples of accomplishments towards leading the cold chain in the first year of implementation of the new strategic plan.

First, SQF has met with GCCA committees and staff many times in 2016, resulting in two GCCA members' formal appointments to SQF leadership committees tasked with review of the warehousing and distribution standard.

Second, thanks to GCCA core partner, the International Refrigerated Transportation Association (IRTA), a Refrigerated Transportation Best Practices Guide was developed to equip companies across the food supply chain with a compliance assistance resource for FDA's Sanitary Transportation of Food (STF) rule. IRTA highlighted these resources at a roundtable held in conjunction with the 2016 GCCA Assembly of Committee meetings. Participants from food industry associations included the Food Marketing Institute (FMI), American Frozen Foods Institute (AFFI), American Bakers Association (ABA), International Foodservice and Distributors Association (IFDA), Grocery

Manufacturing Association (GMA), United Fresh Produce Association (UFGA), and the American Trucking Association (ATA). This roundtable resulted in invitations from FMI, ABA, and the North American Meat Institute (NAMI) to present the guide to its membership. We owe a huge debt of gratitude to the tireless efforts of IRTA members that developed this guide and because all IARW members, starting in 2017, are automatically IRTA members, they also receive this valuable benefit and resource.

Finally, recent meetings between GCCA and the FDA demonstrated significant support of the Refrigerated Best Practices Guide. FDA officials responsible for the rule had read the guides and were encourage by GCCA's proactive approach. Based on their interactions with industry, FDA identified GCCA as the leader when it comes to guidance on refrigerated transportation best practices and would like to feature it on their resource pages. GCCA has also been invited to work with FDA and the International Warehouse and Logistics Association (IWLA) deliver education to FDA personnel on the unique aspects of the third party logistics industry.

These are just a few of the major wins for "Leading the Cold Chain." We recognize that it is not enough to just have a seat at the table – we must convene key stakeholders and lead the conversation. As you tackle the bevy of issues facing our industry in 2017, please remember that GCCA is working hard on your behalf and continues to be ready and willing to provide you with the resources you and your organization need to be successful. ☞



COREY ROSENBUSCH  
PRESIDENT & CEO  
GLOBAL COLD CHAIN  
ALLIANCE (GCCA)

## 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 **International Association for Cold Storage Construction (IACSC)**, which provides a forum for innovative ideas, promotes standards of practice, and sponsors professional education programs for the cold storage construction industry.

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# IMPLICATIONS OF A TRUMP PRESIDENCY ON THE COLD CHAIN

*There are clues to priority issues, but timing and scope of policy changes are still uncertain.*

By Lowell Randel

With Donald Trump's victory in the presidential election, speculation has begun on what to expect for policies impacting the cold chain.

Trump ran a rather unconventional campaign, and, as an "outsider" to the Washington D.C. political establishment, does not have a well-defined history on many policy positions. However, he has outlined some of his priorities during the campaign and in the days after his victory.

Towards the end of the campaign, Trump released a "Contract with the American Voter." The document outlines some of the early priorities expected from a Trump Administration. Below are some selected policy areas included in the contract and mentioned along the campaign trail that have the potential to impact the cold chain industry.

## Regulatory Reform

Regulatory reform has been a big issue for Trump during the campaign.

The "Contract with the American Voter" includes a new requirement that for every new federal regulation, two existing regulations must be eliminated. Trump has stated in many speeches that unnecessary regulations have stifled the business community. He hopes to roll back some of the Obama Administration's regulations, and it appears that new regulatory development will need to come with the elimination of other regulations.

This presents a good opportunity to lessen some of the regulatory burdens on the cold chain.

In addition, the contract suggests a hiring freeze on all federal employees to reduce the federal workforce through attrition. Military, public safety and public health would be exempted. Such a freeze on hiring would make it more difficult for agencies to expand their numbers of inspectors. This could particularly impact agencies like the Environmental Protection Agency (EPA).

## Trade

During the campaign, Trump stressed what he saw as disadvantages with current trade agreements such as the North American Free Trade Agreement (NAFTA). This position helped him garner the support of many blue-collar workers who feel trade has taken away a large number of American jobs. Trump has vowed to either renegotiate or withdraw from the NAFTA agreement. Since the election, leaders from both Canada and Mexico have expressed willingness to reopen NAFTA discussions. Trade is critical to the cold chain industry, so change to the primary agreement between the United States' largest trading partners could be both an opportunity and threat.

Trump has also expressed opposition to the Trans-Pacific Partnership (TPP) and has stated that he would withdraw the United States from the deal. Withdrawal from TPP could result in lost opportunities for growth in trade with Asia.

The contract also includes a provision to direct the Secretary of Commerce and U.S. Trade Representative to identify all foreign trading abuses that unfairly impact American workers and direct them to use every tool under American and international law to end those abuses immediately. Targeting perceived trade abuses could lead to retaliation from other countries and potentially disrupt the flow of goods.

## Immigration

Another central theme to Trump's campaign was addressing immigration.

His contract calls for beginning the removal of more than two million criminal illegal immigrants from the country and cancelling visas to foreign countries that won't take them back.

Immigration from terror-prone regions where vetting cannot safely occur would be halted and all vetting of people coming into our country will be considered "extreme vetting."

Trump's contract also calls for legislation that would fund the construction of a wall on the southern border between the United States and Mexico and establish mandatory minimum criminal penalties for those violating the immigration laws.

## Infrastructure

Trump has indicated that increased investments in infrastructure are needed. His contract proposes legislation that would leverage public-private partnerships and private investments through tax incentives to spur \$1 trillion in infrastructure investment over 10 years.

## Healthcare

In the last days of the campaign, Trump seized on the news that healthcare premiums will be increasing next year to push his message of repealing Obamacare. The replacement policy would likely include Health Savings Accounts, the ability to purchase health insurance across state lines, and lets states manage Medicaid funds. Trump has signaled after the election that there are elements of Obamacare that would likely continue, including coverage for pre-existing conditions and coverage for children up to the age of 26.

## Taxes

Trump has outlined an economic plan that he claims will grow the economy 4 percent per year and create at least 25 million new jobs. He proposes to accomplish this through tax reduction and simplification, in combination with trade reform, regulatory relief, and lifting the restrictions on American energy. He is proposing to reduce the current number of brackets from seven to three and lower the business tax rate from 35 percent to 15 percent. Trump is also in favor of eliminating the estate tax.



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## Labor/OSHA

With Trump's focus on regulatory reform, there are several Obama labor policies that will likely come under scrutiny for elimination or change. The Overtime Rule, which was scheduled to go into effect on December 1, 2016, has been the subject of controversy and opposition from Republicans in Congress. A judge in Texas granted an emergency injunction to delay the rule, which should make it easier for the Trump Administration to walk back or further delay the rule's implementation and enforcement.

The National Labor Relations Board' (NLRB) Union Persuader Rule, which requires companies to disclose how much they pay anti-union consultants and what activities they were hired to do on the employer's behalf, is also likely to be considered for change in the Trump Administration.

Trump's call for fewer regulations is also expected to impact OSHA's rulemaking activities. For example, OSHA's efforts related to changing the Process Safety Management (PSM) program are likely to be slowed down or paused indefinitely.

## Environment

During the campaign, Trump repeatedly criticized the Environmental Regulatory Agency's (EPA) regulatory overreach.

Trump has signaled that he would stop the controversial Waters of the United States (WOTUS) regulation. He has also targeted EPA's Clean Power Plan and Ozone Rule for elimination. In addition, Trump has stated that he would pull the United States out of the Paris Agreement on climate change. It is unclear if he would also move to pull the United States out of the recent Kigali Agreement that incorporates hydrofluorocarbons (HFCs) into the Montreal Protocol.

