

Taking the Cold from South to North

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

The Southern Model

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

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

"What makes us different from other regions in Europe is the high quality commodities we produce such as olives, oil, fish, cheese, wine and fruits, and vegetables," Charitonidis notes. "What is also true is that Greece's cold chain is not seen as having the capacity – yet – to welcome big loads and demanding logistics."

"The main difference between the northern and southern markets is that the latter is smaller, it's afraid to pay at the beginning, so it is stuck with insourcing its cold storage and logistics needs," says Charitonidis. "It is also true that a sense of identification is a significant factor in countries like Greece, Italy, Portugal, and Spain. Retailers and small to medium enterprises that sell directly to consumers are those most likely to insource. These companies may

have not realized or digested that their main objective is sales. Food processors are taking baby steps towards remote inventory management and outsourcing because they don't have the money to invest in packaging or processing lines."

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

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

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

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

The Northern Model

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

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

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

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

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

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

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

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

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

Challenges Ahead

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

His focus is also on encouraging more research and development in food technology issues and the use of carbon dioxide as a refrigerant, insurance issues regarding storage and transportation, and effective policy that would allow his company to respond quickly to market demands and form easy and ergonomic freight forwarding schemes.

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

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

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

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

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

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

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