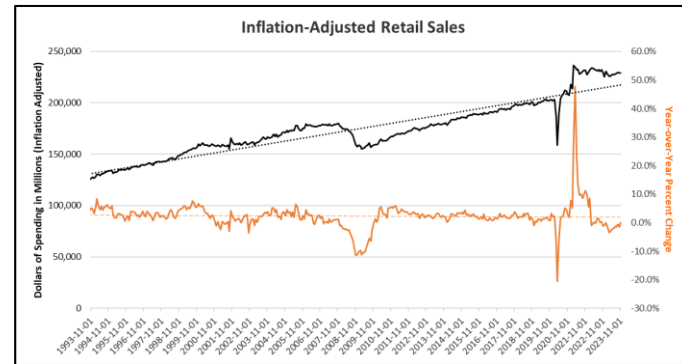
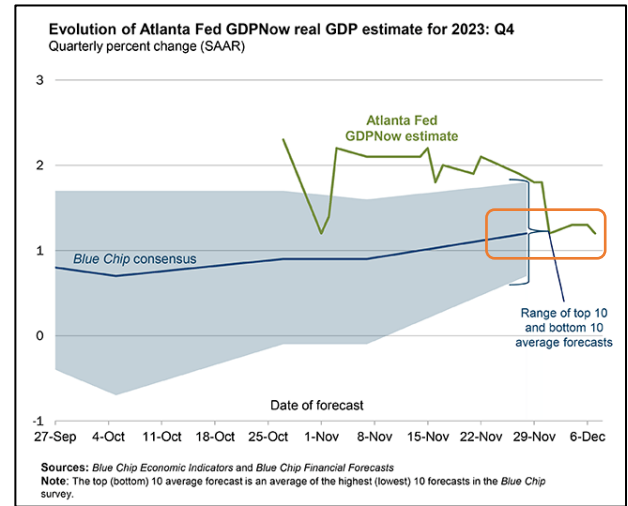


Factors Shaping Supply Chain & Logistics

Q4 GDP Outlook 1.2%. The Atlanta Fed GDPNOW estimate early in December is currently showing it growing at 1.2% based on data released thus far. The U.S. economy was riding on top of consumer spending, government investment, and nonresidential construction activity for most of the year. In Q3, adding inventory building activity going into the peak pushed growth to 5.2%. Without that inventory building activity, slowing construction starts, and some questions about the strength of the consumer, growth is slowing. But it is growth.

Consumer Spending Remains Strong. Inflation Adjusted Retail Sales continued at a historically elevated rate, despite being flat year-over-year. Sales inched up as expected by 0.2% between October and November. This year's retail peak season is critical for resetting the global supply chain. Inventories have softened and good sell-through during this holiday season will help deplete inventories further. As inflation cools (especially for items like fuel and energy), it quickly adds more discretionary spending income for consumers. For now, stable consumer spending is the most important factor here.