The impending release of the Final Rule to amend the Risk Management Program will likely be scrutinized by the Trump Administration and could be a target for elimination. The timing of the Final Rule would enable Congress to utilize the Congressional Review Act (CRA) to disapprove of the regulation. With Republicans retaining control of the House and Senate, the CRA could also be used on any other regulations finalized in the last days of the Obama Administration.

## Food

In September 2016, the Trump Campaign released a factsheet criticizing the Food and Drug Administration (FDA) and the "food police." It called for reforming food safety regulations that were overly burdensome. However, the factsheet was removed shortly after it was posted, and the updated version does not include mention of the FDA. It is unclear if regulations such as those under the Food Safety Modernization Act (FSMA) will be impacted under the Trump Administration.

While Trump has given clues about priority issues, the timing and scope of policy changes in a new Trump Administration are still uncertain. However, with Republicans retaining control of the House of Representatives and the Senate, President-elect Trump should have some Congressional assistance in advancing his priorities. ☞

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# FOOD WASTE AND THE COLD CHAIN

*Refrigeration plays a huge role in reducing food waste, hunger, and environmental impact.*

There are 7.1 billion people in the world today. Roughly 800 million of them are classified by the United Nations Food and Agriculture Organization (FAO) as “chronically undernourished,” which is to say they don’t have enough to eat. Yet the world produces enough food to feed 10 billion people – that’s enough for everyone on the planet today, and everyone to come until 2050, points out Jon Shaw, Director, Sustainability and Communications, Carrier Transicold & Refrigeration Systems.

“So we’re wasting 40 percent of what we produce,” says Shaw. “That is a staggering amount. Imagine what would happen if we could only breathe 60 percent of the available oxygen on the planet,” says Shaw.

Food is lost or wasted throughout the supply chain, from initial agricultural production down to final household consumption, according to studies conducted by the FAO.

In medium- and high-income countries, food is to a significant extent wasted at the consumption stage, meaning that it is discarded even if it is still suitable for human consumption. Significant losses also occur early in the food supply chains in industrialized regions.

In low-income countries, food is lost mostly during the early and middle stages of the food

supply chain, with much less food wasted at the consumer level.

But regardless of the causes, refrigeration has a huge role to play in reducing food waste, hunger and environmental impact.

## **Loss and Waste in Low-Income Countries**

The causes of food losses and waste in low-income countries are mainly connected to financial, managerial and technical limitations in harvesting techniques, storage and cooling facilities in difficult climatic conditions, infrastructure, packaging and marketing systems, according to the UN FAO.

The UN FAO believes the food supply chains in developing countries need to be strengthened by, among other things, encouraging small farmers to organize and to diversify and upscale their production and marketing. Investments in infrastructure, transportation, food industries and packaging industries are also required.





Food waste at the Azadpur wholesale fruit and vegetable market in India.  
(Photo courtesy of Carrier Transicold & Refrigeration Systems.)

“Today, only 10 percent of worldwide perishable foods are refrigerated, so there is immense opportunity to cut food waste by implementing or improving the cold chain.”

—JON SHAW,  
*Director, Sustainability and Communications,  
Carrier Transicold & Refrigeration Systems*

Both the public and private sectors have a role to play in achieving this.

### Rejection in Developed Countries

To ensure they do not fall afoul of retailer penalties or changes in demand, growers in developed countries often overproduce, according to the 2015 research report by the University of Nottingham, “The Impact of Reducing Food Loss in the Global Cold Chain.” It may therefore be uneconomical to harvest the extra produce resulting in it being left in the field or diverted to a secondary market such as processing or animal feed. Low market prices can similarly result in growers leaving food in the field if the costs of harvest (labor, transport etc.) cannot be recovered. In the United States, approximately 7 percent of all planted fields go unharvested every year.

The rejection of food that does not meet the required specification (out-grading), due to visual and sizing requirements demanded by consumers and retailers is one of the major

causes of food loss in developed countries, the Nottingham report notes. In the United States, out-grading can lead to losses of as much as 20 to 50 percent.

The Nottingham report indicates that breaks in the cold chain can occur due to a wide variety of causes, including: operator error; insufficient pre-cooling; poor loading practices; inadequate insulation; improperly functioning refrigeration equipment; or, even something as simple as cargo or walk-in cooler doors being left open too long.

### Food Waste and the Cold Chain

As readers know, without the cold chain, perishable foods can only be transported and sold as far as they can travel without spoiling or developing bacteria that could cause food-borne illnesses, such as e.coli, listeria, or salmonella, to spread.

According to the International Institute of Refrigeration, the lack of a functioning cold

chain causes significant food loss up to almost 20 percent globally. In developed countries, food losses from the absence of refrigeration account for nearly 9 percent of total food production, and 23 percent on average in developing countries.

“More than 50 percent of wasted food can have its shelf life extended by the cold chain,” Shaw points out. “Yet today, only 10 percent of worldwide perishable foods are refrigerated, so there is immense opportunity to cut food waste by implementing or improving the cold chain. Cold chain development is the best investment that can be made for food preservation.”

### The Environmental Connection

Food waste has a big impact on the environment.

According to the book, “Food Foolish: The Hidden Connection Between Food Waste, Hunger and Climate Change,” co-authored

by John M. Mandyck, Chief Sustainability Officer, United Technologies and Eric B. Schultz, former CEO of Sensitech Inc., it is estimated that food waste generates 7 percent of global greenhouse gas emissions, or 3.6 billion metric tons, offering a significant opportunity for countries and industries to reduce their negative impact on the climate.

In fact, if food waste were a country, it would be the third largest emitter of greenhouse gas emissions, behind China and the United States.

In the United States, the equivalent of all the water used by California, Texas, and Ohio is used every year just to grow the food that is wasted.

“By preserving perishable foodstuffs, refrigeration helps reduce food losses and the carbon emitted to produce this wasted food, and helps improve food security by connecting consumers and producers much more effectively,” Shaw suggests.

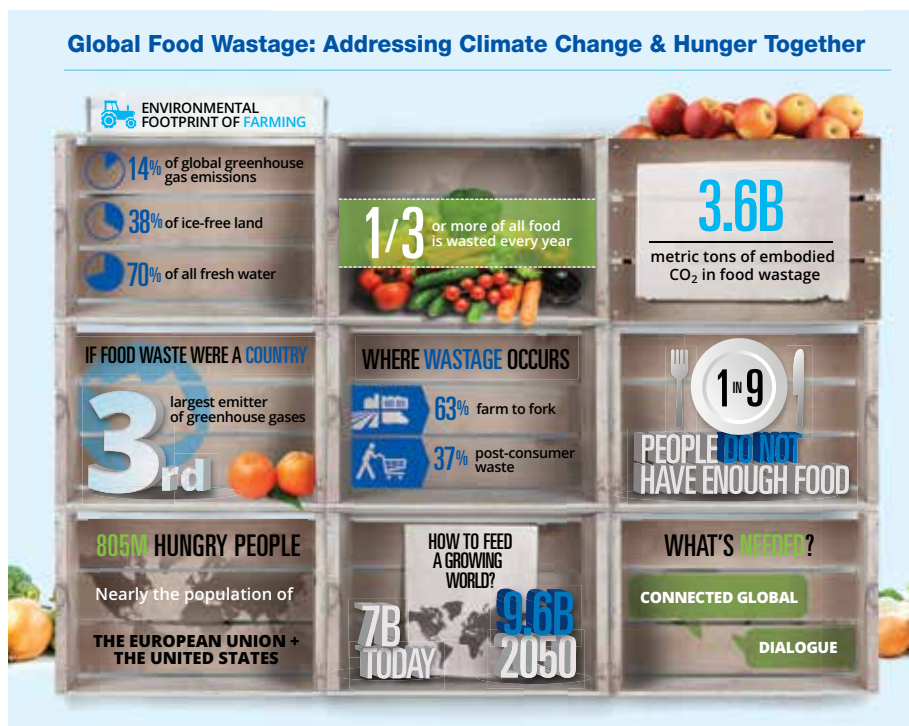
In 2014 at the UN Secretary-General’s Climate Summit, a coalition of major companies active in the global cold chain announced the organization of the Global Food Cold Chain Council (GFCCC). The initiative seeks to reduce greenhouse gas emissions in the processing, transportation, storage, and retail display of cold food and to stimulate demand for climate-friendly technology.

