

COLDFACTS CONNECTING A VITAL INDUSTRY MAY-JUNE 2025

Food Fight

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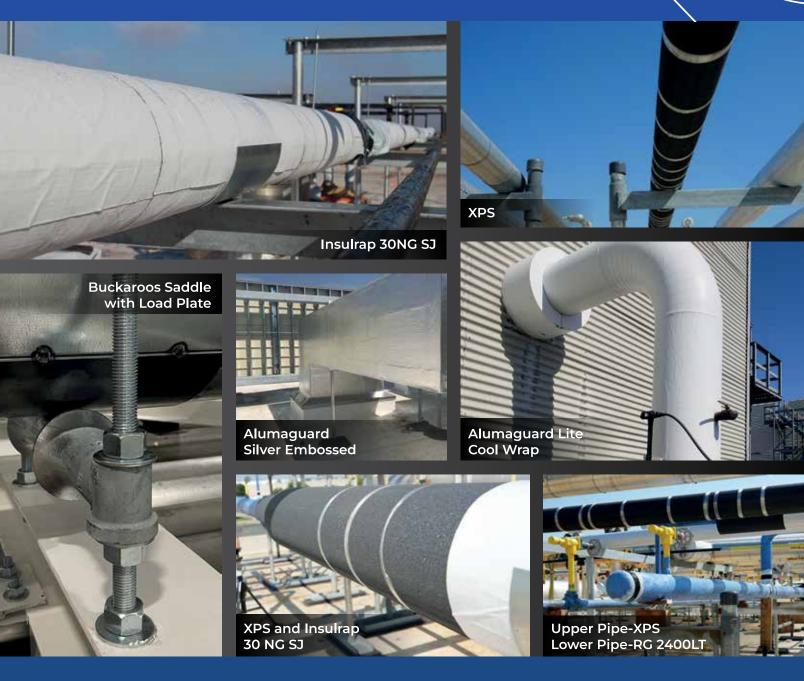
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LEADOFF MESSAGES FROM GCCA LEADERS

T IS AN HONOR TO INTRODUCE THE MAY/JUNE ISSUE OF COLD FACTS MAGAZINE. CHAIRING THE 2025 GCCA TRANSPORTATION BOARD IS A SPECIAL role, and I am excited to serve as we rebuild, refine, and refocus our organization.

Resilience of the Cold Chain

In uncertain times, the cold chain operates as a reliable, resilient part of our everyday lives. Those of us who work in storage, transportation, and other links of the industry serve a sector that is strong, but also adaptable: to fluctuating customer and consumer demands, to shifting regulations and policies, to changes in environment and sustainability, and to new competition.

As supply and freight demand stabilize from trade and tariff decisions, reliable cold chain logistics will continue to be a huge part of the global economy, as stable and new markets continue to invest in perishable goods.

The March Canadian jobs report noted the 1% increase in transportation and warehousing jobs. In the United States, the same workforce surged by almost 30,000 jobs in April. While this may signal a hiring boom to handle import surges ahead of tariff rollouts, it is also an optimistic sign – jobs numbers in our sector are steady. While these numbers may fluctuate, I still believe in a robust, stable cold chain that will provide career opportunities around the world.

Globalization and International Perspectives

Our responsibility as an international alliance is in honoring all perspectives, listening to all input, and understanding and serving the various needs of our membership, no matter their location. A major priority in 2025 is to elevate our value proposition and role within the larger organization. GCCA Transportation is primed to build credibility around the globe with offerings for transportation professionals.

This includes reviving and relaunching programs that have great value and potential – like Certified Cold Carrier – and telling the story of how this program benefits participants around the world. Certified Cold Carrier participants are recognized in the industry, demonstrating the highest level of commitment to safety and seizing the opportunity to re-engage drivers, management, and staff. We are committed to expanding the program for global use, changing and adapting to the uniqueness of global regions and regulations, and better promoting it as a recognition program of choice.

Looking Ahead

We are redefining the destiny of GCCA Transportation.

As we continue along a more strategic path set by former and current leaders, we will embrace our global footprint and collaborate more efficiently to show value and influence for stakeholders in all parts of the chain. The GCCA is a unique organization where we come together for the betterment of our world and the successful delivery of safe, quality, temperature-controlled goods. I am excited to be on this journey with you – let's get to work. **2**



RICHARD PATENAUDE CHAIRMAN, GCCA TRANSPORTATION



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INSIDE THE 'BIG Beautiful BILL'

The balancing act will be difficult as U.S. congressional leaders strive to reach an agreement during the summer.

By Lowell Randel

resident Trump has made it a top priority to pass a tax package that would make many provisions of the Tax Cuts and Jobs Act (TCJA) permanent, as well as provide additional tax relief through policies such as

no tax on tips.

Republicans in Congress are planning to use the Budget Reconciliation process to advance the "Big, Beautiful Bill" to complete it before the August recess. The benefit of using the reconciliation process is that approval requires only a simple majority in the House and Senate, avoiding the 60-vote filibuster threshold in the Senate.

On May 22, the House narrowly passed its version of the legislation by a vote of 215-214. The bill will now be considered in the Senate.

While Senate passage of the House package is far from certain, it is useful to understand the provisions passed by the House as the process moves forward. Below is a summary of key provisions compiled by selected House committees included in the "Big, Beautiful Bill."

Ways and Means Committee

The House Ways and Means Committee has jurisdiction over tax policy and is at the center of the reconciliation package.

- Increases the debt limit by \$4 trillion.
- Permanently extends the marginal tax rates included in the TCJA. Without action, the rates would revert to pre-2017 levels.
- Permanently extends the enhanced standard deduction, which is annually adjusted for inflation and allows taxpayers to reduce their federal taxable income if

they don't itemize their deductions.

- Increases the State and Local Tax (SALT) deduction cap to \$40,000 in 2025 with annual increases through 2033, after which it would be permanent.
- Permanently extends and increases the estate and gift tax to \$15 million, from \$10 million, starting in the 2026 tax year. The exemption would be indexed to inflation.
- Permanently extends and increases the pass-through business deduction to 23% (up from 20%) beginning in tax year 2026.
- Creates a deduction for qualified tips for tax years 2025 through 2028.
- Establishes a deduction for overtime compensation for tax years 2025 through 2028.
- Allows businesses to immediately deduct the cost of their domestic research expenses in the year paid or incurred for tax years 2025 through 2029.
- Restores the 100% bonus depreciation for certain property placed in service in 2025 through 2029.

Energy and Commerce Committee

• Requires states to impose "community engagement" rules as a condition of receiving Medicaid benefits starting on December 31, 2026. Recipients between the ages of 19 to 64 would have to work, perform community service or participate in a work program for at least 80 hours per month (unless they qualify for an exemption).

• Rescinds multiple climate-related programs operated by the U.S. Department of Energy and the U.S. Environmental Protection Agency.

Agriculture Committee

- Achieves significant savings through reforms to nutrition programs. States would be responsible for funding 5% of the costs of Supplemental Nutrition Assistance Program (SNAP) benefits. Prevents U.S. Department of Agriculture (USDA) from updating the cost of the Thrifty Food Plan, which forms the basis of SNAP benefits calculations, outside of annual cost-of-living adjustments. Modifies the ages for work requirements to include recipients 18 to 64.
- Extends and modifies commodity support programs and increases coverage levels under the crop insurance program.
- Extends conservation program funding.
- Provides \$285 million for USDA trade promotions programs including the Market Access Program, Foreign Market Development Program and Emerging Markets Program.
- Increases funding for animal disease prevention and response programs.

Homeland Security Committee

• Provides \$46.5 billion for U.S. Customs and Border Protection (CBP) to construct physical barriers along the U.S. border, as well as related infrastructure including



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- Provides \$5 billion to acquire or construct CBP checkpoints and other facilities near US borders.
- Provides \$4.1 billion to hire additional CBP personnel.

Judiciary Committee

- Provides \$45 billion for U.S. Immigration and Customs Enforcement (ICE) detention capacity, including single adult detention and family residential centers.
- Provides \$14.4 billion to ICE for transportation and removal activities, and to ensure the departure of noncitizens ordered removed.
- Provides \$8 billion for ICE to hire 10,000 additional immigration enforcement officers and support staff.

Transportation and Infrastructure Committee

• Provides \$12.5 billion for the Federal Aviation Administration to improve air

traffic control (ATC) technology.

• Imposes a new annual \$250 fee on electric vehicles and a \$100 fee for hybrid vehicles.

As the action shifts to the Senate, it is important to note that the Senate's budget resolution differs from the resolution passed by the House. For example, the Senate version allows for larger tax cuts and a \$5 trillion debt limit increase. In addition, committees were given different spending and savings instructions. The House Agriculture Committee was tasked with saving \$230 billion from programs within its jurisdiction, while the Senate Agriculture Committee was tasked with saving only \$1 billion.

Questions may also be raised about some of the House provisions and whether they comply with the Byrd Rule, which requires that all provisions directly impact spending or revenue. Anything deemed to violate the Byrd Rule would require 60 votes in the Senate to remain in the bill.

Some Senate Republicans have indicated their intention to modify the bill. Several

of the more controversial and challenging provisions include the House reforms to Medicaid and nutrition programs, the debt limit, SALT deduction levels, and the magnitude of savings/spending.

Congressional Republicans will have to strike a delicate balance across these various issues to satisfy moderate party members who are concerned about reforms to safety net programs and more conservative members who demanded greater savings as a part of the bill. This balancing act will be challenging as party leaders attempt to reach an agreement during the summer.

Failure to pass the tax provisions before the end of 2025 would result in the largest tax increase in the nation's history, making the incentive to successfully pass the legislation extremely high. **②**

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By Shane Brennan

COVER STORY



FOOD FIGHT

The implications of Trump's tariffs on the food industry and the consequences for cold chain operators worldwide.



efore the 2024 United States election, President Donald Trump called tariffs "the most beautiful word in the dictionary." Since taking office, he has implemented some of the most dramatic and consequential changes in global trade policy seen in a generation.

Few areas of trade policy are as controversial, emotive, or consequential as agriculture and food. Even at the height of the "free trade era," the world made only modest progress in opening agricultural markets. As the United States seeks to accelerate an ongoing reset in global trade relations and countries around the world reassess the value of bilateral and multilateral trade alliances, food tariffs, regulations, and border controls will be a top focus for governments worldwide.