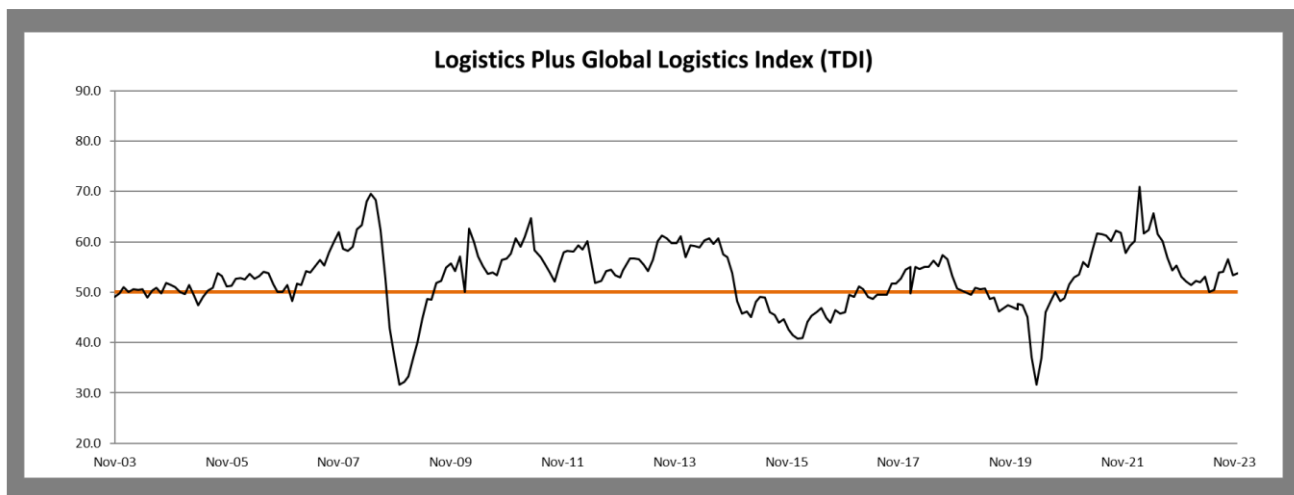


The LogisticsPULSE Global Logistics Index

The GLI Inches Up in November

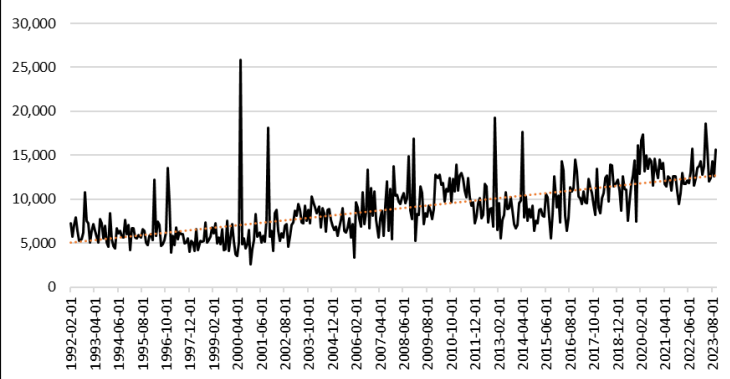
The LogisticsPULSE Global Logistics Index (GLI) came in at **53.8 in November**, up slightly from 53.4 in October. It was still in expansion territory but remained sluggish. The index was 1.4% higher Y/Y (it was 5.5% lower Y/Y last month) and was 0.7% higher M/M. For seasonality comparisons, it was 6.8% lower than November of 2021 during the global supply chain peak.

The GLI measures transportation demand across 22 global economic metrics and has been measured over twenty years of collected data.



What's New & Important with North American Supply Chains?

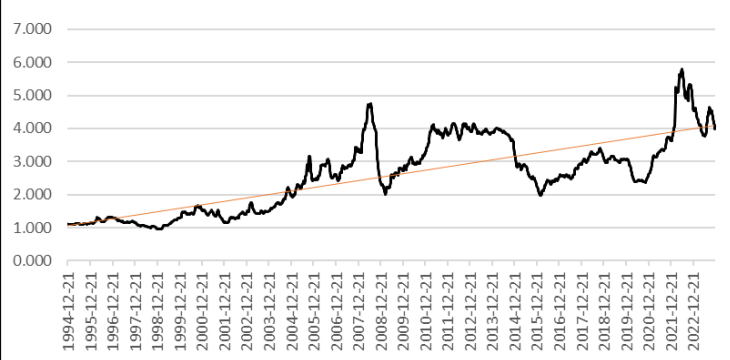
Defense Capital Goods New Orders (Millions of Dollars)



Defense Spending to Ratchet Up

Congress has approved a record \$886 billion in spending to support two ongoing wars and to bolster defensive posture in the South China Sea and surrounding regions. Spending had already been increasing as the chart at left shows, but this additional spending appropriations for equipment, vessels and aircraft, and munitions will spur far more manufacturing activity in the defense industry. In addition, increased spending across the global defense sector is a global phenomenon as countries work to replenish stockpiles. Supply chain activity up and down the entire defense procurement process will ratchet up in the coming quarters.