According to a study commissioned by GFCCC, expansion of the food cold chain in developing countries could reduce food waste greenhouse gas emissions equivalent to a 50 percent reduction in the carbon footprint of current food waste by the year 2050.

“There are significant opportunities for reducing greenhouse gas emissions by expanding the cold chain, particularly in developing countries, and improving the energy efficiency of the equipment being utilized,” GFCCC Executive Director Kevin Fay notes. “A more climate-friendly cold chain will not only reduce its own carbon footprint, it will extend food supplies to feed more people and reduce the estimated 3.3 billion metric tons of CO<sub>2</sub> equivalent in food waste every year.”

## Solutions to Waste

Small steps can make a big difference. Shaw notes that since one-third of all food that is wasted happens at the consumer level, awareness campaigns are needed, and he cites as an example, the United Kingdom’s WRAP program that has reduced household food waste 20 percent in the last 10 years.



A snapshot of global food waste. (Photo courtesy of Carrier Transicold & Refrigeration Systems.)

Consumer preference is another opportunity to reduce waste. “As urbanization grows around the world, it gives rise to more affluent consumers who are looking for safe, nutritious and diversified food. This means greater demand for growers and supply chain operators to invest in cold chain equipment,” Shaw says.

“In addition, consumers in developed countries can do a little less out-grading of their own when it comes to selecting fruits or vegetables. To reject a fruit or vegetable because it’s a bit misshapen is to contribute to food waste,” Shaw notes.

In the United States, one 3PL is making a big difference at the local level.

“Everyone in this business knows there’s always been millions of pounds of barely damaged food that gets stuck in the cold chain because of labeling errors, or over production or some other issue that makes it not worth shipping because it will get rejected by the carrier or consignee,” says R. Scott Whiting, Vice President/General Manager of Merchandise Warehouse.

“We didn’t want to throw this food away so we collected it and, with permission from our customers, established relationships with local food pantries that pick it up, put it in their own freezers and distribute it to people in need,” Whiting says.



Kinnow mandarins that had been maintained and delivered from cold storage on a refrigerated truck. (Photo courtesy of Carrier Transicold & Refrigeration Systems.)





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Left: The Midwest Food Bank truck ready to be loaded with donated food items from Merchandise Warehouse. (Photo courtesy of Merchandise Warehouse.)

Right: Jeremy Baynai (left), Director of Operations, Midwest Food Bank – Indianapolis, greets Scott Whiting, Merchandise Warehouse, during a pick up of donated food from the 3PL. (Photo courtesy of Merchandise Warehouse.)

“It’s invaluable to receive donations from local donors and manufacturers, and Merchandise Warehouse’s donations are a great example of the collaborative efforts going on within business, government, and the public and private sector to get the most from the food that travels across the country,” observes John Whitaker, Executive Director of the Midwest Food Bank, the recipient of Merchandise Warehouse’s donations. “Last year, Merchandise Warehouse donated 567 pallets of frozen product equivalent to \$766,753 of donated food – that’s quite an amount!”

“Agencies that distribute food sometimes have a hard time getting donations from the manufacturers, but the 3PLs know what’s there, what’s not moving or no longer available for normal distribution but could be available for donation,” notes Whiting.

Not content with his own company’s efforts, Whiting dreams of a more concerted and collaborative industry effort to identify food that could be distributed to those in need. “I know there are probably a lot of other 3PLs out there doing what we’re doing but it’s ad hoc – my vision is to roll out a national program with five major customers/manufacturers and 10 3PLs and a group of qualified food banks and use existing technology to put together a system that could make identifying food ready for donation, easy and ubiquitous.”

The cold chain can present some complex challenges, Shaw admits. “For example, we see multiple hand-offs from grower to packer

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Richard Tracy, GCCA Vice President of International Programs for the Global Cold Chain Alliance (GCCA), moderated a session at the “World Cold Chain Summit to Reduce Food Loss” that focused on the challenges of developing the cold chain in emerging markets and reducing food losses along the entire global food supply chain.

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to food distributor and finally to the retailer, such as a restaurant or supermarket. Digital technology is beginning to change the way we manage this complexity. The more we can learn about where, when and why food loss occurs, the better we can be at closing and correcting the gaps in the cold chain.”

Shaw adds that Carrier is giving a voice to the issues of food waste and climate change by actively participating in cold chain conferences and webinars on reducing food waste, and through the publication of the book “Food Foolish: The Hidden Connection Between Food Waste, Hunger and Climate Change” (\$9.95 on amazon.com -- all proceeds will be donated to food charities), and by providing input to publications and websites such as GCCA’s *Cold Facts*.

Shaw says that at Carrier, the goal is to leverage digital technology to break down the information barriers, so they can better understand what happens to food as it moves along the cold chain from farm to fork, which gives greater visibility to their customers to help them prevent food losses from occurring.

For the third consecutive year, Carrier organized the “World Cold Chain Summit to Reduce Food Loss,” which was held in Singapore in December 2016. The event brought together more than 160 delegates, from 35 nations, including global leaders in the supply chain, private sector, academia, government and NGOs to discuss and develop scalable, sustainable solutions to expand and improve the cold chain to reduce food loss and waste.



Richard Tracy, GCCA Vice President of International Programs for the Global Cold Chain Alliance (GCCA), moderated a session focused on the challenges of developing the cold chain in emerging markets and reducing food losses along the entire global food supply chain. Tracy was joined by the following presenters: Dr. Majeed Mohammed, Senior Lecturer, Crop Production, Department of Food Production, The University of the West Indies; Annette Young, Supply Chain Director, Jollibee Foods Corporation - Yiguo (ExFresh); and Dr. Sylvain Dabade.

Also, the European Union's Platform on Food Losses and Food Waste came together for its inaugural meeting on November 29, 2016. This group, made up of 33 public entities and 37 representatives from the private sector, will be the key forum at the EU level to help the players identify and implement food waste prevention solutions and to achieve the related Sustainable Development Goals. The Platform further aims to support all participants in rethinking a food value chain where food waste is minimized and the value of food produced is maximized.

The European Cold Storage and Logistics Association (ECSLA) was one of the 33 public entities selected to represent the European temperature controlled storage and logistics sector in the Platform as it represents companies that form a crucial link in the cold chain and the temperature controlled supply chain. GCCA members gain valuable government affairs and advocacy representation at the EU level via GCCA's membership with ECSLA.

"Simply put, if we can reduce and eliminate food loss and waste, we'll have consumed fewer natural resources, created fewer greenhouse gas emissions, helped to lift nascent and struggling economies, and the ultimate prize, feed more people with healthy, nutritious meals," concludes Shaw.

