

Trends in cold chain markets – from air to sea?

There is a growing shift in pharmaceutics to ship products from air to sea freight that is driven by cost — air freight is 16 times more expensive than ocean freight, and 4-5 times more expensive than road transport; climate change and need to reduce CO2 footprint; as well as increased security and flexibility offered by sea freight. Meanwhile, there is still a preference for air freight for some very high-value products requiring specific handling. At the same time, increasing technology developments for high-value and dangerous goods will gradually allow shifting towards more sea freight, where the risks of temperature excursions are said to be lower.

The volume of reefers has grown by around 10%. There is a significant move by ports to improve reefer service and become 'SMART-ER' (e.g. GDP certificate for pharmaceutical products), while at the same time continuing congestion, delays and labour shortage are still obstacles to seamless supply. Intermodality is looked at as an alternative, but there are still many obstacles on the way.

We also see big investments being made by venture capital in supply chain technology. With sustainability and cost of energy on top of agenda, research to develop new, environment-friendly refrigeration systems and solutions is intensifying and is further stimulating the development of cold chain overall. Ports, among others, will have to cope with the increasing demand for traffic at the same time as the availability and costs of energy. Cold chain operators will have to turn more to renewable energy, energy storage and reuse, building insulation and performance and operational efficiency.