US Diesel Sales Price

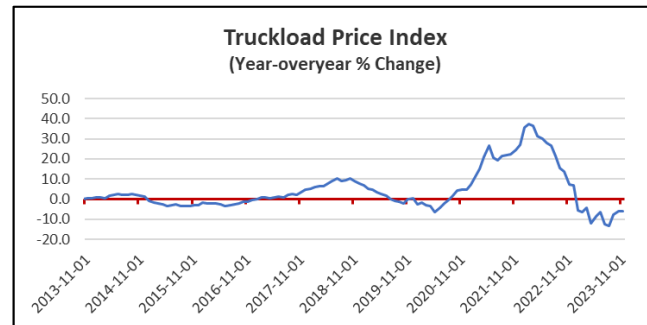


Diesel Prices Expected to Stay at Current Rates Through 2024

The U.S. average diesel prices are expected to remain in the \$3.95 per gallon range throughout 2024. The potential volatility in global petroleum prices and demand in Europe for U.S. refined fuels are uncertainties that could change this forecast. Today, petroleum accounts for 46% of the price of a gallon of diesel, and West Texas Intermediate prices are falling rapidly. The latest price per barrel was low at \$72.34 at the time of writing this month's brief.

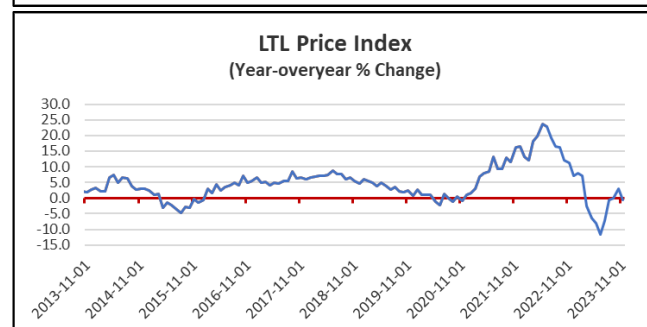
Full Truckload (FTL) Price Index:

Truckload prices were down 0.5% M/M (2.2% higher last month) in November (latest available) according to the Producer Price Index (includes both contract and spot rates). They were down 5.8% Y/Y (-6.2% adjusted from last month). (PCU484121484121)



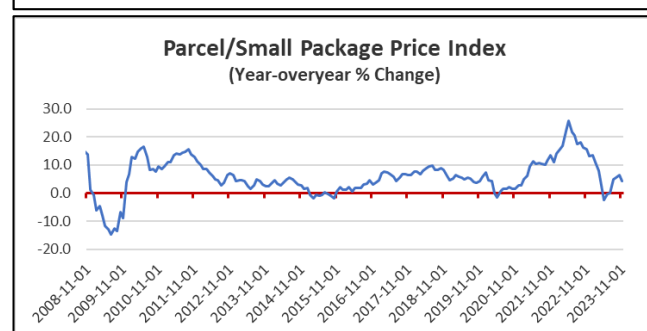
Less-Than-Truckload (LTL) Price Index:

LTL prices were lower by 1.4% month-over-month in November (latest available) and were down 0.6% Y/Y (up 3.0% last month). Prices have succumbed to seasonal weakness as retailers hold off on further inventory building activity (largely) headed into the final few weeks of the peak retail season. But it is important to note that they remain 27% higher than they were in November of 2019. (PCU4841224841221)



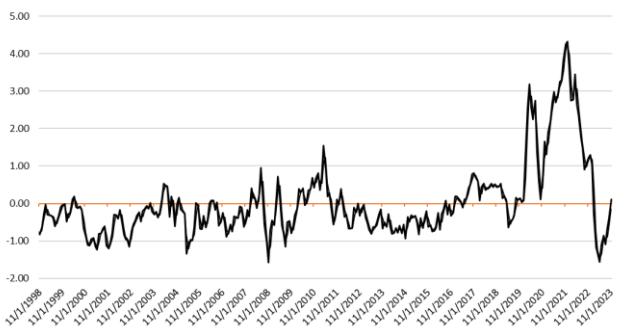
Parcel/Small Pack Price Index:

Prices for parcel and small package express courier services increased again by 4.2% Y/Y (6.5% higher last month); but were down month-over-month in November by 1.1%. E-commerce sales were 10.6% higher Y/Y (7.6% last month) and were higher by 1.0% month-over-month in November (latest available). (PCU492110492110201)



What's New & Important with International Supply Chains?