"There's really no reason why it can't be done. The world already produces enough food to feed 10 billion people. We just have to be better stewards of what we produce – and create, improve and maintain a sustainable infrastructure to support it." ☞

**ALEXANDRA WALSH** is Vice President of Association Vision and Managing Editor of COLD FACTS.

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*Winner of the IACSC Built by the Best Award*

**By Karen E. Thuermer**

**W**arehousing and logistics company Lineage Logistics prides itself on building and delivering sophisticated, customized, and dependable cold chain solutions. The second largest cold storage operator in the world, Lineage contracted with Fisher Construction Group to design and build an approximately 250,000 square-foot greenfield cold storage and food processing facility in Santa Maria, California, that would meet the needs of Lineage's client, Titan Frozen Fruit, and be a flagship facility.

Unique to the project is its implementation of partnering the third party logistics operator's freezer to a food processor. Fisher's submission statement for the International Association for Cold Storage Construction (IACSC) "Built by the Best Award" outlines: "From construction to operation, this project benefits from shared resources. Combining processor and cold storage gains syner-

gies such as: Shared refrigeration system -- allowing the processor (Titan Frozen Fruit) to have their IQF and water chilling refrigeration needs managed by an on-site refrigeration expert (Lineage Logistics). Better serviceability and communication -- allowing 24/7 real time storage and retrieval services to the frozen food processor. Shared construction costs -- both processor and cold storage provider ben-

efited from an increase in 'scale of economy' pricing."

Eric M. Duyck, Vice President Operations, Titan Frozen Fruit, stated, "Everything about our facility is noteworthy. From a processing standpoint, Santa Maria is the center hub for strawberries in California. This location is ideal for Titan because the raw materials are local. The cold storage partnership with Lineage is also critical to Titan's continued success. Being able to ship all of our finished goods next door is critical to us being able to operate at lower costs."

"We wanted this facility to be a leader in the fleet of Lineage's facilities," said Scott Guimond, Project Manager, Fisher Construction Group.

Among the requirements for designing and building the Lineage facility were creating a beautiful and functional facility that gave new meaning to full service and showcased high standards for state-of-the art food processing, maximizing pallet positions, completing the project in time for Titan's





Left: Berries are cleaned and sorted before entering the clean processing room through wall opening. (Photo courtesy of Fisher Construction Group.)

Right: Titan processes berries in a state-of-the-art environment designed to reduce the possibility of contamination and withstand the rigors of routine washdown. (Photo courtesy of Fisher Construction Group.)

strawberry harvest season, finding a solution for waste water, and making it LEED certified.

“At the time of this project, Lineage did not have a LEED certified facility,” revealed Guimond. “It was important to Lineage that any new greenfield project incorporate the best and latest in current cold storage standards.”

Praising the project, Duyck added, “Since day one, we have been proud to showcase our facility and always receive great feedback from our customers. The LEED certification is a great benefit because sustainability in our industry is important to our customers.”

### Fast Track

Central to the facility is its location in Santa Maria. “Globally speaking, it has an extremely rare environment that is perfect for growing strawberries,” commented Guimond. “Most of the strawberries produced in April hit the fresh market, but the processing market is not far behind. We knew that for this whole deal to work, Titan would have to be processing

strawberries eight months after breaking ground.”

“It was critical to Titan’s success to be ready and processing at the start of the 2014 season,” reported Duyck. One of Titan’s biggest requirements was constructing a state-of-the-art food processing facility in advance of the projected June deadline.

Making it work was how Fisher was able to fast track the project, get all permits in place, and construct the facility to be ready at the beginning of the strawberry season.

“We broke ground in October 2013 and were processing by May 2014,” Duyck said. “Fisher Construction Group managed the numerous sub-contractors on the job and facilitated the day-to-day details in order to keep the project on time, on budget, and on schedule.”

The project was multi-phased and done during and after normal working hours to accommodate the deadline. “Fisher was able to obtain all the necessary permits without

a delay in the schedule,” Duyck commented. “The project management was excellent and, in my opinion, is the reason why this project was so successful.”

Permitting was broken down into five phases: demo/grading; utilities; foundations; structure; and tenant improvement build out.

Adding to its complexity, the facility was built adjacent to a housing development that was under construction.

Particularly important to both Lineage and Titan was that Fisher absolutely maximized the potential of their property. To do so, the building footprint was maximized on a 10-acre site and considerable effort was given to the spaces under the roof.

“Our design staff was challenged with being creative and strategic with the design approach,” Guimond said. Extreme care was given to provide a processing space that maximized production and streamlined product flow.



Top: Lineage Logistics freezer. (Photo courtesy of Fisher Construction Group.)

“On the warehouse side, we had to be hyper-efficient relative to maxing out the cube,” he added. “The rack and material handling plan was laid out with intent to utilize every cubic foot.”

### Challenges and Solutions

Among the biggest challenges facing the project was schedule demands. “Many subcontractors dropped out of the bidding process when they understood the schedule demands,” Guimond revealed. “We had to align ourselves with the very best project partners and only those who shared our vision with Lineage and Titan that this MUST be done.”

Complicating matters was the fact that while Titan’s owners were experts in processing strawberries, they had never built a greenfield project. “We were thrilled that they were in agreement with Lineage that we were the right general contractor solution for their exciting project,” Guimond said. “We had the unique challenge of working alongside Titan in the design phase to create meaningful and purpose-driven spaces that were tailored to their needs.”

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Given that Titan’s goal was to operate from the best strawberry processing facility in the world, Fisher addressed every detail with the intent of providing a sanitary processing environment.

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Other challenges included finding a wastewater solution for the project. “Originally, the data projected dictated an aerobic digester to mitigate the high BOD (sugar content),” Guimond explained. To address the issue, Fisher hired a wastewater consultant with whom they had worked with before, to formulate an alternative solution. According to Guimond, that effort saved the project a lot of capital and valuable on-site real estate.

“Through the use of our consultant we were able to provide a mechanical screening solution that quickly screened out solids before they had a chance to disengage in the waste water and increase the demand for water processing,” Guimond explained. “We also had to incorporate an effective processing room drainage plan that promoted a clean

and efficient work environment. Finally, a commitment from Titan to help solve this problem operationally by utilizing all of the latest/greatest processing equipment and processes helped minimize plant spills and product waste from being swept into the drains.”

Given that Titan’s goal was to operate from the best strawberry processing facility in the world, Fisher addressed every detail with the intent of providing a sanitary processing environment. “Everything in the process space is made for wash-down with positive drainage,” Guimond said. “Everything from the process equipment to the drop IMP ceiling to the sloped curbs was constructed with precision and innovation to maintain the most sterile environment.”





This included adding special diffusers to supply air ducts to keep air from getting violent and blowing anything around. “The process rooms have positive pressure to ensure that items are always leaving the process space and never advertently getting blown in,” he explained.

In recognition, Fisher Construction Group won the IACSC “Built by the Best Award.” The award acknowledges industry-changing innovations and projects that exceed customers’ expectations, positively impact and grow the cold chain worldwide, and contribute to the larger society through food safety, trade development, and job creation. Initiated by the Global Cold Chain Alliance (GCCA), the IACSC award also recognizes project teams that move the industry forward in regards to the design and construction of temperature-controlled facilities. ☞

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Top: Engine room powering both Titan Frozen Fruit and Lineage Logistics.  
(Photo courtesy of Fisher Construction Group.)

Bottom: Exterior of Titan Frozen Fruit, west end of the joined facility.  
(Photo courtesy of Fisher Construction Group.)



