

Supply Chain Impact Intelligence

October 2025

This monthly brief has three primary sections providing updates on the fundamental factors impacting the cost of goods and services. Each section will cover the current market and trends within energy, freight, raw materials and wages. The first section provides a high-level overview, followed by a heat map containing detailed inflation trends. The third section dives deep into the market fundamentals currently impacting prices and costs of manufacturing.

Energy

A multitude of geopolitical events could send oil prices soaring at any moment, with Russia banning gasoline exports after Ukraine hit several Russian refineries. However, solid global production combined with the continued low demand from Europe, China and the U.S. has prevented oil, gasoline and diesel from escalating.

Freight

Due to the combination of continued tariff uncertainty, potential tariff order panic earlier this year and slumping demand, ocean freight rates have declined significantly since July. Spot prices in late September hover around historic norms.

Trucking costs, both spot and contract, continue to linger in the lower price range as low demand and lower diesel prices keep rates down. However, a decline in fleet size and a crackdown on driver rule enforcement has started to show signs of leading to fewer available trucks which may lead to an increase in trucking costs.

Raw materials

Demand for raw materials remains week, with flat to lower prices shadowing the depressed demand. Tariffs have led to random volatile price spikes as manufacturers stockpiled raw materials before the tariffs went into effect.

Wages for labor in manufacturing and service providers

Wage growth in manufacturing has been on an elevated track for several years. However, the latest data has shown mild wage increases with annual raises returning back to normal rates. Wage increases for service providers have maintained an annual growth rate of 4% since 2023.

Monthly spotlight

The Producer Price Index (PPI), which covers the cost of goods production, shows a concerning picture of inflation. The PPI Index that covers materials and components for manufacturing continues a trend upward, rising 4.1% from January to August this year. As the impact of tariffs winds its way through the supply chain, anticipate an acceleration of inflation rates, particularly on goods.

Inflation and raw materials heat map

The heat map provides a synopsis of inflation trends month-over-month. It also provides a long-term inflation picture looking at 12-month percent changes, three-year percent change and what has happened since January 2020, right before the pandemic created wild price swings. The colors within the heat map are meant to assist you with capturing the current trend of costs that impact manufacturing, service and distribution. Note: The August % change is not available for all categories below as they lag a month behind.

