



FLEXIBILITY AND PANDEMIC PROOF – FUTURE OF REEFER TRADE

Steve Wray and Christian Dalgaard of WSP's Maritime Advisory team in London look at the future of reefer container trade and how these new units can remain pandemic resistant.

Traditionally, reefer freight has focused on perishable goods. These must be packaged in temperature-controlled conditions to ensure their freshness. With the development of reefer container technology, the reefer freight market offers opportunities for flexibility and growth.

There are several reasons for this trend, which WSP has recently experienced when supporting a maritime advisory service for a major client in Peru and another in Ecuador.



Pandemic Proof

The demand for shipping reefer containers is pandemic proof. Peru is a country that exports a lot of food and other products that require the use of reefer containers. This is one of the main reasons why the country's two ports, Callao and Paita, were significantly less affected by the drop in demand in 2020.

As far as the long-term outlook for the use of reefer containers, the future looks positive, especially with a steadily growing population, a global focus on healthier diets and an emphasis on sustainable supply, which act as a powerful catalyst for reefer container growth.

Changes in diet and resupply cycles, as well as the fact that people are spending more time at home, have encouraged healthier diets and food preparation, which is inevitably tied to perishable foods.

The demand for plant-based and vitamin-rich diets in Europe and North America, combined with a booming Chinese meat market has led to an increase in the number of reefer containers transporters and ports.

Moreover, with seasonal foods becoming available all year round, consumer tastes and preferences have allowed growing regions to expand. Other food trends in terms of sustainable food supply - such as natural fish stocks complemented by agricultural intensification – will create more reefer trade going forward.

But other trends with an impact on maritime transport are also relevant. While greater near-shoring may be one outcome of the global COVID-19 pandemic, the locations from which food and other products requiring refrigerators are exported or imported will not change significantly – hence the need for continued shipments.

Case Study - Shrimp in Ecuador

Historically, refrigerated shipments have relied on relatively large consignments of frozen goods in a single bulk shipment, but this limits the markets that can be served. Conversion into smaller packages, such as individual 40-foot

reefer containers, avoids this issue and makes it easier to serve larger areas.

According to recent work by a major terminal operating company that added a new facility to its portfolio, shrimp exports from Ecuador have increased from 92,000 tons in 2005 to 645,000 tons (pre-COVID in 2019) and were destined for a number of different destinations including China, Europe, the USA and Vietnam.

WSP has found that the logistics supply chain process has improved significantly. For example, reefer units can be delivered directly to the shrimp farm and the cargo loaded directly into a refrigerated container at the required temperature. Construction of a refrigerated warehouse, which is part of the project assessment, clearly shows how the options available to shippers in the port have improved. These trends are typical of those occurring across the industry and are expected to continue.

It avoids shrimps being delivered by truck to a refrigerated vessel and the cargo being open to the elements for some time while being transported to the vessel. Refrigerated containers avoid these issues, provided that all infrastructure is available.



Positive Future

The commitment to investment in “cold chain logistics” and the increased use of the Internet of Things (IoT) by shipping companies, such as

Maersk Line, will further transform and improve refrigeration operations. There is already an increase in visibility and cost of rising energy bills, through efficiencies such as real-time access to data on container temperature, which can help shippers and cargo owners to organize their reefer shipments more effectively.

The future looks bright for reefer containers. Evidence that reefer is pandemic and recession proof, customer tastes that integrates healthier and sustainable food, along with gains in efficiency through the development of new reefer technology and the flexibility offered by reefer containers all point to a loss in market share for traditional reefer shipping.

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