The following four examples illustrate how consideration of food and agriculture issues can dominate how countries set trade policies and approach deals.

Riding the Wave – China and the United States

Cold chain businesses serving U.S. agricultural exporters are at the mercy of the rolling trade tensions of the world's two largest economies. China is a lucrative market for U.S. food exports, especially soybeans and key proteins, as the country has struggled to satisfy its growing middle class' demand for protein over the past three decades. This directly benefits U.S. meat exporters and soybean farmers who supply this key animal feed ingredient to China's fast-growing and intensifying red meat and poultry producers.

Unsurprisingly, tariff wars make U.S. exporters nervous. In April, Caleb Ragland of the American Soybean Association told World Grain magazine: "As the No. 1 export crop for the United States, soybean producers face huge, disproportionate impacts from trade flow disruptions, particularly to China, our largest market. Soybean farmers still have not fully recovered market volumes from the damaging impacts of the 2018 trade war, and this will further exacerbate economic hardship on our farmers."

Ragland has a right to be concerned. In 2017, China accounted for 30% of the entire U.S. soybean crop, and due to retaliatory tariffs, soybean exports declined by 76% in 2018.

Pork and dairy exports also declined by a more modest but still significant 12%. However, it was the period after the tariff wars that was most striking. The so-called "Phase 1" negotiations resulted in conditions that allowed for U.S. agricultural exports to rebound to record highs. The general relaxation of tensions provided the backdrop for China's decision to allow U.S. beef imports into China for the first time. By 2024, beef exports to China were valued at over \$2 billion.

Tariffs dominate the headlines, but more subtle actions can be just as, if not more, disruptive to trade. In the early weeks of the recent dispute, China suspended the export licenses of three major U.S. soybean exporting companies and, in February, allowed more than 85 meat processing and storage facility export registrations to lapse for several weeks into March.

Lapsed registrations did not mean that goods could not be exported from those facilities, but the uncertainty levels increased, and the signal was clear. Joe Schuele with the U.S. Meat Export Federation, told Reuters, "The risk involved in shipping product with a looming expiration date is high. The situation is certainly dire if [registrations for] these plants are not renewed. The situation has the attention of every exporter."

As any operator who has gone through the process of obtaining a Chinese export license knows, it is challenging to obtain and comes with a degree of uncertainty over when it might be revoked for reasons that are not always apparent. Tensions have already subsided from their high point in March 2025, and U.S. exporters and cold chain operators have a sense of uneasy relief. But no one expects calm waters anytime soon.

Hard Choices - United Kingdom and Europe

It's been 10 years since the Brexit vote and five years since the United Kingdom formally left the European Union. It is difficult to underestimate the importance of food trade and cold chain logistics issues in the divorce negotiations. The United Kingdom and the EU never seriously considered imposing new tariffs on goods. Instead, the preoccupation was with nontariff-related rules and market protections.

In seeking to free itself from the obligation to follow European laws, the U.K. faced an obstinate refusal from the EU to grant special dispensations for how its food goods flowed across its borders. The result was a dramatic fracture in a highly integrated food supply chain.

Within the European single market, U.K., Irish, French, Dutch, and Belgian retailers could store food in a retail distribution center in one country and fulfil orders overnight in stores in another. U.K. food specialists, particularly small businesses, could place orders for one or two pallets and utilize a groupage network that delivers within hours or days across the continent. This all ended for U.K. exporters on January 1, 2020.

After that point, consignment moving from the U.K. into the EU had to be certified, customs-registered, and subject to likely inspection at the EU port of entry. The costs, delays, and uncertainties had immediate effects. Food exports initially froze, but as trade recovered, it became clear that they would not return to the previous levels. Furthermore, a third of U.K. businesses decided that it was not possible or cost-effective to sell goods to companies outside the country.

Fast-forward five years, and the U.K. and EU have agreed on a deal outline for a new Sanitary and Phytosanitary (SPS) agreement aimed at removing the certification and inspection requirements on both sides. The food industry has welcomed this move, but it comes with significant consequences. A deal is possible because the U.K. has essentially conceded to the EU's original demands that it "dynamically align" with EU food rules indefinitely.

If the EU imposes new prohibitions on ingredients or production techniques, the U.K. must follow suit. This permanent agreement will severely limit the U.K.'s ability to make the kind of concessions other countries might expect in a new comprehensive trade deal. The United States is one of many major agricultural exporters that sees "European" regulatory standards as unjustified discrimination against their producers, especially in key cold chain categories, such as beef and poultry.

In the weeks preceding the U.K.-EU deal, the United States and the United Kingdom reached their own agreement, which resulted in a significant increase in the amount of beef both sides would allow to enter their markets, tariff-free. However, the new allowances were still a fraction of U.K. imports and did not come with any concessions on the regulatory prohibitions on the majority of U.S.-produced beef entering the market. On announcing their deal, the U.K. and U.S. leaders promised that it was an "appetizer," with more ambitious agreements to come. However, now that the United Kingdom has agreed to stay bound by EU food rules, it's unclear how much appetite the United States will now have for the main course.

The U.K. example illustrates the consequences, trade-offs, and hard choices involved in repositioning a country's trade strategy. It shows that some of the most difficult challenges arise within the food and agriculture sector during this era of change, and it is cold chain operators that manage the consequences.

Poised to Win – Brazil and Australia

While the United States and China feud, and Europe is navel-gazing, other export markets are positioned to take advantage ... in theory.

Australia has long been a world leader in growing its export markets. With over 70% of its farm production sold through exports, it must be single-minded and responsive in seeking to open and maintain markets for its produce. It is also uniquely positioned between the United States and China, both geographically and economically. Australian exporters suffered setbacks when the United States imposed a 10% tariff on their imports, but the Chinese market demand has more than made up for it.

It is therefore unsurprising that in April 2025, Australia exported record volumes of beef. However, experts will not rush to simple conclusions. *Meat and Livestock Australia*'s global supply analyst, Tim Jackson, told the Australian Broadcasting Corporation that, "The surge in export volumes was fundamentally because of record supply. Australia has a large herd, rising slaughter rates and carcass weights have been lifting consistently, so when measured in tonnes, our production is going up, and that good supply flows into exports."

A pragmatic and realistic outlook prevails among Australian industry leaders. Official reports look to the "medium term," predicting longer-term declines in volumes and values as consumer trends in meat consumption shift, trading relations stabilize into new patterns, "While the United States and China feud, and Europe is navel-gazing, other export markets are positioned to take advantage ... in theory."

and global competition intensifies.

Brazil is a relatively new arrival in the big leagues of global exporters, but its rise is rapid, and there are good reasons to be bullish.

On the eve of the significant U.S. tariffs announcement, Brazilian Agriculture Minister Luis Rua told the European news outlet EurActive, "Brazil is a reliable and stable partner – one that ensures competitive products that contribute, for example, to global food price stability. That's why we are ready to support any country that requires an increase in Brazilian exports, for whatever reason – even geopolitical."

Like Australia, Brazil does not employ a "wait and see" strategy for the potential trade fallout benefits. Notably, President Lula's recent tour of Asian capitals secured new trade access deals for Brazilian meat exports in Japan, South Korea, and Vietnam. This, along with a breakthrough in the longstanding EU MERCOSUR trade agreement, shows that Brazil can succeed beyond trade growth with China and the United States.

However, perhaps Brazil's biggest challenge in harnessing these opportunities is its ongoing challenges in infrastructure and supply chain.

A working group of leading port operators has launched a "Manifesto for Innovation" in the maritime and port sector, highlighting how the shortcomings in Brazil's port network are hindering trade. This includes long docking wait times of five days or more, compared to the U.S. average of two days, as well as high customs clearance times and costs of \$862 and 49 hours, versus the \$136 and 12.7-hour average across the Organization for Economic Co-operation and Development (OECD) countries.

As the country rushes to cope with its first major outbreak of HPA1 influenza, its ability to provide reassurances on its containment and control strategy will prove its readiness to become a major player in cold chain exports.

Caught in the Middle – Africa

Many African countries were faced with high tariff levels on the "reciprocal tariffs" list presented by the U.S. President on so-called "liberation day." It was a stark illustration of a shift in U.S. policy, which for decades has seen maintaining open and tariff-free trade routes for some of the world's poorest nations as a core strategy in its global foreign policy. Coupled with the dramatic and immediate scaling back of U.S.-funded aid and development programs, this will have far-reaching consequences for food trade policy across Africa.

Since 2000, 34 countries in sub-Saharan Africa have benefited from the Africa Growth and Opportunity Act (AGOA), which allows more than 6,800 products, including minerals, chemicals, fruits, and vegetables to be imported into the U.S. market duty-free. AGOA products represent 29% of total U.S.bound exports from the 32 African countries that are party to the act. South Africa, the biggest exporting economy, is also the biggest beneficiary, utilizing tariff-free quotas on products such as wine, citrus, soybeans, sugar cane, and beef.

AGOA is up for review in September, but few African leaders hold out hope for its renewal. "AGOA is finished. It is dead in the water," says Alex Owino, a former advisor to Kenya's Treasury under President Uhuru Kenyatta.

The focus shifts instead to the potential for bilateral deals and arrangements. Countries will look for ways to mitigate the tariff walls being erected in the United States. However, the influence of China as an investor and trade partner has grown over the past two decades, and the further extraction of the United States will only help reinforce strong links. Also, in the food and horticulture sector, links to Europe have always been more important in terms of value and volume, and many countries in the region retain preferential tariff and quota policies. If U.S. routes close, this would be a prominent place to look for trade diversion opportunities.

However, for most Africans, the real opportunity is in growing trade within the neighbourhood. Failure to find ways to remove trade barriers between neighbouring countries is holding Africa back. As Kennedy Mukulia of the Africa Union Commission argues in a recent piece for the Daily Nation, "Intra-Africa trade hovers below 20% of total food commerce, largely because trucks spend more time at border posts than on the tarmac."

The African Continental Free Trade Area holds many of the answers to breaking down these barriers by establishing enforceable rules and mechanisms to hold countries accountable for how they manage their border controls.

If the United States' actions cause African nations to accelerate the inevitable path towards greater economic integration, it may inadvertently push the biggest step forward in food security and agricultural prosperity that the continent has ever seen.