New York Fed Global Supply Chain Pressures Index



Whip Saw Change in Global Supply Chain Pressures Index

We cover this a lot, because it is a good indicator of global supply chain cycle changes. The New York Fed's Global Supply Chain Pressures index has rebounded from an all-time low hit in May 2023 to move back toward a balanced state. The index came in at 0.11 in November, which is a "balanced" market. This means that the relationship between shippers and carriers are balanced, supply chain disruptions are largely minimal, and transit times are predictable. There are still three areas of the world where transits are a concern: The Red Sea, Panama Canal, and lower Mississippi River. But most other regions are facing little congestion and are in-cycle.

Hints of Improvement in Global Manufacturing Environment

November manufacturing reports showed 22 countries had improving M/M PMIs. Trends were mixed, but showed that 1) inventories were down and customers were nearing the end of their destocking process; 2) new orders were still flat, but there were some pockets of growth beginning to show in Europe; 3) input costs were only slightly easing, but discounting of finished goods to spur sales was underway across many markets (causing some potential margin compression); 4) but manufacturer optimism about an improving 2024 environment was on tap and many were hanging onto talent to prepare for that growth. This would be an improvement in the global supply chain condition versus the sluggish 2023 global market.

Airfreight Price Index:

The airfreight price index was higher by 1.7% M/M in November (latest available and up 0.3% last month) and was lower on a Y/Y basis, falling by 12.9% (down 21.4% last month). Compared to the period just before the pandemic, air cargo prices are 3.3% higher (essentially in-line with the pre-pandemic period). With less emergency scrambling for products, air cargo is still lagging. (IC131)

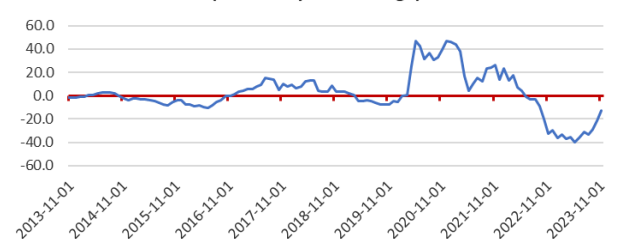
Ocean Freight Price Index:

The blended PPI for maritime service in October was 10.1% lower Y/Y (12.6% lower last month), and it was slightly higher by 1.6% M/M (-5.5% last month). Some ships being diverted around the Cape of Good Hope to avoid tensions in the Red Sea have helped tighten capacity - but slowly. Panama Canal congestion is still a problem, and diversions are still occurring. (PCU483111483111)

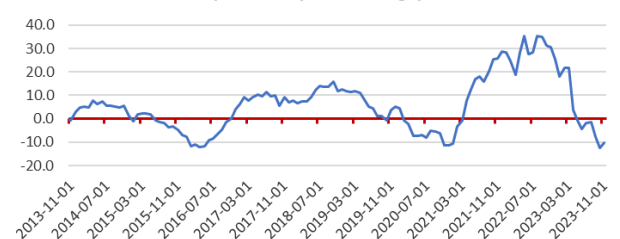
Warehousing Price Index:

Warehousing prices were lower in November (latest data available) with rates down 0.8% M/M (-0.5% last month) but was higher Y/Y by 5.1% (+5.5% last month). (PCU49314931)

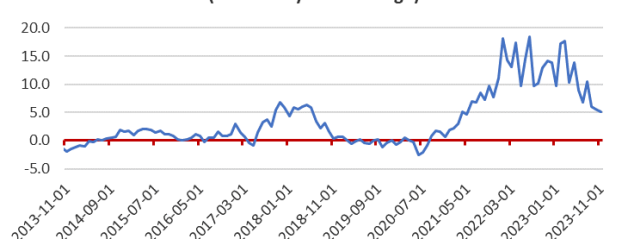
International Air Freight Price Index
(Year-over-year % Change)



Maritime Freight Price Index
(Year-over-year % Change)



Warehousing Price Index
(Year-over-year % Change)