# MAKE PROFESSIONAL DEVELOPMENT A PITCH FOR NEW TALENT

*Millennials respond to career planning,  
mentors and continuous learning.*

By Sheryl S. Jackson

**T**he challenge of attracting new talent and retaining that talent to develop industry leaders of the future is not unique to the cold chain.

The cold chain industry, however, does face talent challenges not faced by others, points out Kathryn Mullen, Senior Director of Talent Management for Americold. “The average age of cold chain employees is 55, which means we are an aging industry,” she explains. “Our industry is not a career choice for many young people while they are in school.” In fact, students are unlikely to consider opportunities surrounding the technological innovation that’s rapidly advancing the industry right

now, even though they are already consumers of supply chain trends such as online grocery orders and home delivery of meal kits, she adds.

Lack of awareness of career opportunities in the cold chain means the pipeline of new talent entering the industry is not sufficient to replace experienced leaders as they reach retirement.

Even though the industry may not be the first glamorous or exciting opening new grad-

uates desire, Mullen says the industry has a lot of positive opportunities. “There are many leadership opportunities for young people as the industry advances towards the Internet of things and continues to expand,” she says. For this reason, it is important for cold chain businesses to develop relationships with local schools, offer internships, and participate in career fairs that focus on corporate as well as warehouse roles.

When Colin Longmuir graduated from school in Portland, Oregon, in 2009, finding any job was difficult during the recession. “I was not thinking about a specific career path or industry. I was focused on finding a job that provided a paycheck that would cover rent,” he says.



*The first graduating class of the WFLO Institute: Latin America. From left to right, Salvador Figueroa, Almatras Dominican Republic; Elvis Quezada, Almatras Dominican Republic; GCCA President and CEO Corey Rosenbusch; Juan Carlos Hencker, Refrisistemas Costa Rica; and Raul Hernandez, Precisa Frozen Chile.*

Longmuir, a warehouse manager with Henningson Cold Storage Co., winner of the 2016 Don Schlimme Award, and a GCCA Global NextGen Finalist, discovered cold storage opportunities at a career fair. “I fell into this industry, but I stayed because my perspective changed,” he says. Although he and classmates had an idealized vision of working for companies they considered innovative – Nike and Adidas, for example – he realized that he had more opportunities to advance his career in the cold chain.

“I knew nothing about cold storage but Henningson’s management associate training program gave me the opportunity over two and one-half years to work in different locations and every department,” says Longmuir. “The program changes as you go through it, with additional layers of responsibility and leadership added as you progress.”

In addition to the management training program, Longmuir also participated in a Portland State University Program – Today’s Managers, Tomorrow’s Leaders – to gain additional leadership training. He had already been a warehouse manager for several months and says he wished he had taken the course earlier. “I learned I had done some things right, but I also learned how I could have better handled some situations.”

For industry-specific training, Longmuir participated in the WFLO Institute, an educational program that provides a 360-degree view of the cold chain industry. Students attend four-day seminars for three years. “I was the youngest person in my Institute class but when I recently visited an Institute session, I noticed that there are many more young people in the classes.”

Professional development plays a key role in employees’ decisions to stay with a company, but employees need an opportunity to apply their knowledge and gain experience, suggests Mullen. “I believe that professional development is 10 percent formal training, 20 percent mentor feedback and 70 percent on-the-job, which means stretch assignments that enable people to use the knowledge they gain in classes or feedback sessions,” she says. “This means that supervisors and managers must work with each employee to identify their career goals and appropriate training opportunities that they will be able to use to reach those goals.”

When asked about the role professional development has played in his professional growth, Ing. Juan Carlos Hencker, Regional Manager for Central America and the Caribbean for Refrisistemas Industriales de CentroAmerica and a graduate of the WFLO Institute: Latin America, points to the opportunity to work on cold chain projects at an international level. As part of a United States Department of Agriculture project in the Dominican Republic, Hencker and his team presented a study of five products in the cold chain that were important to the country’s economy. “I traveled to different countries to provide training in refrigeration, as well as safe and efficient handling of products,” he explains. “I was able to share my knowledge but [throughout the process] I have also learned a lot.”

Hencker believes ongoing professional development is key to developing a passion for a career in the industry. “The main advice I give is to have passion and commitment for your career, want it, and feed it every day

with new knowledge and experience,” he says. “There is always something new to learn and to know.”

Just as Hencker has found professional satisfaction in teaching as well as learning, so has Darnell C. Akers, warehouse manager for Lineage Logistics in Virginia. He attended the WFLO Institute from 2006 to 2009 to supplement the online and local professional development programs he participated in as part of his career development. He is still involved in the Institute today – serving as a class adviser.

“I serve as a mentor to students, helping them outside the class,” explains Akers. In addition to helping students learn how to strengthen their professional network, he shares his experiences and encourages them to talk as a group about the obstacles they face, as well as solutions they can share with others.

Although there are many different types of online courses, local college offerings and professional seminars, Akers recommends a variety of professional development pursuits. “The WFLO Institute is focused on the cold

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### WFLO Institute Latin America

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July 9-13, 2017

chain industry but the greatest benefit is that participants are not just supervisors or managers in one or two departments. People from administrative offices, food safety departments and operations are present, so you get a broad range of perspectives on the business.”

As industry members reach out to local colleges and universities, it is important to highlight the desire for innovation and imagination as well as professional development and advancement opportunities in the company and the industry, advises Mullen. “Millennials want to express their ideas, receive feedback and recognition, build professional relationships, and to have a career that offers promotions and leadership positions.” Com-

panies that offer formal and informal mentor programs, management training programs, and access to professional learning will attract new talent, she predicts.

Kane Thomason, Inbound Operations Manager for XPOLogistics, 2016 United Kingdom Young Manager of the Year and GCCA Global NextGen Finalist, points out that it is not enough to offer professional development and growth to attract new employees – a company must make an ongoing commitment to developing new leaders.

“Keeping young talent is tough for a lot of companies,” Thomason admits. “For me, working for such a large company has been

great as I’ve had lots of opportunities. I feel everything that I’ve been promised, I have received,” he says.

“However, lots of companies do over promise and under deliver when it comes to developing their young talent. I know lots of people who have been disappointed with the development they’ve had within companies, especially when they compare this to what was promised and what actually happened,” says Thomason. “As an industry, we have a responsibility to set the right level of expectations. For example, working in a frozen food warehouse isn’t going to be very glamorous; however, it can be very enjoyable and extremely rewarding.” ❄️

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# TAKING THE COLD FROM SOUTH TO NORTH

## *Comparing European cold chain models.*

By Alexandra Walsh

**T**he European cold chain, from the sunny southern tip of Greece to the northern reaches of Sweden, stretches approximately 3,000 miles – the same distance as from the balmy tip of Florida to northern Washington state. But unlike the United States, where the primary difference in the cold chain between one end of the country and the other is whether the shipments are apples or oranges, Southern European and Northern European cold chains are quite dissimilar.

### **The Southern Model**

Controlled temperature storage and logistics business models within Southern Europe vary in their operations, tactics, and strategies based on the regional needs of their customers, suppliers or buyers, regional produce, government held and privately held infrastructure, economic stability, and imports and exports, according to Tasos Charitonidis with Alaska Cold Stores, a food logistics and cold storage company headquartered in Athens, Greece.

“Third party logistics services in Southern Europe range from pure inventory management and transportation to reverse logistics, data analysis, new add-on products and services such as mobile platforms for inbound and outbound orders placement, remote management, food technology, and industrial refrigeration,” Charitonidis adds.

“What makes us different from other regions in Europe is the high quality commodities we produce such as olives, oil, fish, cheese, wine and fruits, and vegetables,”

Charitonidis notes. “What is also true is that Greece’s cold chain is not seen as having the capacity – yet – to welcome big loads and demanding logistics.”