Beyond Tariffs

There is no doubt that the recent interventions of the Trump administration have heightened the drama and uncertainty that permeate the global trading system. However, as the examples here demonstrate, the issues for food businesses extend well beyond a short-term tariff war.

Recent months have wreaked havoc on supply chain forecasting. However, if this

situation compels some to confront the underlying issues – for example, encouraging businesses to understand the value of investing in their supply chain resilience or forcing governments to tackle the frictions that hinder the flow of food trade with desired markets – then there are reasons to be hopeful more opportunities will emerge for cold chain operators across the global food supply chain. **②**

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SEAPORTS ARE THE BELLWETHER OF THE ECONOMY TO COME

How ports and shipping lines are navigating tariffs, supply chains, and maritime cargo on choppy seas.

By Alexandra Walsh

resident Donald Trump has begun his second term in office with ambitious plans to overhaul U.S. trade policy, aiming to achieve various economic and non-trade-related objectives. Long favored by the President, tariffs are his go-to tool. They have become a significant issue for businesses and the international economy, and tariffs are expected to remain the dominant topic in global commerce throughout 2025.

The surge in tariff activities has caused considerable disruption in global supply chains. As the situation continues to evolve, its immediate effects are evident. Businesses are navigating uncertainty, and supply chains are encountering new complexities. But it's the cargo seaports that serve as the canary in the coal mine.

"In many ways, we serve as the bellwether for what is about to happen in the economy, because businesses, retailers, and consumers stock up their inventories and prepare for the summer consumption season," said Cary Davis, President and CEO of the American Association of Port Authorities (AAPA) and an advisor in President Trump's first administration. "They are making purchasing decisions at the moment that will affect what the shelves look like weeks and months from now."

AAPA: Headed for Positive Resolution

In a C-SPAN interview in early May, Davis stated that the first months of 2025 saw an explosion of record-breaking imports and exports, as businesses and consumers accelerated their buying decisions, anticipating that tariffs would likely be imposed. "Now, we are basically facing a cliff."

Davis points out that inventories will vary from industry to industry based on consumer buying habits and the nature of the commodity. "Overgeneralizing, I think most analysts are saying that between five and seven weeks (mid-summer), we will probably see significant price increases and shortages of household consumables that customers expect to buy."

Seaports are critical infrastructure, and seaport managers make billion-dollar decisions on a monthly and yearly basis about how to recapitalize the port facilities' infrastructure. "It is hard to make those decisions when the trading landscape is uncertain, there are inflationary pressures on construction, and you don't know the cost for constructing a new dock, piling, pier, or dredging project 12 or 16 months out," said Davis.

He notes a surge of interest in free-trade zones, geographical areas often located in ports where businesses can bring in imports or goods without introducing them into the economy. "You just leave it there until you have a better sense of the tariff rate, and then you can bring it into the country."

Davis believes the warehousing industry is faring well under the circumstances. "Just like during the pandemic when the consumer downstream and tax situation were uncertain, all sorts of warehouse facilities, bonded and free-trade zones, can hold their customers' goods at bay until they have a clearer picture of what the playing field will look like."

Davis doesn't think there's a need to worry about panic buying at this time. "I think we are headed towards a positive resolution of the angst we might be feeling in the trade community."

Port of Los Angeles: Uncertainty Remains

- Port of Los Angeles ranked as the Number 1 container port in the Western Hemisphere for 25 consecutive years (2000-2024)
- Port of Los Angeles ranked Number 18 in the world (based on 2023 throughput)
- San Pedro Bay port complex ranked Number 9 in the world (based on 2023 throughput)

The ports of Los Angeles and Long Beach had already started to see a sharp slowdown in volumes as the first vessels arrived from China, subject to the 145% tariff.

Posting on X, Port of Los Angeles Executive Director Gene Seroka wrote, "The 90-day pause and reduction in tariffs is welcome news to consumers, American businesses, workers, and the supply chain." At the Port of Los Angeles' monthly media briefing in May, it was apparent that ports and shipping attract attention during uncertain economic times. Seroka said, "We have over 80 media outlets participating today...the largest media turnout in our six years of monthly briefings."

The subject of uncertainty was tariffs and trade flows, which are crucial to the U.S. economy (as well as those of its trading partners), but are difficult to predict during the current "pause" or temporary reduction phases, during which background discussions are presumably underway with the United States' trading partners. During the webinar, Seroka repeatedly qualified his answers to media questions by reiterating, "The uncertainty remains ... tariffs are still elevated."

While tariffs on Chinese imports are no longer at 145% for the next 90 days, they remain at a substantial level of 30%. "Even with this announcement, tariffs remain elevated compared to April 1," Seroka says. "This 90-day reprieve is not a long runway."

Regarding upcoming deadlines in July and August when present pauses expire, Seroka said, "These will lead to trepidation, not knowing where we'll all land." Rather than making specific forecasts during the media briefing, Seroka referred to "a stop-start focus" in various trade negotiations, and an "information whipsaw."

To avoid further uncertainty and trade disruption, Seroka suggested both sides should work together swiftly toward a long-term agreement. "Additionally, it's important for the United States to work with other nations to reduce existing tariffs."

Maersk: Trade Like Water Finds a Way

Despite the uncertainty tariffs create, Lars Karlsson, Global Head of Trade and Customs Consulting at Maersk, notes the resilience and adaptability of trade in response to changing regulations and tariffs.

"Trade, like water, will find a way. This will not go away," Karlsson said during a recent interview for Maersk's "Beyond the Box" podcast. "It is better to be ready now and not to wait for solutions that will come later. Companies need to invest in this, talk to the right partners, and they need to have the networks to make it happen." "Before Covid, cargo moved comparatively smoothly, with a few bumps in the road.

"Since 2020, there have been a number of events that have challenged container movements, causing delays and costs in supply chains, which have resulted in a better economic environment for carriers.

"Carriers' customers, however, have seen extended transit times, which means less capacity, higher pricing and now we're seeing rates shoot up into the stratosphere once again and because ships don't move very fast and the system kind of operates in slow motion these conditions are going to be with us for many, many months."

Peter Tirschwell

Vice President, Journal of Commerce S&P Global Market Intelligence (Speaking on a webinar organized by Hapag-Lloyd.)

Karlsson advocates looking at partnerships and the networks your company already has established, including those internally, to ensure you meet the demands of today and tomorrow, not just those of yesterday. "Stay agile, stay with your partners, and ensure you have access to the data you need. Look for solutions that can serve you in multiple markets and for multiple risks and regulations, that are configurable for your situation, that provide risk screening upstream as early as possible to detect and avoid risk that can be costly from a trade compliance perspective, and that can adapt to uncertain times and fast-changing requirements."

The latest news in global trade has introduced significantly more uncertainty to 2025 than was expected at the start of the year, Karlsson acknowledges. He says recent conversations between Maersk and businesses have shed light on several shared concerns. "Since the start of 2025, we've seen an almost 1000% increase in the number of inquiries from clients. This highlights the complexity of the environment businesses now have to navigate."



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Learn more and register now www.gcca.org/events Karlsson said he wasn't surprised to hear many businesses are worried about rising costs due to tariffs and the resulting delays in their supply chains. He adds that some companies are shifting their sourcing to other countries to mitigate these costs. Conversations with different businesses also highlighted a heightened need for customs compliance guidance to effectively navigate the new tariff landscape.

"Partners with solutions for multi-regulations, multi-markets, and the ability to configure to the production and sales pattern of a company – from the journey through the market to the end consumer, are important during this time," explained Karlsson. "Supply chain visibility, customs compliance excellence, and utilizing available data all come down to having the right partners." @

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

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Logistics Industry Warns of Impacts of New Port Charges

In April, the U.S. Trade Representative unveiled a final version of a proposed new charge on any Chinese-owned or operated vessel entering a U.S. port. The measure, first proposed in February, is designed to penalize shipping operators that have failed to purchase U.S.-built container ships, and to revitalize the struggling U.S. shipbuilding industry. Initial proposals were for sweeping charges of up to \$1.5 million each time a Chinese-built ship calls at a U.S. port.

GCCA joined several U.S. logistics and trade associations in opposing the measure. In a formal submission, it called on the USTR to amend the proposals stating that the measure would lead to "increased costs for domestic industry and ultimately consumers" and that "imposing a fee or tax on all ships owned by the world's largest shipping companies will increase the cost of exporting US products to international markets."

The final version softens what was initially proposed, including significant exemptions for ships operated by non-Chinese companies and for smaller ships, empty vessels, and certain export loads such as wheat and soybeans. However, analysts estimate that large Chinese container ships could face fees of approximately \$300 to \$600 per container, depending on ship size and cargo load.

The new Port Fee has given rise to fears of carriers imposing a surcharge, but analysts believe that the revised proposals give rise to alternatives. "We don't think there will be a surcharge," says Philip Damas, head of Drewry Supply Chain Advisors. "I think it's more likely that carriers will try to find a way to redeploy their ships to avoid the fines instead of passing the cost on to shippers."

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INNOVATION VS. OVER REGULATION IN THE DRIVE TO DECARBONIZE

A movement to rid the roads of carbon-based refrigerated transportation continues, even as some of the regulatory steam driving it has, at least for now, evaporated.

By Gina Veazey

he U.S. state of California has led the world in driving decarbonization in refrigerated transportation. Most recently, its policies drew the ire of federal regulators and politicians who tapped the brakes on the state's plan to quickly transition transportation refrigeration units (TRUs) operating in the state to Zero-Emission TRUs (ZE-TRUs).

Some, like Don Durm, Vice President of Supply Chain Solutions at PLM Trailer Leasing, argue that easing regulations could be good for the cold storage industry. The problem with the California regulation, Durm says, was that it was too optimistic about the pace of innovation. "If you really looked at what the manufacturers produce right now, even for the state of California, they probably couldn't keep up with all the mandates. It lets innovation catch up and push forward."

Meanwhile, industry observers say operators remain committed to a zero-emission future, with or without the leadership of California.

"Operators are driving decarbonization because the technology works and delivers results," says Michael Lowe, CEO, Sunswap, a United Kingdom-based manufacturer of battery and solar-powered transport refrigeration units. "In markets like the UK and Europe, the industry is solving this challenge independently rather than waiting for regulation."