	2023 1 month % change				Prices low/declining				1 month % change				Prices high/increasing								Historic inflation rates						
	2023 Sep		nth % c	. 0-	2024 Jan	Eoh	Mar	Apr	May	1 mor		hange Aug	Sep	Oct	Nov	Dec	2025 Jan	Feb		nth % c	hange	lun	Inf	Aug	12-month % change	•	Jan. 2020
Materials	эср	000	1404	DCC	Juli	100	IVIGI	Abi	iviay	Juli	Jui	Aug	JCP	Oct	1404	Dec	Juli	100	IVIGI	Abi	iviay	Juli	Jui	Aug	70 change	70 change	70 change
Resins	0.1%	-1.5%	-0.3%	-0.3%	-1.1%	1.8%	-1.5%	2.6%	-0.3%	0.2%	1.1%	-1.3%	-2.2%	1.9%	-0.6%	-0.7%	0.7%	0.3%	1.1%	-0.6%	-1.1%	0.9%	-0.8%	1.9%	0.8%	-11.5%	-6.1%
Metals	-0.5%	-0.6%	-0.7%	-0.1%	0.7%	0.4%	0.5%	1.1%	1.8%	0.5%	-1.3%	-1.3%	-0.4%	0.9%	1.2%	-1.1%	1.2%	0.6%	-0.4%	0.8%	-0.1%	0.7%	3.6%	0.2%	7.4%	4.5%	48.5%
Chemicals	-0.1%	0.3%	-0.5%	-0.3%	-0.5%	0.5%	-0.1%	0.7%	0.1%	0.1%	0.6%	0.1%	-0.4%	-0.2%	-0.3%	0.0%	0.6%	0.7%	0.3%	0.0%	-0.5%	0.1%	0.4%	0.0%	0.7%	-2.5%	22.8%
Paper	0.7%	-1.6%	0.1%	0.0%	0.7%	-0.1%	-0.8%	0.3%	0.7%	0.1%	1.4%	-0.7%	-0.1%	1.0%	-0.2%	-0.1%	-0.6%	0.8%	0.7%	0.7%	-0.1%	-0.1%	2.0%	0.2%	4.3%	7.4%	29.5%
Sanitary paper	0.0%	-1.5%	-0.7%	-0.6%	-0.2%	0.0%	-0.1%	-0.1%	0.0%	0.0%	0.1%	0.0%	1.1%	-0.2%	0.1%	-1.5%	0.0%	0.1%	0.2%	-0.1%	0.2%	-0.6%	-0.5%		-1.1%	2.1%	16.7%
Packaging	0.5%	0.6%	0.1%	0.1%	-0.1%	0.8%	0.6%	0.4%	-0.2%	0.1%	-0.3%	0.7%	0.1%	0.1%	-0.7%	-0.1%	-0.8%	0.9%	0.1%	0.5%	-0.3%	-0.3%	-0.6%	0.6%	-0.5%	-0.2%	28.3%
Fibers	0.2%	0.9%	-0.1%	-2.4%	1.3%	0.0%	1.5%	0.3%	0.5%	0.9%	1.1%	0.5%	-0.6%	-0.6%	0.0%	0.0%	1.4%	0.0%	0.0%	0.3%	-0.7%	-0.3%	0.4%	0.4%	0.2%	-1.6%	39.7%
Cotton	-1.2%	-2.5%	-4.4%	0.4%	5.4%	7.6%	-9.1%	-8.9%	-2.1%	-1.4%	-3.5%	1.6%	2.5%	1.2%	-2.5%	-2.0%	-2.1%	-0.3%	-0.4%	1.0%	-0.6%	0.4%	0.6%	-0.3%	-2.5%	-36.5%	-0.6%
Energy																											
Oil	9.9%	-4.2%	-9.3%	-7.5%	3.1%	4.2%	5.2%	5.0%	-6.2%	-0.3%	2.5%	-6.3%	-8.4%	2.5%	-2.8%	0.2%	8.0%	-5.6%	-4.6%	-6.9%	-2.2%	9.7%	0.3%	-5.2%	-15.4%	-30.8%	12.8%
Diesel	4.3%	-1.1%	-5.8%	-6.5%	-3.0%	4.9%	-0.5%	-0.5%	-4.5%	-2.6%	2.4%	-2.9%	-3.8%	0.7%	-1.8%	-0.8%	4.0%	1.0%	-2.2%	-0.6%	-2.0%	2.9%	5.0%	-1.1%	1.1%	-25.4%	22.7%
Natural gas	2.3%	12.9%	-9.1%	-7.0%	26.2%	-45.9%	-13.4%	7.4%	32.5%	19.8%	-18.5%	-3.9%	14.6%	-3.5%	-3.6%	42.0%	37.2%	1.5%	-1.7%	-17.0%	-8.8%	-3.2%	6.0%	-9.1%	46.2%	-66.9%	44.1%
Electricity - industrial	0.3%	-5.9%	-1.6%	0.2%	0.6%	2.9%	-1.8%	-0.9%	-1.4%	8.4%	0.7%	0.0%	0.1%	-5.2%	-3.2%	0.5%	0.7%	1.4%	0.4%	0.1%	-2.1%	7.4%	6.0%	1.2%	6.8%	13.6%	46.8%
Logistics																											
Ocean shipping	-4.5%	-5.5%	-3.1%	3.1%	2.9%	-2.4%	-2.9%	0.6%	3.5%	4.9%	1.1%	-1.6%	-4.3%	-1.2%	-3.2%	-0.6%	8.7%	2.1%	-5.0%	-1.3%	-2.6%	1.9%	-3.0%	-0.8%	-9.4%	-14.6%	22.1%
Trucking	0.9%	0.6%	-1.4%	-2.0%	2.6%	0.8%	0.5%	0.6%	-0.9%	-1.2%	2.4%	-1.5%	-0.3%	0.1%	0.0%	0.0%	5.7%	0.7%	-0.1%	0.0%	-0.4%	1.1%	1.7%	1.5%	10.5%	11.2%	39.1%
Labor (index of averag	ion an	d nons	upervi	sory e	mploye	ees)																					
Manufacturing	1.1%	0.0%	0.9%	1.3%	0.0%	0.1%	0.5%	0.5%	-0.1%	0.6%	0.7%	-0.2%	0.9%	-0.1%	0.8%	0.6%	0.4%	0.1%	1.0%	-0.2%	-0.1%	0.5%	0.4%	-0.3%	3.9%	15.4%	29.0%
Services	0.9%	0.9%	-0.4%	0.3%	1.2%	-0.1%	0.3%	0.5%	0.0%	0.2%	-0.1%	0.3%	1.3%	-0.1%	0.1%	0.9%	0.5%	0.7%	0.1%	-0.1%	-0.1%	0.3%	-0.1%	0.3%	3.8%	13.0%	30.5%
Construction labor	0.0%	0.2%	0.2%	0.2%	0.7%	0.0%	1.0%	-0.5%	0.3%	-0.6%	0.5%	0.4%	1.3%	-0.9%	-0.1%	1.5%	-0.7%	0.1%	1.1%	-0.5%	0.6%	-0.6%	0.9%		3.0%	13.8%	30.2%