“The main difference between the northern and southern markets is that the latter is smaller, it’s afraid to pay at the beginning, so it is stuck with insourcing its cold storage and logistics needs,” says Charitonidis. “It is also true that a sense of identification is a significant factor in countries like Greece, Italy, Portugal, and Spain. Retailers and small to medium enterprises that sell directly to consumers are those most likely to insource. These companies may have not realized or digested that their main objective is sales. Food processors are taking baby steps towards remote inventory management and outsourcing because they don’t have the money to invest in packaging or processing lines.”

Because of the lack of outsourcing to 3PLs and the subsequent dearth of competition among Southern European logistics companies, Charitonidis says an understanding of quality control, benchmark analysis of faster moving UPCs, and other forms of inventory

management that facilitate sales is wanted.

He adds that another issue is that transporting temperature-controlled products in the south relies mainly on family businesses that are unable to coordinate efforts to easily and systematically choose the optimum arrangement for grouping loads onto trucks.

Alaska Cold Stores stands out in the region as its core competencies include food safety, inventory management for retailers and food processors, and assisting customers in improving their performance in terms of quality control for fresh produce.

“Over the past 10 years, we have come up with additional services taking advantage of the JIT (Just in Time) concept in distribution and packaging,” Charitonidis explains that they persuade distributors, importers and exporters that if their produce is not pre-sold, they may choose the option of packaging it in batches as sales evolve in order to eliminate the risk of loss in case packaged product remains unsold.

### The Northern Model

Similar to those in the south, Northern European cold chain business models are very diverse depending on the type of client.

Paul Bosch, a food and agricultural supply chain analyst for Rabobank, points out that the first of three key storage functions for Northern European operations is upstream in the cold chain, where farmers use local cold storage typically dedicated to their output, for instance for fruit and vegetable storage.

Bosch adds that the next business model for cold chain is to support food manufacturers who need space for their raw materials and processed products and rent this from larger warehouse operators. These operators offer flexibility and various capabilities such as packaging.

The third business model used by cold chain providers is to support retailers. These cold chain businesses are focussed on efficient transport and use storage to support the distribution, rather than the other way around. Sometimes the retailers manage and operate the DCs themselves and sometimes they are

managed by third party logistics and cold storage providers.

“The needs (speed, skus, planning) grow in complexity from upstream to downstream,” Bosch notes. “This means more contracts and longer relationships as replacing logistics partners becomes more difficult.”

Bosch believes there are three key differences between northern and southern cold storage models.

First, modern supermarkets in the north have a bigger share in total food purchasing than the smaller grocery markets in the south, so there is a bigger potential market for logistics providers in servicing retail.

Second, most logistics clusters are in Northern Europe so competition is fiercer, and transport distances are shorter as more people live close together, however, Bosch notes that traffic jams are an increasing problem. “Margins can be quite low in transportation as the amount of suppliers make it a sort of commodity. Many companies like to stay away from this, focusing on specific food subsection clients.

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And third, Northern Europe has more trade-oriented cold stores because of its significant position in global perishable trade. "Northern Europe imports a lot of goods that are sent to all of Europe, which is a favorable position to be in because it gives warehouses the opportunity to handle products from different seasons and get higher capacity utilization, which in turn, could be used to grow revenues or reduce costs," Bosch says.

### Challenges Ahead

Charitonidis says one of his top challenges is to elevate the standing of 3PLs. This can be done by promoting the difference between the benefits and services provided by third party logistics companies from investors that rent cold storage to merchants or transporters that use cold stores to temporarily store merchandise before it's reloaded on the truck.

His focus is also on encouraging more research and development in food technology issues and the use of carbon dioxide as a refrigerant, insurance issues regarding storage and transportation, and effective policy that

would allow his company to respond quickly to market demands and form easy and ergonomic freight forwarding schemes.

And finally, his last challenge is to come up with specific measurable and achievable milestones for forming new products.

"We want to get more people to see the scientific way of deploying and commissioning multi-dimensional optimization processes in load management with respect to food technology issues."

Bosch believes one of the top challenges facing Northern European cold storage and logistics facilities lies with retailers as they see the importance of urban supermarkets decrease, and the importance of logistics rise. "I believe retailers will invest increasingly in logistics."

Also challenging is changing international trade flows. "Not only are trade agreements uncertain, but there is also the rise of other ports/hubs and new routes for perishables to contend with."

And then there's insourcing. "Automation could make the cost of warehousing less costly and enable food companies to create service and revenues next to a more or less stagnant food market -- if its not volume, it needs to be value."

But Bosch admits that food companies managing their own automated warehouses is still a big challenge for most because of the significant capital and expertise required. ®

**ALEXANDRA WALSH** is Vice President of Association Vision and Managing Editor of COLD FACTS.

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# ASSOCIATION NEWS

## NEWS ABOUT GCCA CORE PARTNERS

The educational content for **GCCA's** 20th European Cold Chain Conference in Brussels, March 8-10, 2017, was recently announced. Over 100 high-level professionals representing the temperature controlled supply chain industry including cold storage, transportation, logistics, distribution, and construction are expected to attend. Presenters will share real-life experiences and challenges on topics including Refrigeration & Energy, Operational Excellence, Administration & Human Resources and Innovation & Trends.



The 2016 **IARW** Productivity & Benchmarking Survey Results are now available to all warehouse members who contributed their data to the online benchmarking platform over the past few months. Only companies that complete the online survey tool receive a complimentary copy of the executive summary. In addition, the online platform allows for customized reports to be generated letting companies "slice and dice" their data for additional value. Access the GCCA website to enter your company's facility into the IARW's online Productivity & Benchmarking platform.



In 2017, the **WFLO** Institute will be offered in three locations to help your team get the world's best cold chain logistics training. The first Institute will take place February 18-22 in Atlanta, Georgia, followed by the WFLO Institute West taking place in Los Angeles, California, March 18-22 and finally the WFLO Institute Latin American (conducted in Spanish) taking place in July 2017 in Mexico City, Mexico. For U.S. participants, choosing between the East and West Coast Institutes will allow for less facility downtime and lower travel costs. The East and West Institutes feature the exact same program, focusing on cold chain management, customer service, employee benefits, employee safety, food safety, and warehouse operations.



Lineage Logistics, Fisher Construction Group, and Titan Frozen Fruit were the recipients of the very first **IACSC Built by the Best Award**. The announcement was made during the Opening General Session of the 36th IACSC Conference & Expo, which took place November 10-12, 2016. The project team conducted a joint keynote presentation during the event. The 216,777 square-foot LEED certified facility includes 151,000 square feet of cold storage and dock space and 65,000 square feet of dedicated onsite food processing for Lineage's tenant Titan Frozen Fruit. One of the more unique factors of the project is the shared resources and expertise between the third-party logistics company and the food processor. More information can be found in the feature article on page 16 of this issue of *Cold Facts Magazine*.



**IRTA** is presenting an education session during Cargo Logistics Canada, February 8-9, 2017, in Vancouver, Canada. The session will focus on the Best Practices Guides that IRTA created to assist members in responding to the U.S. Food and Drug Administration's (FDA) final rule for the Sanitary Transportation of Human and Animal Food (STF). In addition, IRTA will host a Cold Chain Executive Connection during the event, bringing together cold chain professionals from both the United States and Canada for a discussion on trends, opportunities and challenges facing the temperature controlled transportation industry. ☞



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

**Q:** Does anyone have knowledge of FDA accepting any level of freezing for a kill step for Listeria? I have a customer that stores sunflower kernels and is being required to steam treat the kernels as a "kill step" for microbes, mainly listeria. They have inquired about freezing to achieve the "kill step." Everything I have researched to date shows that listeria can be stopped at frozen temperatures but does not die, and will resume growth once the temperature rises.