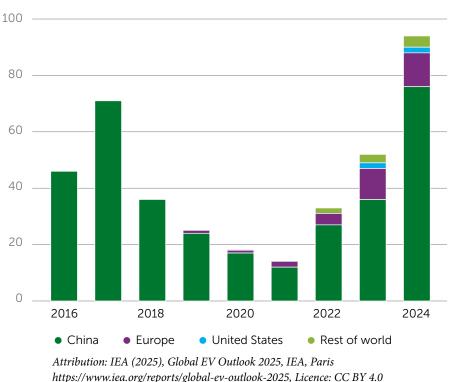
Bill Maddox, Senior Manager, Product Management at Carrier Transicold, says the company's customers are still interested in zero emission, but their motivations are different. Some see the value and the opportunity of zero emissions, because it's part of their sustainability goals. Others are interested, Maddox says, because it can make them more profitable.

"I don't think it's going away, and I don't think it's a dying thing," observes Durm. "I don't think people are going to [say] we're not doing this anymore."

Regulation vs. Innovation

The decarbonization effort is ripe for industry-led innovation, says Lowe. "There are some potential signs that we could see a registration scheme [in the United Kingdom], as in how many TRUs we have in the fleet, for example. That's not regulation. That's literally understanding how many there are in the United Kingdom."

Indeed, regulation continues to play an important role in decarbonization in some parts of the world. But innovation is driving the decarbonization effort forward in many



ELECTRIC TRUCK SALES BY REGION, 2016-2024

markets, even in the absence of regulatory pressure and government support.

Electric Truck Sales

Global sales of medium- and heavy-duty electric trucks increased by nearly 80% in 2024, according to the International Energy Agency.

In China, which represents more than 80% of 2024 global electric truck sales, a combination of incentives, stringent emission standards and declining battery prices are driving sales.

Although ZEV adoption is slower in Europe and the United States, there are some signs of growth there too. In Europe, electric truck sales grew substantially in some countries, despite a lack of incentives, says the IEA. Sales grew in 2024 in Denmark, Germany, Italy, and the United Kingdom, but declined in France and the Netherlands.

In the United States, the number of electric trucks sold in 2024 exceeded the total number sold from 2015 to 2022. A tax credit of as much as \$40,000, grants, and investments in charging infrastructure drove sales, says the IEA.

Cost of Entry

The cost of entry is high for zero-emission technologies. In battery electric vehicles (BEVs), the battery may represent as much as half the total cost of the truck today, but this is expected to change. By 2030, the IEA says the cost of these batteries may fall by as much as 35%.

"The reason FMCG retailers and fleet owners speak with Sunswap is sustainability – they want to replace their diesel fleets," says Lowe. "But what's compelling is that zero-emission technologies actually reduce operating costs. That combination of environmental impact and financial performance is crucial to meet sustainability goals and improve margins."

While ZEV technologies have not yet reached total cost of ownership (TCO) parity with their ICE counterparts, the IEA anticipates that the TCO of battery electric trucks will be "more competitive than diesel trucks" in China and the European Union by 2030. The IEA also forecasts that TCO parity will soon follow in the United States, where emissions standards will effectively increase the cost of operating diesel trucks.

California Greening

In 2021, the California Air Resources Board (CARB) took aim at the typically small internal combustion engines powering Transport Refrigeration Units (TRU). Among other initiatives, it proposed to require TRU owners to transition at least 15% of TRUs to ZE-TRUs by December 31, 2023 – and to continue the transition in the same proportion in following years.

The U.S. EPA ultimately declined to authorize this part of the CARB amendments, putting one of California's most controversial regulations on hold.

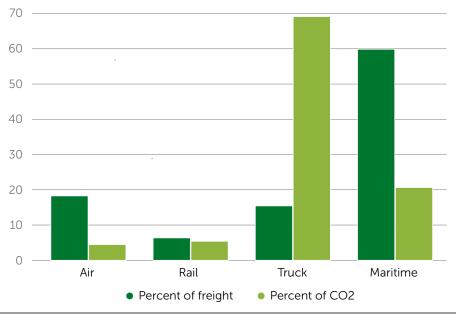
In North America, an estimated one in seven (15%) straight trucks and trailers on the road use a TRU to maintain the temperature of freight. Most TRUs are powered by a small diesel engine.

While greenhouse gas (GHG) emissions from a single TRU may be negligible, the full effect of TRU emissions is substantial. GHG emissions are a big concern in and around yards where many trucks sit at idle, waiting to be loaded or unloaded. CARB says these yards are predominantly in disadvantaged areas.

Moreover, TRU engines produce PM2.5, the smallest particulate matter, which can travel deep into the lungs and potentially enter the bloodstream.

In addition to California, 10 states have adopted some or all of CARB's heavy-duty vehicle regulations. Together, the 11 states account for 25.4% of new heavy-duty vehicle registrations in the United States.

Meanwhile, the cost of a ZE-TRU alone can be as much as two-times the cost of a traditional diesel unit today, says Durm. He points to the leasing model as a sound strategy for ZE-TRUs or ZEVs, particularly while the industry is coalescing around specific technologies and while needed standards are in development. "They don't have to make the initial investment, they just make a monthly payment," adds Durm.



FREIGHT AND CO2 BY MODE OF TRANSPORTATION

A Better Fit

All over the world, electrification is proving to be a better fit for certain use cases, suggesting that parity may be achieved sooner by some segments before it is achieved overall. Routes with some combination of lower daily mileage, lower speeds, and predictability are proving easier to electrify.

While owners of heavy-duty delivery trucks with high-mileage routes (which increases the potential for a cost benefit) are also exploring electrification in higher proportions, overthe-road heavy-duty trucks face distinct challenges. "They're just constantly moving and doing different things. They're never on a dedicated route or commodity," observes Maddox.

These trucks could be hauling bananas at 55° F one week and premium ice cream at -20° F the next, Maddox says, or making runs from Florida to California, then California to Idaho. "Just keep moving, that's how they're efficient with their freight and that's part of the challenge," says Maddox. "Having that built-out infrastructure is fundamental because this technology could be anywhere – so if you can be agnostic on infrastructure, that is where you've got a key solution."

"The other side is the world of Walmarts or Syscos, and they go from the distribution center to the stores. They are coming back to the same place, so they could have the opportunity to utilize charging at a base location," says Maddox.

Lack of Charging Infrastructure

Today, electric fleet owners and operators often install depot chargers, allowing the fleet to charge overnight. The promise of electrification could extend to more segments with greater access to public or opportunity HDV charging stations.

Although charging stations with equipment dedicated to heavy-duty vehicles are lacking, especially compared to traditional fueling stations, progress is being made to improve charging infrastructure. The IEA, using a model that takes policy commitments into account, projects the global number of HDV truck charging points to increase from about 300 thousand in 2024 to more than 3 million by 2030.

In the United States, the lack of charging infrastructure presents a significant limitation for electric heavy-duty trucks. In January, the U.S. Department of Energy (DOE) announced a \$68 million investment to design, develop, and demonstrate innovative electric vehicle (EV) charging sites near key ports, distribution hubs, and major corridors. The projects aim to accelerate access to largescale public EV charging infrastructure for medium- and heavy-duty EVs.

Each of the DOE-funded projects target large-scale, replicable, high-power charging installations to serve medium-and heavyduty electric fleets with tens of hundreds of vehicles. They are focused on high-capacity charging infrastructure to serve medium-and

The Last Mile for Freight

Global freight transportation overall, including by trucks, planes, ships and trains, accounts for 8% of global greenhouse gas emissions, rising to 11% when warehouses and ports are included, according to the International Energy Agency.

Although a smaller proportion of freight is moved over a shorter distance by truck than by maritime freight, trucks contribute a far greater share of greenhouse gas emissions. They can emit more than 100 times the CO2 of ships carrying the same amount of freight the same distance, according to the MIT Sustainable Supply Chains Initiative.

heavy-duty electric trucks for long-haul use cases (more than 500 miles per day) along major corridors and rural regions where grid capacity is limited. The vision is for continued innovation to drive expansion of the charging infrastructure as technology costs decline and momentum grows for medium- and heavyduty electrification.

Need for Cultural Change

The move to ZE-TRUs and ZEVs isn't just about the equipment. Operators will play a large role in making the transition a smooth one.

Most TRUs are powered by internal combustion engines today, giving operators access to an enormous amount of energy stored in fuel tanks, says Maddox. "It covers a lot of sins," he says, like leaving doors open while making a delivery or loading warm product and using the TRU to cool it enroute.

"You've always got enough fuel to get you where you need to go [with an internal combustion engine]," says Maddox. "When you go to a zero-emission solution, now we've got more finite power available. We just have to be smarter about how we use it." @

GINA VEAZEY is a writer and editor who specializes in business topics.

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Mike Conlon | Vice President mconlon@powerconstruction.net The site presented design, construction, and logistical hurdles ... along with a large hill.



by Reith Lona

FISHER CONSTRUCTION GROUP BUILDS ADVANCED ASRS FACILITY

Agile Cold Storage engaged Fisher Construction Group to design and build a state-of-theart Automated Storage and Retrieval System (ASRS) facility in Gainesville, Georgia.

"Agile reached out to us because of the complexity of the ASRS and our reputation in the industry; there are not many contractors that specialize in that cold storage ASRS world. Because of our expertise, they trusted that we knew what we were doing," says Reece Esary, Project Manager for Fisher. "If you've never built one of these, you can mess it up quickly by not asking the right questions or involving the right partners."

As the population continues to grow and available buildable land becomes scarcer, the ASRS building model optimizes storage capacity by utilizing vertical space. Additionally, given the difficulty in finding workers willing to operate in cold storage environments, the ASRS design reduces the labor required per pallet position, enhancing efficiency and operational sustainability.

Having been involved since the first week, Esary budgeted and managed expenses throughout the project. He was on the ground from the first movement of dirt to the project's completion. The same was true for the project engineer and superintendent.

"At Fisher, we structure our project teams to have the same team members involved from the start through completion," Esary says. "This ensures that items don't get dropped or missed. This helps as there is a main point



Agile Cold Storage ASRS facility designed and built by Fisher Construction in Gainesville, Georgia. (Photo courtesy of Fisher Construction Group.)

of contact that has been involved from the beginning. Safety-wise, having more eyes on site and paying attention, we can catch things before they become major issues."