Market fundamentals impacting costs

The table below highlights the factors creating an upward or downward pressure on the cost of manufacturing, providing services and distribution. The information details pressures on energy and raw material prices, costs of trucking and shipping, and wage changes within goods manufacturing and service providers. The **upward** section identifies factors that may lead to future price increases while the **downward** section indicates what may lead to lower costs.

Table of contents

Energy -

Freight -

Raw materials \rightarrow

Labor →

Market fundamentals putting **upward** and **downward** pressure on prices:

Energy

Oil market fundamentals



Upward pressures

- Geopolitical pressures and conflicts from the Russia/Ukraine war to multiple potential areas in the Middle East have the potential of leading to significant increases of oil, gasoline and diesel prices.
- Oil rig counts in the U.S. have dropped this summer due to low demand and low prices. As production and supply levels decline, prices tend to rise. Analysts anticipate this to cause price pressure later in 2026.
- Growing demand of fossil fuels in developing countries, especially from India and Southeast Asia, will contribute to increased price pressures during the next few years.
- Stock levels of oil in the U.S. have slowly continued declining which hasn't impacted prices yet but could lead to a large price increase if global supply gets disrupted.



- Saudi Arabia's increased production levels have created solid supply levels and, in turn, lower prices.
- China has boosted its oil drilling and discovered a large oil deposit offshore, and Brazil has grown its offshore drilling production.
- The Energy Information Administration (EIA) believes the high U.S. production levels will continue. Most production growth will come from offshore drilling in the Gulf of America and not shale oil.
- Less oil and its derivatives will be needed from Europe and China as government policies push them toward green
 energy. Europe and China will continue investing heavily to increase green energy, reducing dependance on fossil
 fuels. The purchase of EVs has exploded in China, creating a noticeable decline in fuel demand.

Diesel market fundamentals



Upward pressures

- Two U.S. refineries will shut down in 2025 and another in 2026, decreasing refining capacity by 3%. The refinery shutdowns are primarily related to aging facilities and climate policies that impact the ability to remain in production. The EIA has forecasted low inventory levels in 2025 and 2026, leading to consistently higher prices.
- Europe, which no longer receives diesel from Russia, continues to rely on the U.S. for diesel imports, leading to further price pressures in the U.S.



Downward pressures

- Low demand has prevented price increases so far, but when demand increases, supply levels will be strained.
- New refining plants have come online outside the U.S., along with capacity upgrades of several current U.S. plants. In 2023, China became the largest refiner of diesel and gasoline.

Natural gas market fundamentals



Upward pressures

- Russia and Ukraine have been targeting each other's energy infrastructure, which could lower global supply availability.
- Long term, global natural gas demand is projected to surge with higher global temperatures, and technology demands from Al and cloud services. Asia will also account for a substantial portion as it switches from more polluting resources to liquified natural gas.