**A:** Freezing will not kill Listeria, which is why they are requiring the customer to use steam on the sunflower seeds to eliminate the Listeria. Also, the steam process must be validated to ensure that the steam process being used meets the required time/temperature parameters for destruction of Listeria. An endpoint temperature of 165°F/74°C will ensure elimination of Listeria.

*Answer provided by Dr. Michael Jahncke, Chairman of the Scientific Advisory Council from Virginia Seafood Agricultural Research & Extension Center. To contact the SAC regarding a food storage/handling or logistics question, post in the GCCA Online Community at [community.gcca.org](http://community.gcca.org) or email [inquiry@gcca.org](mailto:inquiry@gcca.org).*

### WFLO SCIENTIFIC ADVISORY COUNCIL

The WFLO Scientific Advisory Council (SAC) 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 Partners. SAC members are highlighted below.

To contact the SAC regarding a food storage/handling or logistics question, post in the GCCA Online Community at [community.gcca.org](http://community.gcca.org) or email [inquiry@gcca.org](mailto:inquiry@gcca.org).

#### SAC CHAIRMAN AND WFLO SCIENTIFIC ADVISOR

**Dr. Michael Jahncke**, Virginia Seafood Agricultural Research & Extension Center  
Expertise: Fish Products

#### SAC MEMBERS

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Expertise: Dairy Products

**Dr. Barbara Rasco, PhD JD**,  
Washington State University  
Expertise: Food Safety, Food Safety Regulations

**Dr. Elhadi Yahia**, United Nations Food and Agriculture Organization, Cairo, Egypt  
Expertise: Postharvest Technology of Perishable Foods

**Kees Jan Roodbergen**,  
University of Groningen  
Expertise: Logistics and Operations Management

# MEMBER NEWS

## NEWS FROM MEMBERS OF GCCA CORE PARTNERS

**APEX COLD STORAGE** received Safe Quality Food Certification, Level 3 from the Safe Quality Food Institute for its Kent, Washington facility, for the second year in a row.



**CONGEBEC** Facility Manager Jeffrey Porter passed away on Thursday, October 27, 2016. Congebec Director Gabriel Pedneault said that, "Jeffrey is a big part of Congebec's story. He was hired on August 16, 1982, by Salaison Nord Cold Storage, which was acquired by Congebec in 1997. Jeff accumulated over 34 years of service in the Boucherville and Montreal facilities." Porter is survived by his wife Sylvie Lechasseur and his children Kimberly and Scott.



**LINEAGE LOGISTICS, LLC** received the Innovation Award and Excellence in Customer Service Award from the SUBWAY restaurant chain and its franchisee-owned purchasing group, the Independent Purchasing Cooperative, at the group's annual convention earlier this year.



**NORDIC LOGISTICS AND WAREHOUSING**, a member of AGRO Merchants Group, will develop a new cold storage and repack facility

in Savannah, Georgia. In April 2016, AGRO and Nordic completed a 200,000 square-foot expansion to its existing Savannah facility, representing the second investment in the market. The new facility, which will initially be built to 175,00 square feet, will be adjacent to the current Nordic site with additional land available for future expansion.



**STELLAR** promoted Brian Kappele to Executive Vice President, Food & Beverage Facility Services. A 17-year veteran of the company, Kappele will oversee Food & Beverage Facility Services, including Refrigeration Services. Additionally, Brian Reeves was promoted to Vice President of Operations in Refrigeration Services. Reeves will oversee all refrigeration project management, automation and controls, commissioning, and refrigeration field services.



**UNITED STATES COLD STORAGE (USCS)** was recognized as the "2015 Facility of the Year" by Unilever United States Inc., for its Hazleton, Pennsylvania, warehouse. For the third year in a row, Unilever also selected USCS Hazleton as "Temperature Controlled Warehouse of the Year," based on its performance against a range of key performance indicator criteria. They included items related

to shipping and inventory accuracies, truck turn times and cost control.



**USCS** hired Matthew Hughes as an Assistant Manager for the company's dedicated facility in Covington, Tennessee. Completed in January 2015, the 9,010,000 cubic-foot facility maintains a -20 degree Fahrenheit environment for ice cream storage and is dedicated to an adjacent ice cream manufacturing facility owned by Unilever. The operation this year was awarded LEED Gold status in the U.S. Green Building Council's Leadership in Energy & Environmental Design (LEED) program.



**VIKING COLD SOLUTIONS** announced that a Southern California utility, along with an independent third-party energy management firm, ASWB Engineering, completed a field demonstration study of the Viking Cold Thermal Energy Storage system. The study verified a reduction in electricity consumption of 30 percent and 39 percent in two separate low-temperature cold storage facilities in the San Diego area. Based on the results of this study, the utility and ASWB recommended that California utilities adopt the technology into their energy efficiency incentive programs. ☞