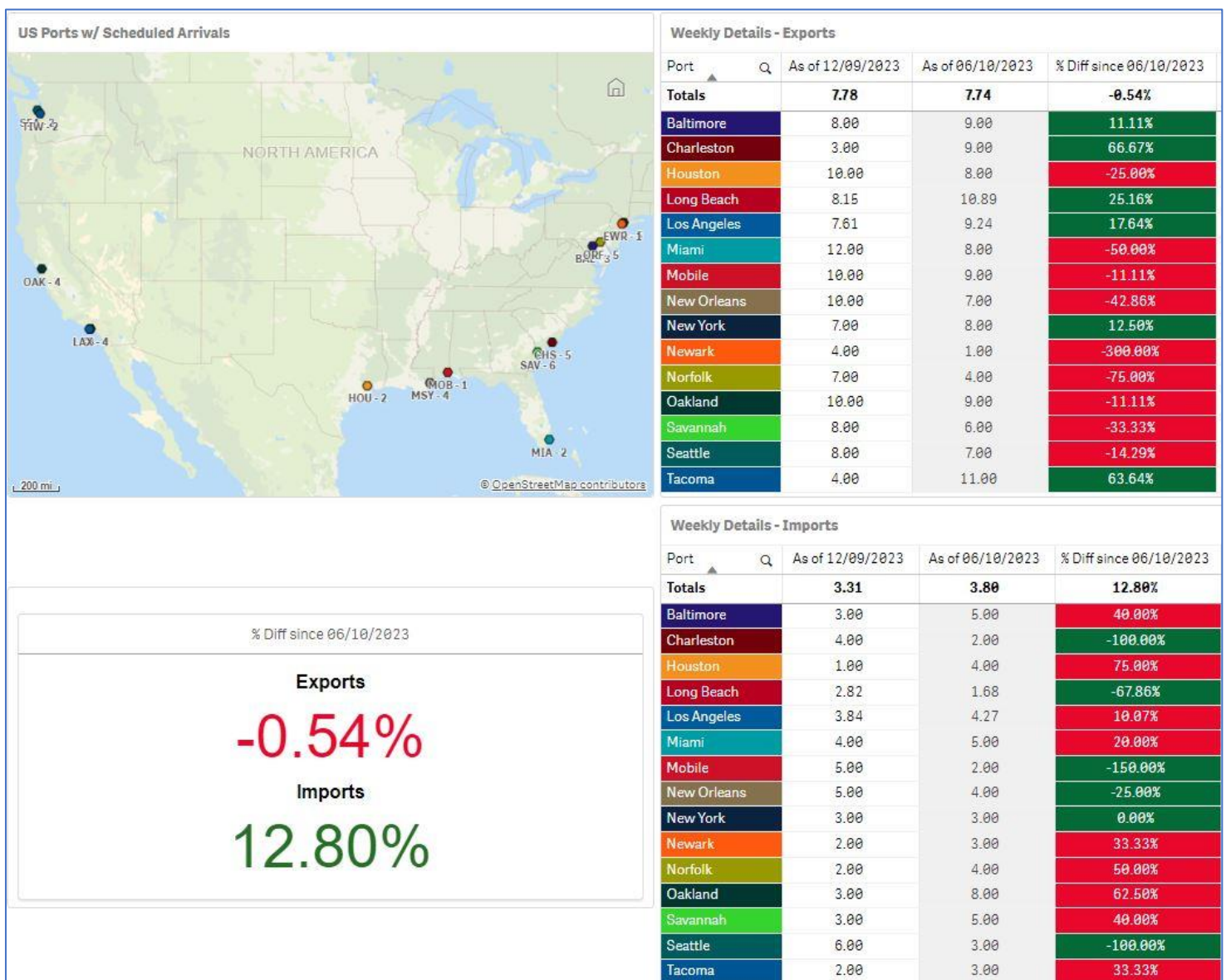
The LogisticsPULSE Port Congestion Index

U.S. Container Imports and Exports Processing Continue to Show Aggregate Improvements

Port congestion can have a big impact on supply chains. The **LogisticsPULSE Port Congestion Index (PCI)** is a data-driven tool that calculates how much congestion there is at critical U.S. ports.