Downward pressures

- In the short term, high inventory levels, especially in the U.S., will keep prices at or below historically normal levels.
- Qatar broke ground in October 2023 on the world's largest new liquified natural gas (LNG) project, the North Field expansion project, which will supply LNG to Europe and China.
- Significant discoveries of natural gas were made in northern Africa on land and offshore. Several major oil companies are investing heavily to produce and provide natural gas and oil to Europe as a replacement for Russia.

Freight

General freight trucking



Upward pressures

- Trucking capacity has been declining since late 2023 with it accelerating in 2025, leading to upward pressure on rates
 despite low market demand. When demand turns around, the low market trucking capacity will lead to a significant jump
 in trucking costs.
- On Aug. 21, the Trump administration put a pause on all new commercial truck driver work visas. There is potential this could lead to a shortage of drivers and higher freight costs.
- Several states have begun cracking down on drivers who don't speak English. This could lead to driver shortages, increasing shipping cost and driver wages.



- Truckload volumes are down 15% in 2025 vs. 2024 volumes. These low demand levels may last into 2026.
- Diesel fuel prices remaining near or under \$4 per gallon for an extended period helps keep freight costs lower.

Deep-sea freight shipping



Upward pressures

Due to the Houthis' persistent threats in the Red Sea, shippers continue to take longer routes around Africa, requiring
additional insurance, labor, fuel and ships which all elevate operating costs.



Downward pressures

- Suppliers have mostly stopped frontloading due to tariffs, leading to analysts anticipating declines in ocean shipping volume and rates.
- Strained global demand, outside of the tariff-related inventory-building mentioned above, is placing downward pressure on prices.

Raw materials

Steel



Upward pressures

- A tariff of 50%, effective June 4, was placed on all steel imported into the U.S. The UK will remain at 25%. In late
 August, the Trump administration expanded the tariff on steel and aluminum products to an additional 400 product
 types. This expansion now applies to a large range of goods and components.
- Solid U.S. supply levels and production that nearly meet the low demand have helped keep prices from escalating substantially from the tariffs.



Downward pressures

- Globally, weak demand will keep lower pressure on prices.
- New steel mills opening in 2025 in the U.S. and growing investment during the next three years will keep supply levels solid. New facilities opening in Australia and China will also keep supply strong.

Stainless steel/nickel



Upward pressures

- There is an import tariff of 50%.
- Low pricing of nickel and a flooded market have led to several countries shutting down mines, reducing investments and slowing nickel production, with the hope of lowering supply and increasing price.



- Weak demand continues globally, especially from China, Europe and the U.S.
- Nickel's prices are declining with surplus production from China, Chinese-owned production in other countries and Indonesia, which provide nearly half of global nickel, creating strong inventory levels.
- Growing investment in mining, exploration and discovery may lead to higher supply levels meeting future demand.

Aluminum



Upward pressures

A tariff of 50%, effective June 4, was placed on all aluminum imported into the U.S. The UK will remain at 25%. In late
August, the Trump administration expanded the tariff on steel and aluminum products to an additional 400 product
types. This expansion now applies to a large range of goods and components. The tariffs seem to be heavily impacting
spot aluminum prices.



Downward pressures

- New aluminum smelting plants that came online in 2023 have kept supply levels solid.
- The U.S., China and the global economy, in general, continue with tepid demand.

Copper



Upward pressures

- 50% tariff placed on imported copper started Aug. 1; see below for exemptions.
- Long term, copper prices will maintain an elevated state as a shortage of raw copper ore will persist with global production not meeting demand growth, despite a 3% anticipated growth in global production.
- China, the world's largest producer of refined copper, announced in October 2024 that refined copper production will be reduced due to the ore shortages and will, instead, increase its focus on recycling copper.



Downward pressures

- Chile, the largest refined copper supplier to the U.S., with more than 50% of the market, received an exemption on the copper tariff.
- The renewed focus on recycling copper in China and globally has provided an opposite price effect, helping keep a cap on the cost of copper.