## 2017 CALENDAR

**FEBRUARY 18–22, 2017**

**53rd WFLO Institute – East**

Atlanta, Georgia, United States

**MARCH 8–10, 2017**

**20th GCCA European Cold Chain Conference**

Brussels, Belgium

**MARCH 18–22, 2017**

**53rd WFLO Institute – West**

Los Angeles, California, United States

**APRIL 23–25, 2017**

**126th IARW-WFLO Convention**

Dana Point, California, United States

**JUNE 13–15, 2017**

**Global Cold Chain Expo**

Chicago, Illinois, United States

**JULY 9–13, 2017**

**2017 WFLO Institute: Latin America**

Mexico City, Mexico

**JULY 31–AUGUST 2, 2017**

**2017 Assembly of Committees**

Washington, D.C., United States

**NOVEMBER 2–4, 2017**

**37th IACSC Conference & Expo**

Scottsdale, Arizona, United States

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



# NEW MEMBERS

## NEW MEMBER COMPANIES OF GCCA CORE PARTNERS



### IARW-WFLO WAREHOUSES

**Abreu E Lima Logistica Ltda.**

Abreu e Lima, Pernambuco, Brazil

**Emirates Logistics India Pvt. Ltd**

Mumbai, Maharashtra, India

**Finlease (Australia) Pty Ltd**

North Sydney, New South Wales, Australia

**Madden Cold Storage**

Harden, New South Wales, Australia

**Midwest Refrigerated Services, LLC**

Kansas City, Kansas, United States



### WFLO MEMBERS

**Grocery Delivery E-Services USA, Inc.**

New York, New York, United States

**Inghams Enterprises**

North Ryde, New South Wales, Australia



### IARW ASSOCIATE MEMBERS

**AB Phillips**

Moorabbin, Victoria, Australia

**ABAD Exports Private Limited**

Kerala, India

**Coldman Logistics Private Limited**

Bangalore, India

**Combilift Australia**

Dry Creek, Victoria, Australia

**Dexion Australia Pty Ltd**

Seven Hills, New South Wales, Australia

**GNB Industrial Power**

Mount Waverly, Victoria, Australia

**Pacific Consumables Ltd**

Onekawa, Napier, New Zealand

**Precision Labour Hire**

Victoria Point, Queensland, Australia

**Professional Pallett Management**

Springfield, Queensland, Australia

**Quorum Secutity Systems Pty Ltd**

Silverwater, New South Wales, Australia

**Ray Hodge Consulting**

Yarraville, Victoria, Australia

**Select Coatings**

Lilydale, Victoria, Australia

**SensaData Pty Ltd**

Mordialloc, Victoria, Australia

**Xtralis**

Bentleigh East, Victoria, Australia



### IACSC MEMBER

**Reindycom**

Leon, Guanajuato, Mexico

**Therma-Stor LLC**

Madison, Wisconsin, United States

### IACSC ASSOCIATE MEMBERS

**Coldman Logistics Private Limited**

Bangalore, India

**LiftMaster**

Elmhurst, Illinois, United States

**PNA Construction Technologies**

Atlanta, Georgia, United States



### IRTA MEMBERS

**ABAD Exports Private Limited**

Kerala, India

**Armstrongs Driver Education**

Thomastown, Victoria, Australia

**Emirates Logistics India Pvt. Ltd**

Mumbai, Maharashtra, India

**Link Cold Storage**

Wangaratta, Victoria, Australia

**PK Refrigerated Logistics**

**& Services Pty Ltd**

Clayton, Victoria, Australia

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# COOL PEOPLE

PROFILING INFLUENTIAL PEOPLE CONNECTED TO THE COLD CHAIN INDUSTRY



## PETE PEARSON

Director, Food Waste  
World Wildlife Fund

At the World Wildlife Fund (WWF), Pete Pearson works on food waste prevention and food recovery, helping businesses understand the intersection of agriculture and wildlife conservation.

**CF:** Your background is in sustainability programs in the retail grocery sector — how did you end up at WWF?

**PETE PEARSON:** I worked as a sustainability director for one of the largest grocery chains in the United States. I helped create zero-waste programs for all our stores and started efforts to expand our sustainable product offering. During my time working in grocery retail, we collaborated with WWF on our sustainable seafood and climate change (carbon reporting) initiatives. When the food waste position was advertised at WWF, I stumbled on it by chance and it fit.

**CF:** Explain the intersection of food waste prevention and recovery and wildlife conservation?

**PP:** It's estimated 30 to 40 percent of what we grow in the United States is lost or wasted throughout the food system. Preventing food waste in a home, school, or business may be the most impactful act of conservation a

“Increasing food system efficiency and reducing consumer waste may be one of the most daunting redesign challenges of the 21st century.”

person can engage in. That's because food — how and where it's produced — represents one of the greatest threats to biodiversity. There is much we can do to help developing countries improve their cold chains to reduce loss at post-harvest and in transportation. However, in countries like the United States, it will require a re-evaluation of food's value and the environmental cost of loss and waste. Can we create better products and cold chain practices that help reduce waste in homes or consumer facing businesses?

**CF:** Do we know how much food loss there is on the farm and after harvest and is it important to be able to measure food waste?

**PP:** All solutions for wasting less food start with awareness and measurement. In the United States, ReFed ([www.refed.com](http://www.refed.com)) estimates that 16 percent of food is wasted on farm, 2 percent in processing, 40 percent in consumer-facing businesses, and 43 percent at home. While this information offers valuable guidance, we still need measurement across the supply chain and to understand what behavior changes can reduce waste. We need to expand food recovery to food banks, and re-evaluate quality specifications and grading standards that allow “imperfects” to have secondary markets. Additionally, we should explore how to maximize food's value not just as food for people, but turn what can't be sold to humans into the most beneficial food for animals and soils without creating incentives to expand agriculture's current footprint.

**CF:** What can GCCA members do to contribute to a less wasteful global food system?

**PP:** Trying to solve the entire problem of wasted food is overwhelming. Measurement and transparency must be required at every stage in the supply chain. Increasing food system efficiency and reducing consumer waste may be one of the most daunting redesign challenges of the 21<sup>st</sup> century. It starts by recognizing that waste and loss of food can no longer be a choice at any point in the value chain. We have to engage in a system-wide commitment to curb the overconsumption of resources and improve supply chain inefficiencies to lessen food waste. @





# JAMISON: INDEPENDENT THIRD-PARTY TEST LAB RESULTS

## The HCR Door results are in: ***80% efficient*** in blocking air infiltration



*The HCR calorimetric environmental test chamber at CTS Labs in Urbana, IL*

HCR pioneered the air door market 37 years ago and now has over 4000 worldwide installations. Until recently there was no authoritative, independent third-party test lab data that documented the efficiency of the unique HCR air door. A three-month evaluation was recently completed, and those results are now available to the marketplace.

Creative Thermal Solutions (CTS) is a leading test lab for products in the HVAC and refrigeration industries. They test products that claim to offer increased energy efficiency, reduced energy consumption, and environmental sustainability. CTS labs recently conducted an extensive thermal performance analysis on HCR air doors. ***The results verified that the HCR Model AC (Single Air Door) is 80% energy efficient\* when stopping air infiltration and energy transfer between rooms with different temperatures.***

### HCR Air Doors - Remove All Obstacles

HCR demonstrates the greatest energy efficiency for doorways with over 10% DOT (door-open time), and can represent considerable and even dramatic energy savings in the right application. In addition to energy savings, HCR significantly reduces moisture from entering the cold room, and prevents icing and condensation on floors, walls, and products. Reduced frosting of the refrigeration cooling coils will result in fewer defrost cycles.

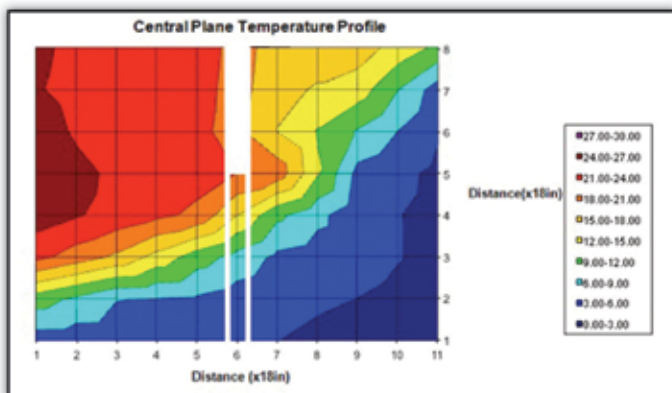
*For more details about the CTS test results, visit [www.hcrairdoors.com](http://www.hcrairdoors.com)*

**JAMISON** | HCR Air Doors

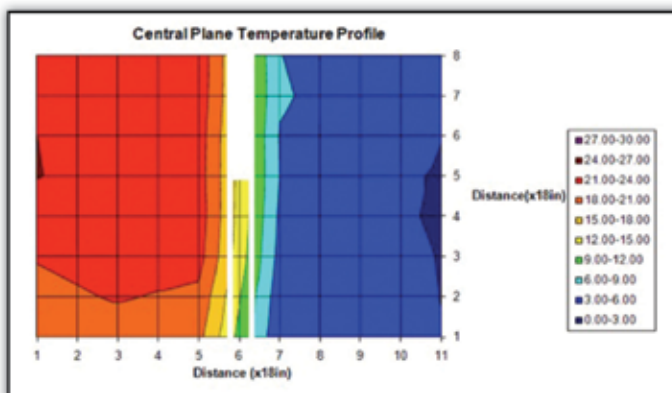
[www.jamisondoor.com](http://www.jamisondoor.com)

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\*For details and the lab performance report visit [www.hcrairdoors.com](http://www.hcrairdoors.com), contact your Jamison or HCR representative, or call 800-326-7700. Request the White Paper on the Evaluation of Horizontal Recirculatory Air Curtain Efficiencies – Cooler to Conditioned Space, D. Rhyner, HCR, Inc.



*Temp profile: air door off*



*Temp profile: air door on*

# FLOOR FACTS



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