Construction began in early 2023, with the foundation pouring completed by April, followed by the installation of steel. The facility, designed as a large blast freezer, features 48,360 pallet positions within a 92,000-square-foot building that supports six cranes. It maintains a final operating temperature of -10°F, enabling rapid cooling of products arriving warm from processing.

"One of the most notable aspects of the project is we were able to stay under budget and return those savings to the client," Esary says. "We also met the contractual schedule and beat that by a couple of weeks."



Getting to Work

Fisher partnered early with Agile to tailor a solution that addressed the site's unique challenges, such as the fact the facility was nestled on a large hill at the entrance to the active cold storage operation. Consequently, the project posed significant design, construction, and logistical hurdles.

"We knew there were a lot of complexities with the project site," Esary says. "There was a huge slope, and there are stringent tolerances for the slab and automation equipment that you have to meet. The differential settlement of the ASRS slab should be almost negligible, and we had to coordinate with our ground approvement contractor at the front end to see if it was even feasible."

Strategically located five hours from the Port of Savannah, the site benefits from lower wages and its proximity to processing plants, which reduces operational costs and allows for savings to be passed on to customers.

From the beginning, Fisher's team addressed the challenging sitework amid record rainfall in northeast Georgia. To stabilize the hillside, Fisher built concrete shoring walls with soil nails extending 20 to 25 feet deep into the surrounding soil, while part of the ASRS slab was supported by H-piles driven down to bedrock.

"We had to build retaining walls with some tiebacks back to the existing facility," Esary says. "That added to the complexity." Another challenge arose because Fisher was building next to an existing facility, leaving only about 25 feet of space. Additionally, the retaining walls limited the amount of equipment that could be placed above them between the existing and new buildings.

"You have to distribute the load with road plates and only specific equipment could be used in this space, so there was just more complexity there," Esary says.

Over 11,000 cubic yards of concrete were

poured safely and efficiently, all while keeping the existing cold storage operation running smoothly. The massive steel rack structure, supplied by Frazier Industrial, comprises 9.6 million pounds of steel and stands 125 feet tall. It was delivered on time and within budget, meeting the strict tolerance requirements of Swisslog's automation systems.

The facility has six automated cranes supplied by Swisslog. Each crane is equipped with a pallet mole that extends as the crane



The massive steel rack structure stands 125 feet tall. (Photo courtesy of Fisher Construction Group.)



moves down an aisle to retrieve a pallet. The mole collects the pallet and brings it back to the crane, then the pallet is transported via an automated conveyor system to the dock.

"In terms of construction, we built the facility in four 'blocks,' which is a phased approach," Esary says. "Working from the dock over to the backside of the ASRS, you have to get 50% of the rack up and tight before you can start putting IMP panels on and start decking."

Esary explained that by putting on the IMP panels, you're creating a "giant sail," making it challenging in high winds, so it's vital to time things correctly.

"Right around the 50% completion mark is when you get the automator on-site, because they have to put their rail in, where the cranes get installed on, and then you have to get the cranes installed inside the building before they close it up," Esary says.

Fisher also undertook the design and construction of a 24,150-square-foot loading dock equipped with an automated conveyor system. Most of the refrigeration equipment, including six ALTA units, was situated on the roof of the loading dock, adding 435,000 pounds of weight to the structure.

Innovative Thinking

A significant success of the job, and once again, a reason Fisher was hired for the

project, was getting all the tolerances correct between the automater and the racking supplier manufacturer, which required extensive coordination between the two.

Innovation played a crucial role throughout the project. Fisher's team designed the ASRS buildings at a lower elevation than the loading dock – an uncommon feature – enabling the cranes to retrieve products from any height within the system. This design not only reduced the overall building height, helping to comply with local height restrictions, but also maximized site utilization on limited land.

An inspection corridor beneath the cantilevered loading dock was engineered with glycol tubes and temperature sensors to prevent freezing, making routine maintenance easier in a challenging environment.

Another key innovation was the integration of six rooftop ALTA refrigeration units with the roof-mounted refrigeration equipment, which added approximately 435,000 pounds of weight but provided energy-efficient cooling.

The Fisher team also utilized a complete lightning protection system. Given that Georgia is prone to many lightning storms throughout the year, sometimes weekly during the summer months, this was an important aspect since the ASRS-type structures typically are the tallest structures for miles. A single lightning strike can damage The pallet is transported via an automated conveyor system to the dock. (Photo courtesy of Fisher Construction Group.)

the entire system, so the Fisher team decided to install a lightning protection system. The ASRS is fully automated with many sensitive components, and they wanted to keep the building protected.

A Top Team

One of the goals Fisher pursued on this project, and is recognized for, is meeting expectations regarding schedules.

"You have to time things right to make sure everyone is on the same page as to when these things need to be completed," Esary says. "A lot of the automators are from overseas and so a lot of the equipment is being shipped across the Atlantic, and if you don't have equipment/ materials getting there in time, you're delayed. You may have 40 to 50 rack employees on-site and if they're sitting around all day, it costs you tens of thousands of dollars. It is so important that things are coordinated and everything is aligned."

Fisher's collaborative approach ensured all stakeholders, from Agile to subcontractors, were aligned. Esary notes that this approach simplifies the management of complex projects and helps to overcome significant obstacles.

For example, during the project, when unexpected bedrock was discovered on site, impacting the additional truck parking requested by the client, the company collabo-



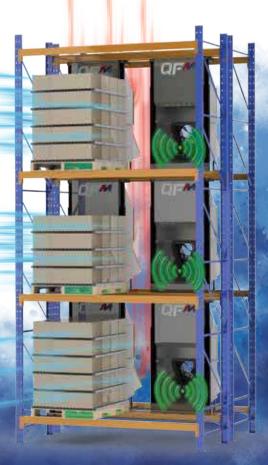


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Fisher undertook the design and construction of a 24,150-square-foot loading dock equipped with an automated conveyor system. (Photo courtesy of Fisher Construction Group.)

rated with all parties involved to redesign the site. This allowed Fisher/Agile to retain the truck parking, reduce costs compared to the original plan, and keep the project on track – all without compromising the schedule.

"Our team strives to work side by side with clients, consultants, and trade partners," Esary says. "We treat all our partners as if we are all on the same team with the same goal. We make it apparent that we expect everyone to buy in to the same common goal. By bringing in insight from various levels of experience, we create a valued-engineered solution. By listening to different opinions and being open to others' ideas, this is a key element to meet and exceed the client's expectations."

The result is a cutting-edge facility that exemplifies innovative design, strong project management, and sustainable practices, poised to serve as a cornerstone of Agile Cold Storage's operations.

"Our team delivered a complex, high-tech project on time, under budget (by more than \$1 million) and with safety and quality at the forefront," Esary says. "It's a testament to the "The result is a cutting-edge facility that exemplifies innovative design, strong project management, and sustainable practices, poised to serve as a comerstone of Agile Cold Storage's operations."

power of teamwork and innovative thinking in overcoming challenges and exceeding client expectations."

John Ripple, Chief Development Officer for Agile Cold Storage, called the finished project exceptional and noted the job was completed with a high level of professionalism and accuracy.

"The end result speaks for itself," Ripple says. "The ASRS started up flawlessly. The project was completed millions of dollars under budget. And the planning process has already begun for a second system of the same design with the same team, led by Fisher Construction Group."

KEITH LORIA is an award-winning journalist who has been writing for major newspapers and magazines for close to 20 years, on topics as diverse as sports, business and technology.

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THE COLD CHAIN IN AFRICA

Demand for temperature-controlled logistics is growing in response to increasing trade opportunities and the continent's shifting landscape.

By Isobel Davidson

nvestment in cold chain growth in Africa is expanding, with great interest in developing temperature-controlled logistics facilities and services in existing cold chain networks. Investors are also focusing on establishing operations in new areas where cold chain services are nascent or non-existent.

The stakes couldn't be higher. As Dr. Newton Matope, President of Kenya-based temperature-controlled logistics operator BigCold and Vice Chair of the GCCA Africa Advisory Council, notes, "Studies have shown that Africa loses up to 40% of perishable food due to inadequate cold storage and transport. Strengthening cold chain infrastructure will help reduce food waste, improve farmer incomes, and enhance food security across the continent."

Drivers of Growth

According to international market ana-

lyst Research and Markets, the size of the African cold chain logistics market was estimated at \$10.88 billion (USD) in 2024 and is expected to reach \$14.85 billion by 2029, growing at a compound annual growth rate (CAGR) of 8.28%.

Temperature-controlled logistics experts leading the industry in Africa point to several factors driving this substantial market growth. Patrick Fernandes, CFO at Mozambiquebased Afrigotel, observes that awareness of food safety has grown significantly. He says this is partly due to an increase in products like yogurts, cheeses, and butters that require controlled temperatures for preservation.

Fernandes considers another key driver of cold chain growth to be producers' concerns about waste and loss due to improper preservation of perishable products and the time it takes to reach the markets. "Consumers are more informed and demanding regarding the quality of products, especially those sold in supermarkets."

Pharmaceutical and healthcare cold chain expansion is highlighted by both Dr. Matope and Fernandes as an important factor in Africa's cold chain market growth, with the need for temperature-sensitive pharmaceutical logistics increasing, particularly for vaccines, insulin, and other critical medicines.

Dr. Matope also points to the rise of modern trade with supermarkets, hypermarkets, and fast-growing e-commerce grocery platforms (including dark stores and quick-commerce delivery) relying heavily on cold storage for inventory management. As these modern channels expand their footprint across African cities, the cold chain becomes a critical enabler.

Intra-Africa and Global Trade

Dr. Martin Cameron, Managing Director of Trade Research Advisory (a spin-off of the North West University in South Africa), explains that trade in products requiring the cold chain now represents around 5% (in value terms) of both total exports and imports for the African continent, with these levels fluctuating slightly between 2017 and 2023.

Dr. Cameron notes that intra-African trade in products requiring cold chain handling during this period accounts for only around 10% to 15% (in value terms) of the continent's total exports and imports. "However, intra-Africa volumes represent around 30% of import volumes compared to less than 25% of exports to the rest of the world," he adds. "The implication is that intra-Africa volumes traded are, on average, relatively lower value and higher volume than exports and imports for the continent associated with the rest of the world."

In terms of international trade, the top African markets for global exports of cold chain-related products are Morocco, South Africa, and Egypt. The most significant aggregate regional destination market for cold chain-related products imported into and exported from Africa is the consolidated EU market, representing more than 40% of import values and 35% of export values between 2019 and 2023.