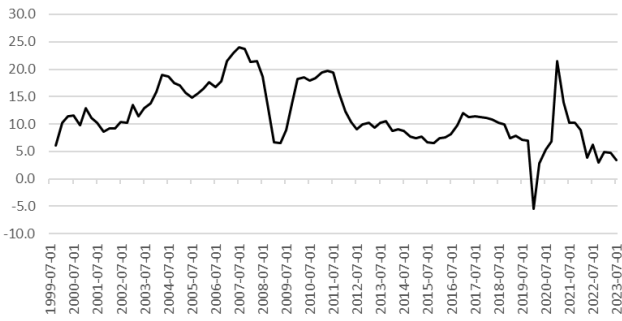
- For containers Exported from the USA, the Container Processing Time (in days) has decreased a little by 2.51%, or ¼ of a day, versus what it was in mid-June 2023. The processing time for Imports from these same ports is improved by about 7.86%, or a little more than a half day faster than it was in mid-June 2023.
- The U.S. Ports with the greatest amount of Imported TEU's currently are in Houston, New York and Los Angeles and are being processed in about 2.61 days. The highest volume of Exported TEU's are Los Angeles, Houston and Savannah and they are completing the export process in about 8.54 days.
- The port with the greatest number of scheduled vessel arrivals is in Savannah, New York, Norfolk and Charleston, where Mobile and Newark have the fewest.

(data shown below is container processing time, in days, by port)



Special Topics in Supply Chain & Logistics:

China GDP Annual Growth Rate Through Q3

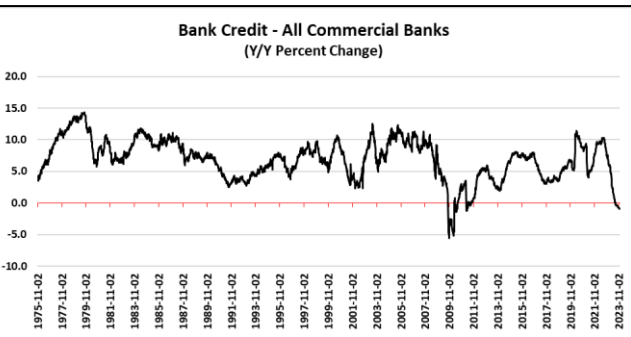


China to Spur Recovery in 2024 And Impact on Global Trade

Like other Central Banks, China is working on several programs to spur economic growth in the country. Based on the success of these programs, it could spur some global scrambling for raw materials, some of which appears to be underway. The Baltic Dry Index, which tracks the early movement of raw bulk materials that are often inputs into construction or manufacturing, is up 42% over the past 30 days and is up nearly 58% YTD. Competition for raw materials (steel, copper, aluminum, titanium, etc.) is likely to increase – and will accelerate when China’s recovery builds momentum.

Weak Bank Lending Activity Still a Drag on Global Growth

Optimism is building that 2024 will be a much better freight environment as global inventory overstocks are eliminated. Some evidence suggests that this has happened. But global economic conditions are still weak, and some headwinds are still building, especially for commercial project funding. The Federal Reserve’s Bank Credit Index shows only the second year-over-year contraction in the history of the measure. For reference, the prior time this occurred was during the Great Recession and global financial crisis. Although conditions are very different this time around, the regulatory pressures being levied on the banking sector are reducing the number of projects that they can consider. The greatest impact of this will be on the construction sector, and some project funding difficulties are beginning to show.



What’s New at Logistics Plus?

LP Manages Complex Delivery of First Non-Grain Ship to Ukraine Since War

Logistics Plus has successfully completed a challenging shipping operation for its client, Vorex USA, in support of the reconstruction and development of Ukraine’s energy infrastructure. This accomplishment reaffirms the company’s commitment to excellence and efficiency under the most demanding circumstances. [Read Story](#)



Logistics Plus Malaysia Cross Border Project (Video)

The LP Malaysia team successfully transported a boom, stick, and bucket from Johor, Malaysia, to Derince, Turkey. The LP Malaysia team was responsible for loading the cargo at the shipper’s factory, trucking it to Singapore, handling the customs clearance, and transferring it onto the ocean vessel. [Watch Video](#)



Logistics Plus Thailand Catamaran Project (Video)

The LP Thailand team successfully transported two catamarans from Laem Chabang, Thailand, to Koror, Palau. At the start of the project, the LP Thailand team struggled to find a carrier that would accept the overlength and over-dimensional catamarans (12.22 L x 3.31 W x 4.21 H meters). [Watch Video](#)