Resins



Upward pressures

- Elevated export demand on U.S. producers
- Dow Chemical will close three petrochemical feedstock plants in Europe by the end of 2026.
- Feedstock used to create resins experienced significant price jumps during Q1 2025. This has led to producers slowly
 pushing out price increases to resin buyers.
- A UN environment program is working on a global treaty to increase plastic recycling and limit the use of harmful chemicals. These potential changes would raise the cost of plastic-/resin-based products significantly.

小

- An economic slowdown has led to declining resin and polymer demand, resulting in declining price levels.
- New production capacity has come online in the U.S. and China. The new capacity has provided strong supply levels on most grades of polyethylene and other resins. Supply levels remain remarkably high in 2025.
- Supply levels of resins remain solid despite production rate cuts.

Cotton



Upward pressures

Much of global mill use occurs in China, and due to the tariffs, items made from cotton will likely see higher prices.



Downward pressures

Global stocks will remain at elevated levels despite the anticipated uptick in mill usage and a decline in 2025/26 production estimates compared with the high production of 2024/25.

Wood pulp, writing and printing paper



Upward pressures

- The current tariff rate on Canadian softwood lumber is 14.54%. This rate was set by the U.S. Department of Commerce in August 2024 during its fifth administrative review, nearly doubling the previous rate of 8.05%. For context, Canadian lumber accounts for roughly 30% of the U.S. softwood lumber supply.
- October 14th may bring an additional 25% tariff on wooden furniture and cabinets along with a 10% duty on timber and lumber. The wooden furniture import tariff will increase to 30% on January 1, 2026.
- Elevated wood pulp prices, which impact paper prices, will remain going forward due to growing demand and lower production levels.



Downward pressures

• On March 1, 2025, the Trump administration ordered the Bureau of Land Management and the U.S. Forest Service to increase forest maintenance and lumber production by end of 2025/early 2026. U.S. production in the Pacific Northwest and South would increase, leading to lower lumber and pulp prices.

Packaging



Upward pressures

- Net-zero environmental targets are encouraging movement away from plastic packaging toward paper packaging.
- Higher wood pulp, paperboard and resin prices will keep packaging cost on an upward trend.



Downward pressures

Several expansion projects began production in 2024.

Labor

Manufacturing wages



Upward pressures

- The trend toward domestic and near-sourcing will expand the workforce shortages as additional labor will be needed.
- In 2016, Mexico made the decision to start raising the minimum wage more than other wages in a bid to even-up earnings. Since then, the minimum wage has increased 280%. Medical device manufacturing in Mexico pays more than minimum wage, but these increases have put pressure on raising these wages as well.
- Mexico will be raising minimum wage another 12% on Jan. 1, 2026.



Downward pressures

 Decline in domestic demand for goods has led to a decline in production rates, meaning less manufacturing labor is needed in the short term.

Service wages



Upward pressures

 Deportation of immigrants may lead to a shortage of available service labor, leading to additional wage inflation as suppliers attempt to attract new service-providing labor.



Downward pressures

A slow economy has led to lower demand for services, and thus, declining wage increases.

Sources

- U.S. Bureau of Labor Statistics, Producer Price Index
- Manufacturers' Outlook Survey NAM, WSTS
- EIA, IEA, OilPrice.com,
- FreightWaves, American Trucking Associations, Hellenic Shipping News, Supply Chain Dive, Freightos
- MetalMiner: Buy Metal With Confidence, Forecasts for Metal Prices, Plastics Industry News Resintel, Cotton Grower: Dedicated Coverage and Reporting of the Cotton Industry, Cotton Inc., Fisher: Global Pulp & Paper Business Intelligence
- Institute for Supply Management

Additional resources



Supply assurance webpage; Vizient Newsroom

Want to receive weekly Supply Assurance updates?

Update your preferences through our Subscription Manager by selecting Supply Assurance Weekly Digest.

Questions? Contact disasterresponse@vizientinc.com, pharmacyquestions@vizientinc.com, novaplus@vizientinc.com.