Trade Research Advisory has calculated that, in value terms, imports and exports between Africa and the EU for cold chainrelated products remained relatively constant over 2024. In volume terms, African exports to the EU peaked in the first half of 2024, while African imports from the EU increased steadily in the second half of the year, partly due to the seasonality of the traded products.

The main products imported into Africa from the EU in 2024 included fresh or chilled seed potatoes, onions and shallots, frozen chicken cuts and offal, frozen swine offal, frozen whole chickens, and frozen swine meat. The main imports into the EU from Africa included tomatoes (fresh or chilled), chili peppers and bell peppers, sweet potatoes, beans (fresh or chilled), peel of citrus fruit or melons, bananas, clementines, avocados, and fresh grapes. "The most significant aggregate regional destination market for cold chain-related products imported into and exported from Africa is the consolidated EU market, representing more than 40% of import values and 35% of export values between 2019 and 2023."

The North American market for cold chain-related products represents less than 5% of imports and slightly more than 5% of exports.

"In this context, the recent implementation of a blanket minimum 10% additional tariff on goods imported into the United States will negatively impact exports from Africa to the United States," says Dr. Cameron. "However, the United States only represents approximately 3% of the export value of cold chain-related products originating from Africa. While this could be extremely negative for specific companies in specific countries dealing with less competitive pricing into the United States, on the whole, these types of products are not historically a significant market for the African continent."

Demand and Capacity

The demand for temperature-controlled logistics in Africa is increasing in response to trade opportunities. Demand is also growing in response to the continent's own changing needs.

The "Economic Report on Africa 2025," a publication of the United Nations Economic Commission for Africa, states that by 2050, the proportion of Africa's population living in urban areas will rise from 45% to 60%. This will contribute significantly to GDP but will also strain infrastructure and services.

Africa's megacities, such as Cairo, Kinshasa, and Lagos, are expected to be among the 10 most populous cities globally by 2035. Meanwhile, emerging urban areas such as Accra, Addis Ababa, and Kigali are also experiencing rapid growth. "As Africa's urban population grows and consumer preferences shift toward fresh and frozen products, the demand for cold chain services is rising," says Dr. Matope.

A 2023 report by the Energy and Environment Partnership Trust Fund (EEP Africa) demonstrates the dramatic variability in cold chain capacity across different African nations. It reports that in South Africa, which has the most mature and sophisticated cold chain market in southern Africa, there is 13m³ of cold storage per 1,000 residents, with most cold chain solutions geared towards large commercial and self-owned farms or provided by third-party logistics providers.

EEP contrasts this with Rwanda, where in 2019, there was 6,162m³ of cold storage available in total, with 58% of this capacity used to cater to flowers for export. It also compares to Zambia's cold chain, which it describes as "underdeveloped" and constrained by "poor road infrastructure, further exacerbated in the rainy season."

For West Africa, a recent study by GCCA's Global Cold Chain Foundation assessed cold chain logistics, technology, operations, and investment in Senegal, Ivory Coast, and Ghana as part of a USDA-funded Emerging Markets Program (EMP). This study showed that cold chain infrastructure in West Africa needs significant development, especially in ports and Special Economic Zones, to meet both current and future demand.

Key Opportunities and Challenges

With a clear need to increase cold chain capacity to meet growing demand

throughout the continent, Africa's temperature-controlled logistics leaders have identified several strong opportunities to accelerate cold chain market growth.

The expansion of regional trade through the African Continental Free Trade Area (AfCFTA) is one such opportunity. By 2045, AfCFTA is projected to increase intra-African trade by 45%, to enhance Africa's GDP by 1.2%, and to boost the agri-food sector by 60%. Efficient cross-border refrigerated logistics will be crucial.

Dr. Matope also envisions growth opportunities as a result of evolving consumer preferences in Africa's urban centers. "With rapid urbanization and a growing middle class, we're seeing a clear shift toward protein-rich and perishable diets, including dairy, meats, fresh juices, and horticulture. This shift is putting pressure on supply chains to deliver safe, high-quality products, creating direct demand for cold storage and temperature-controlled transport solutions."

For Fernandes, the cold chain in Africa can also expect to benefit from greater incentives for financing in refrigeration infrastructures by donor countries of pharmaceutical products and vaccines, and from the use of renewable natural resources, such as solar energy, to reduce energy costs.

Fernandes and Dr. Matope both note the potential for Public-Private Partnerships (PPP) to drive investments as governments and development agencies increasingly recognize the importance of cold chain infrastructure, offer incentives to attract investors, and develop new funding models and strategic partnerships to unlock growth opportunities.

However, they also both identify significant barriers to market growth, including high capital and maintenance costs; a deficient transport network; and a lack of reliable access to stable electricity. A bright spot is the emergence of solar-powered cold rooms, hybrid reefer trucks, and IoT-enabled temperature monitoring, making Africa's cold chain more sustainable.

Both experts highlight that fragmented supply chains and logistics bottlenecks, such as poor infrastructure, inefficient transport networks, and cross-border trade barriers, slow down cold chain logistics. These issues are exacerbated by gaps in skills and workforce with shortages in cold storage management, refrigerated transportation, and compliance with safety standards.



(Photo courtesy of Afrigotel.)

In addition, Africa is disproportionately affected by climate change. According to the World Meteorological Organization, many African countries are already diverting up to 9% of their budgets responding to climate extremes. The cost of adaptation in sub-Saharan Africa is estimated to be between \$30 and \$50 billion annually over the next decade. The impacts of climate change and costs of adaptation may create an increasingly challenging environment for business growth.

GCCA Africa in 2025

The GCCA Africa Advisory Council's strategic plan for 2025 focuses on addressing key challenges to market growth while supporting GCCA members in accessing and developing commercial opportunities. GCCA actions and activities to implement this strategic plan include strong promotion of the industry, positioning cold chain logistics as a key driver of economic and food security, and creating a stronger service provider market. It also includes regular engagement with governments, policymakers, investors, international organizations, and industry stakeholders. Paul Matthew, GCCA Director for Africa, explains, "We are working with African governments to promote business-friendly policies, incentives, and regulatory reforms that encourage investment in cold chain infrastructure. We are fostering knowledge exchange and technical assistance with relevant organizations worldwide, and we are creating opportunities for cold chain businesses to gather to discuss shared challenges and collaborate on potential new opportunities."

The GCCA Africa Cold Chain Conference 2025 will take place in Durban, South Africa, on 20-21 August. Visit www.gcca.org/events/event-calendar to register and for more information on the conference program. **@**

ISOBEL DAVIDSON is a media consultant in the food and logistics industries.

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COLD CHAIN DEVELOPMENT NEWS ABOUT GCCF INTERNATIONAL PROJECTS

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

CANCELLED PROJECTS

As of the date of publication, GCCF has been notified that several existing Food for Progress programs, funded by the U.S. Department of Agriculture, will be cancelled effective June 13, 2025. This includes five GCCF projects covering Bangladesh, Cambodia, the Dominican Republic, Mauritania, and Rwanda. The impacts on U.S. agricultural products and the development of the cold chain have yet to be fully realized; however, GCCF remains committed to supporting an effective and efficient cold chain that provides safe, temperaturecontrolled products worldwide.

ACTIVE PROJECTS

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

Partnered with Improving Economies for Stronger Communities (IESC)

GCCF will deliver a series of virtual training modules covering cold chain management; packaging techniques; hygienic handling and operations; national and international regulations; perishable goods inspection processes; emergency management; and new technologies to cold chain operators, processors, and inspectors. A cohort of cold chain operators from El Salvador, Honduras, and Guatemala will also participate in the GCCF Cold Chain Institute Latin America in July.

Cambodia Cold Chain Technical Assistance, 2025

Partnered with LixCap

In collaboration with LixCap, GCCF is supporting a strategic review for a private cold storage company in Cambodia. This initiative builds upon previous feasibility and construction advisory assessments led by GCCF and LixCap in 2019 and 2020, expanding efforts to enhance Cambodia's cold chain infrastructure. This project consists of a commercial and operational assessment, evaluating market demand, operational efficiency, and investment potential. GCCF provides industry



expertise, technical evaluations, and investor outreach, leveraging its extensive network to support strategic planning on this project.

West Africa Emerging Markets Program, 2024 – 2025

In April, GCCF delivered networking and training events in Ghana, Senegal, and the Ivory Coast, reaching more than 70 individuals, and conducted a dozen on-site consultations. The team consisted of GCCA members and technical experts James Eason, Charles Agboada, Daniel Kaplan, and Roudy Akiki. As part of these events, GCCF also unveiled a series of virtual trainings on the Cold Chain eCampus, specifically designed for the West African cold chain industry. The trainings were developed and delivered by GCCA and CEBA members from Australia, Canada, France, Lebanon, and the United States in English and French. Additionally, the West Africa mentorship program continues, connecting local operators with international experts who can advise on best practices in various aspects of the cold chain.

Ongoing Industry Support to Reduce Food Loss and Waste

GCCF has completed four of the five-course virtual training that will be housed in the



Daniel Kaplan provides an on-site consultation in Abidjan, Ivory Coast, in April.

GCCF Cold Chain eCampus. GCCF is also developing a toolkit for members that will provide information on how to donate product and provide ideas on activities that members can undertake to support their community with food rescue. The toolkit will also include regional policy-specific resources. GCCF is exploring how to expand the pilot of the STOR app; how to measure and record the magnitude of dump/destroy orders; and will roll out a champions program for food waste reduction.

GCCF also anticipates a new contract to support energy efficiency practices in food banks in the United States. Through this grant, GCCF will partner with Feeding America, the University of Arkansas Sam M. Walton School of Business, and Michael's Energy to implement a pilot study aimed at reducing energy consumption in U.S. food banks that operate refrigerated storage by leveraging expertise in refrigeration and energy usage from the private cold storage sector. This will enable food banks to reallocate energy savings toward more impactful initiatives, such as purchasing additional food or essential equipment. **@**



Observing loading and unloading practices at a cold storage in Tema, Ghana.



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COOL SOLUTIONS SCIENTIFIC ANSWERS TO COLD CHAIN CHALLENGES

This section highlights a cold chain question and answer submitted through the GCCA Inquiry Service to the team of experts on the GCCF Council of Scientific Advisors (CSA) and the roster of advisors. Submit your cold chain questions to the Council of Scientific Advisors at www.gcca.org/inquiry.

One of our facilities has a potential customer who would like to store a naturally derived nitrogen delivery system that is created by microbes. No odors. Not hazardous. According to the SDS sheets for the product, it is considered a low-risk biological agent and would only require Biosafety Level 1 (BSL-1) safety guidelines. We wanted to run it by the CSA to see if there are any concerns with bringing this product into our facility, including co-mingling with other product already on-hand. After doing a bit more research on the product, I see it contains nitrogenfixing, non-pathogenic bacteria. This product is packaged in High-Density Polyethylene (HDPE), then placed in boxes and put on pallets. This packaging should minimize the likelihood of cross-contamination or odor transfer. HDPE is moisture, stain, and odor resistant and is FDA approved for use in the food processing industry. HDPE is also corrosion resistant, which means it will not rot, splinter, or nurture dangerous bacteria.

If you decide to store this product, my suggestion is not to co-mingle [it] with the food products. Keep it separate, and check with the state food inspection agency to see if they have any issues with storing this product.

Additionally, I suggest the warehouse implements a food contamination risk assessment plan for this product. My concern is that, as this is an ongoing project, the warehouse may need to temporarily store the product near a food product for logistical reasons. Therefore, having such a plan in place will help maintain the confidence of both customers and inspection agencies.

This answer was provided by Dr. Michael Jahncke, Chairman of the Council of Scientific Advisors, and Dr. Faris Karim, Food Toxicology & Ammonia Contamination Expert from Kansas State University. **@**

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

IN MEMORIAM: DR. DENNIS HELDMAN



The Global Cold Chain Alliance joins the family, friends, and colleagues of Dr. Dennis Heldman in celebrating his remarkable life and contributions to food science and the cold chain. Denny passed away on April 3, 2025.

Denny was a highly influential and respected food engineer and academic who taught at Michigan State University, the University of Missouri, Rutgers University, and The Ohio State University. His career included positions with both private companies and trade associations, and his groundbreaking research focused on the sustainability of the food system. He was a lifelong educator, sharing his knowledge as a leader of the GCCF Council of Scientific Advisors, a faculty member of the GCCF Cold Chain Institute, and supporting GCCF's International Projects and Food Waste Reduction Initiative. He also played a crucial role in developing the GCCA Food Freezing and Storage Calculator.

Those who wish to honor Dr. Heldman's memory may contribute to the Dr. Rohini Desai Mulchandani Endowment Fund for Undergraduate Student Research in Food Science and Technology at The Ohio State University Foundation: www.osu.edu/giving **©**



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



Dr. Michael Jahncke Virginia Tech University, Fish Products Expert COUNCIL CHAIRMAN



Dr. Donald Fenton

Kansas State University, Refrigeration Engineering Expert



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



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



Dr. Patrick Brecht PEB Commodities, Refrigerated Transportation Expert



Dr. Cody Gifford University of Wyoming, Meat

Products Expert



Dr. Stephanie Clark New Mexico State University, Dairy Products Expert



Dr. Faris Karim Kansas State University,

Kansas State University, Ammonia Contamination & Food Toxicology Expert



Dr. Paul Dawson Clemson University, Poultry Products Expert



Dr. Eduardo Molina

Virginia Tech, Sustainable Packaging Expert



Dr. Barbara Rasco, BSE, Ph.D., JD

University of Wyoming, Food Safety & Food Safety Regulations Expert



Dr. Donald Schaffner

Rutgers, The State University of New Jersey, Microbiology Expert



Dr. Debjit Roy Indian Institute of Management, Logistics & Operations Expert



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



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



Dr. Elhadi Yahia

Universidad Autónoma de Querétaro, Mexico, Postharvest Technology, Tropical Fruit & Produce



Dr. Subramaniam Sathivel

Louisiana State University, Frozen Food Quality Expert

Have a burning cold chain question?

Submit an inquiry to the Council of Scientific Advisors at www.gcca.org/inquiry



ENERGY EXCELLENCE RECOGNITION PROGRAM (EERP)



Measure and improve your energy efficiency using qualitative and quantitative assessment tools

Managing energy usage is a high priority for temperature-controlled warehouse operators: to control costs—energy is the second highest operating cost behind labor in the cold chain industry—but also to meet industry demands for increased sustainability impact. The EERP is a tool for communicating your facility's progress in meeting sustainability objectives to your customers, allowing you to be a better partner in overall cold chain sustainability.

HOW IT WORKS

Using qualitative and quantitative assessment tools, operators track facility performance over time and receive progress reports with recommended next steps and links to useful resources. Top performers will be recognized based on energy culture and magnitude of savings.

Qualitative | The EERP utilizes an Energy Management Assessment (EMA) tool to discover each facility's energy culture. The EMA uses a progressive question framework addressing twelve areas that measure commitment to energy conservation.

Quantitative | The quantitative assessment determines the percentage improvement in energy efficiency over time.

"As the world's largest operator of temperaturecontrolled warehouses, it is our duty to spearhead programs that promote energy efficiency while, at the same time, driving sustainability and costsavings throughout the entire supply chain. We're proud of the achievements we've already made at our Americold facilities and we remain committed to the mission of energy excellence in the cold chain."

Ted Royals

Sr. Manager, Energy and Sustainability, Americold Logistics



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ASSOCIATION NEWS NEWS ABOUT GCCA CORE PARTNERS

Chilling, Together

Building relationships. Strengthening the industry. Staying informed. The GCCA Cold Chain Connections series is hosted in cities around the world; created to connect area leaders, local professionals, and visitors to a specific region. Shorter than a full conference, these one- to two-day programs provide the chance to meet new people and learn about the current work of the GCCA, GCCF, and CEBA. Connection agendas feature time for informal conversations as well as presentations from industry experts, leadership panels on a range of topics, and attendee roundtables to share business challenges, opportunities, information, and best practices.

Connections often occur in parallel with other industry events, and may be accompanied by facility visits, study tours, and social activities. In spring 2025, US Connections attendees kicked off their local programs with receptions during major league baseball games (congratulations to the Braves and the Phillies on their hometown wins.) In Toronto, Connections registrants will experience the NHL Hall of Fame.

Why Connecting Matters

"I attended the Northeast Cold Chain Connection primarily for the robust networking opportunities and to gain insights into current market trends impacting the cold chain," says Bryan Hedge of CORE X. "It was a valuable opportunity to connect with fellow industry professionals and key solution providers. Understanding current market trends and fostering those relationships was my top priority."

These events aim to facilitate networking, knowledge exchange, and discussions on current industry trends and challenges, and are open to both GCCA members and nonmembers, promoting inclusivity and broad participation from stakeholders across the entire supply chain.

Topical Conversations

Topics have ranged from real estate market updates, new technology development and deployment, pallet industry innovations, job safety, and regulatory information.

In Philadelphia, Pennsylvania, and Atlanta, Georgia, David Aschenbrand with Newmark provided a useful market update, and



GCCA Cold Chain Connections are providing fun and informative opportunities for cold chain professionals to gather and learn.

a panel of experts discussed AI use cases and managing data, ESG goals, operationalizing upgrades, and key factors in deciding when and how to invest in new technology.

In the Dominican Republic, regional experts detailed the impacts of AI on cold chain logistics, discussed TraSA project advancements, and industry trends, challenges, and business opportunities.

Participant roundtables are a defining aspect of Connections, giving attendees chances to break into small groups for candid conversations.

What Comes Next?

As of publication, several more Cold Chain Connections are scheduled for 2025 in Toronto, Mexico City, St. Louis, Rotterdam, Brazil, Germany, Singapore, Guatemala, and Paris.

"Plans are underway to continue expanding and focusing on these programs in 2026. Prioritizing local and regional relationships and network building is vital to the global success of temperature-controlled supply chains. This convening means warehouse operators, construction and service providers, transport and logistics pros, market experts, and more," says James Rogers, GCCA Senior Vice President of Member and Program Services and Operations. "GCCA is proud to facilitate these sorts of learning opportunities for industry stakeholders. Stay tuned for a Cold Chain Connection coming to a city near you!"

Check out the full GCCA Event calendar, including Connections programs open for registration, at www.gcca.org/events

2025 Brazil Regulatory Forum Recap

The Cold Chain logistics sector in Brazil faces mounting challenges that demand swift and coordinated responses. Recognizing the urgency, the Global Cold Chain Alliance (GCCA) Brazil hosted its 1st Regulatory Forum on April 2, convening industry executives and technical leaders to discuss critical concerns.

The event featured expert insights and included representatives from key associations such as ABOL and ABIEC, as well as government officials who highlighted market expansion strategies and regulatory

ASSOCIATION NEWS NEWS ABOUT GCCA CORE PARTNERS



Sara Stickler; Tim Ludwig, Chair of GCCA Warehouse; Sam Tippmann, Chair of CEBA; Richard Patenaude, Chair of GCCA Transportation; and Ken Whah, Chair of the GCC Foundation at the 2025 Strategic Board Meetings.

updates. Notably, Dr. Marcel Moreira from the Ministry of Agriculture outlined tools to support the private sector, while Dra. Daniela Pieroti Ferreira clarified sanitary regulations and inspections, fostering open dialogue on industry concerns.

One of the forum's most pressing discussions centered on operational risks, particularly the prolonged use of reefer containers on land and the increase of illegal yards in the Paranaguá region – issues that pose severe sanitary threats to export-oriented storage facilities.

Dr. Vivianne Moreira Leite, Chair of the GCCA Brazil Technical Regulation and Food Safety Committee, emphasized the urgent need for regulatory solutions. Additionally, João Carlos Parkison, a senior official from the Ministry of Foreign Affairs, underscored the potential collapses at major ports such as Paranaguá and Santos, advocating for diversified logistics and alternative export corridors to mitigate risks stemming from regional saturation.

Beyond industry challenges, the event highlighted the broader social impact of logistics efficiency. Claudia Vilhena highlighted the role of Sesc Mesa Brasil in reducing food waste, underscoring the sector's contribution to sustainability and food security. As the forum concluded, GCCA Brazil expressed deep appreciation to participants, reaffirming its commitment to advancing practical solutions that will strengthen Brazil's cold chain sector and safeguard its future.

2025 "Top 25" List Published

Each year GCCA publishes a list of the world's largest temperature-controlled warehousing and logistics providers – the Global Top 25 List. Accompanying the Global Top 25 are the breakdown lists of the largest operators in the North America, Latin American/Caribbean, and European regions. The lists are based on the capacity of temperature-controlled space operated by GCCA Warehouse members.

GCCA Warehouse members currently own or operate 8.16 billion cubic feet (231 million cubic meters) of capacity, with total capacity represented by GCCA growing by over 10% in 2025. This capacity was added to the Global Top 25 since the publication of the 2024 lists, due to mergers and acquisitions as well as the completion of numerous ongoing projects. This does not suggest the general industry grew at this pace. The Global Top 25 currently operate 7.3 billion cubic feet (207 million cubic meters). The North American Top 25 operate 5 billion cubic feet (141.5 million cubic meters). The European Top 10 operate 1.43 billion cubic feet (40.6 million cubic meters). The Latin American Top 10 operate 578 million cubic feet (16.4 million cubic meters).

Learn more about this year's Top 25 at www.gcca.org

2025 Strategic Board Meetings

From May 13-15, the GCCA Warehouse, GCCA Transportation, CEBA, and GCC Foundation Board gathered in Nassau, Bahamas, to discuss the future of the cold chain and the Alliance. Board Members heard from President and CEO Sara Stickler on the State of the Alliance, gathered for facilitated strategic breakout sessions, and hosted their formal Board Meetings. Chairs of all four groups also came together in a moderated panel to discuss their term priorities and thoughts around the future of the cold chain industry. **@**

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GCCA Cold Chain Policy Forum Washington, D.C.

GCCA Canadian **Cold Chain Policy Forum** **GCCA POLICY FORUMS**

21-23 July | Washington, D.C. US 6-7 October | Ottawa, Canada



CEBA PROFESSIONAL 4-6 August | Chicago, IL US



GCCA AFRICA COLD CHAIN CONFERENCE 20-21 August | Durban, South Africa



GCCA LATIN AMERICA COLD CHAIN CONGRESS 27-28 August | Santiago, Chile



CONFERENCE & EXPO ER 3-5, 2025 | LAS VEGAS, NY

GCCA CONVENTION 15-17 September | San Antonio, TX US



CEBA CONVENTION & EXPO 3-5 November | Las Vegas, NV US

UPCOMING GCCA, GCCF, AND CEBA EVENTS



GCCF COLD CHAIN INSTITUTES

14-16 July | Mexico City, Mexico19-21 August | Sao Paulo, Brazil2-4 September | Rotterdam, The Netherlands



GLOBAL COLD CHAIN ALLIANCE

COLD CHAIN CONNECTION

15-16 July | Toronto, Canada 16 July | Mexico City, Mexico 6-7 August | St. Louis, MO US 2 September | Rotterdam, Netherlands (Reception Only) October | Curitiba, Brazil 7 October | Cologne, Germany 16 October | Singapore, Singapore 29 October | Guatemala City, Guatemala 13-14 November | Paris, France

Find out more at www.gcca.org/events/event-calendar

MEMBER NEWS NEWS FROM MEMBERS OF GCCA CORE PARTNERS

AMERICOLD has broken ground on an expansion of its cold storage warehouse operation in Hornby, Christchurch. The ambitious \$34 million project will more than double the site's capacity, significantly enhancing its ability to meet the growing demand for temperature-controlled storage across the South Island of New Zealand.

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ARCO NATIONAL CONSTRUCTION is

partnering with Atlantic Food Distributors to bring a 156,000-square-foot cold storage facility to Northeast Ohio in the United States. The project involves renovating an existing facility to include a state-of-the-art Freon refrigeration system, nearly 50,000 square feet of cooler and freezer space, a 13,000-squarefoot, 40-degree Fahrenheit cold dock, and 19,000 square feet of dry storage.

CONGEBEC and BRADNER COLD

STORAGE announce a strategic partnership that will unite their operations to create an extensive network of multi-temperature cold storage facilities across Canada. This alliance spans six provinces: Quebec, Ontario, Manitoba, Saskatchewan, Alberta, and British Columbia, encompassing a total of 16 locations. By combining Congebec's wideranging logistics capabilities with Bradner Cold Storage's regional expertise, the newly formed group will enable coast-to-coast operations through Canada's largest cities.

EMERGENT COLD LATAM announced the acquisition of **FRIALSA PERU**, a leading food storage and distribution joint venture with Grupo Wiese near Lima, Peru. Frialsa operates two cold storage facilities near the city's primary port terminal, and the other is south of the capital, in Lurin. The acquisition also adds blast freezing and transportation capabilities.

EMERGENT COLD LATAM announced it will acquire **COMFRIO**, which has operated in Brazil for nearly 30 years. Its portfolio includes 24 sites and approximately 420,000 pallet positions, representing over two million cubic meters of total storage capacity.

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INTERSTATE COLD STORAGE announced its Columbus II facility has achieved Safe Quality Food certification, a globally recognized food safety standard administered by the Safe Quality Food Institute. The certification signifies the facility meets rigorous

2025 GCCA ADVOCACY FUND

- Reintroduction of the FRIDGE Act
- Streamlining the FSIS export process
- Taking action to delay the compliance date of FSMA 204
- Engaging with EPA to roll back regulatory overreach
- Reducing burdensome OSHA regulations and enforcement policies
- Promoting positive trade policies and mitigating the impacts of tariffs
- Promoting food maximization, like the Feed the Community Act











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MEMBER NEWS NEWS FROM MEMBERS OF GCCA CORE PARTNERS

international benchmarks for food safety and quality management systems, specifically tailored for food storage and distribution operations. ICS received an "Excellent" rating.

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LINEAGE INC. will acquire four existing cold storage warehouses and other related assets from Tyson Foods Inc.. Following the transaction, Lineage will onboard over 1,000 Tyson Foods employees. The warehouses, located in Pottsville, Pennsylvania; Olathe, Kansas; Rochelle, Illinois; and Tolleson, Arizona, total approximately 49 million cubic feet with 160,000 pallet positions.

LINEAGE, INC., has completed the acquisition of Permanor AS, a provider of cold storage and logistics solutions in Norway. The acquisition includes Permanor AS, which specializes in freezing, thawing, storage, and logistics services, primarily catering to the meat manufacturing industry and handling baked goods. Permanor's Haugesund facility installed over 880 solar panels in recent years, reinforcing its efforts toward energy efficiency and sustainability. Across both sites, the facilities span over 10,000 square meters, offering approximately 24,500 pallet positions to support demand.

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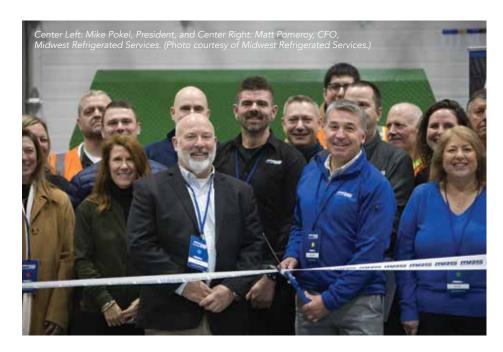
MIDWEST REFRIGERATED SERVICES,

Lactalis USA, and Consolidated Construction Company cut the ribbon to open a 200,000-square-foot distribution center in Belvidere, Illinois, United States. The distribution center is served by the Union Pacific Railroad and offers more than 36,000 pallet positions of refrigerated storage and state-of-the-art layer picking technology.

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VERTICAL COLD STORAGE purchased the Arctic Logistics facility in Canton,

Michigan, United States, in April. The facility encompasses 140,000 square feet, features 19 dock doors, and includes over 20,000 pallet positions. Constructed in 1993 and expanded in 1999, the Canton site features capabilities for blast freezing, case picking, kitting, and cross-docking. **2**





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NEW MEMBERS NEW MEMBER COMPANIES OF GCCA CORE PARTNERS

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Schneider Green Bay, Wisconsin, United States

GCCA ASSOCIATE MEMBERS

Agility Recovery Duluth, Georgia, United States

Grupo MBP Sao Paulo, Brazil

Motive Tustin, California, United States **Movecta S.A.** Sao Paulo, Brazil

Plotter Racks Curitiba, Brazil

Voxel AI San Francisco, California, United States

GCCA-CEBA ASSOCIATE MEMBERS

A&E Construction Upper Darby, Pennsylvania, United States

Checkpoint Group Murfreesboro, Tennessee, United States

Contegra Construction Edwardsville, Illinois, United States

Neweras Enercon Technologies PVT LTD Bangalore, India

GCCA Cold Chain Policy Forum Washington, D.C. | July 21-23, 2025



The GCCA Cold Chain Policy Forum features educational sessions and keynote presentations focused on the regulations and legislation that directly impact the industry, meetings with key federal agency officials, congressional visits, and more.

Learn more and register www.gcca.org



NEW MEMBER COMPANIES OF GCCA CORE PARTNERS

CEBA GENERAL & ASSOCIATE MEMBERS

HFA-AE Fort Worth, Texas, United States

Icecold Building Solutions Ltd Nanaimo, British Columbia, Canada

Ideal Building Solutions Norcross, Georgia, United States

Klein & Hoffman Chicago, Illinois, United State **Leo A. Daly** Minneapolis, Minnesota, United States

Lineage Metals Nashville, Tennessee, United States

McDonough Mechanical Services Inc Forest Hill, Maryland, United States

GCCF MEMBERS

Banque Alimentaire de Côte d'Ivoire Lagunes, Côte d'Ivoire

Chamber of Refrigerated Warehouses and Ice Factories Argentina

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Marcus Millichap **REAL ESTATE COLD STORAGE BROKERAGE** NATIONAL COLD STORAGE OVERVIEW 2025 Developments | Transaction Activity | Vacancy Trends U.S. Cold Storage Completions And Vacancy Trends; Cold Storage Vacancy Below Broader Industrial Sector **CONTACT US TODAY** Luis Ortega Kent R. Williams, SIOR Senior Associate - Cold Storage Specialist Senior Managing Director - Investments Direct: 858.373.3214 Direct: 858.373.3193 luis.ortega@marcusmillichap.com kent.williams@marcusmillichap.com License: CA 02071282 License: CA 00823860 770.928.7120 PRIMUSBUILDERS.COM G

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