INDUSTRY UPDATE

JANUARY - FEBRUARY 2024

RESINS & RAW MATERIALS | ECONOMIC INDICATORS | OCEAN FREIGHT | DOMESTIC TRANSPORT

RESINS & RAW MATERIALS

Berlin Packaging maintains a best-in-class approach to sourcing packaging materials and manufacturing platforms. We are not bound to a specific material, technology, tool, or country of origin, affording us tremendous flexibility to find the most cost-effective packaging solutions for our customers.

Modest demand, sufficient supplies, open manufacturing capacity, declining energy prices, and lessening inflation are muting prices for some packaging raw materials.

In November, the Producer Price Index (PPI) for final demand goods (e.g., CPG products, raw materials) and services (e.g., transportation, warehousing) remained unchanged after dropping 0.4% in October. For the preceding 12 months ending in November, the PPI edged upward by less than 1%.

The PPI measures the average change over time in the selling prices received by domestic producers for their output of goods and services. Because the PPI measures price changes before retail sales, it's considered an early predictor of inflation trends.

PLASTIC RESINS

In December, a group of U.S. senators introduced a bill — dubbed the Farewell to Foam Act — to ban expanded polystyrene (EPS) food service ware, loose-fill packaging, and other single-use EPS products. If the legislation becomes law, the ban will take effect on January 1, 2026. Several states already have passed laws banning EPS foam packaging, including Maryland, Maine, Vermont, New York, New Jersey, Colorado, Virginia, Washington, Delaware, Oregon, and Rhode Island.

Here's a brief rundown of the current market conditions for various resins:

1 **PET (Polyethylene Terephthalate):**
Decreased raw material costs and lackluster demand for bottle-grade resin have led to a slight decline in PET prices.

2 **HDPE/MDPE/LDPE (Polyethylene):**
Slowing demand and lower raw material costs are putting downward pressure on PE prices.

3 **PVC (Polyvinyl Chloride):**
Stagnant demand is contributing to lower PVC prices.

5 **PP (Polypropylene):**
Market conditions have caused a recent seesaw in PP prices, with a November increase followed by a December decline.

6 **PS (Polystyrene):**
Plummeting demand has reduced PS prices.

Post-consumer recycled (PCR):
rHDPE pellet prices remain steady due to soft demand, adequate inventories, and ample supplies of competitive virgin resin. Prices for post-consumer colorless and food-grade rPET flakes remain flat because of balanced demand and sufficient domestic and imported supplies. Purchasing volume may pick up in Q1 for preform production ahead of the summer beverage season.

In Europe, rPET prices (food and colorless grades) continue to decline because of lower costs, tepid demand, and reduced prices for virgin material. rHDPE prices rose in the fourth quarter, driven by material cost increases and production cutbacks.

GLASS

To lower the environmental footprint of their glass packaging, several European glass manufacturers have turned to alternative fuels to power their furnaces. In one instance, using hydrogen in combination with natural gas has reduced the direct carbon footprint of the melting process by more than 30%.

In another application, a glass manufacturer in France plans to use syngas — renewable gas from biomass — at its facility in 2025. The manufacturer will also commission an electric furnace this year. In Germany, a new glass furnace uses 80% renewable energy and 20% natural gas, which reduces carbon emissions by 69% for glass bottles.

ALUMINUM

At the December COP28 UN Climate Change Conference, an international coalition of aluminum container producers and associations announced a target to recycle at least 80% of aluminum beverage cans by 2030 and nearly all by 2050. Currently, more than 70% of aluminum beverage cans are recycled annually, according to the International Aluminum Institute.

The group requests policymakers and the aluminum can value chain to set national or state-level recycling targets, improve the recycling infrastructure, expand data collection on recovery rates to monitor progress, prioritize can-to-can recycling, and maximize the recycling content through better alloy design and scrap purification.

TINPLATE STEEL

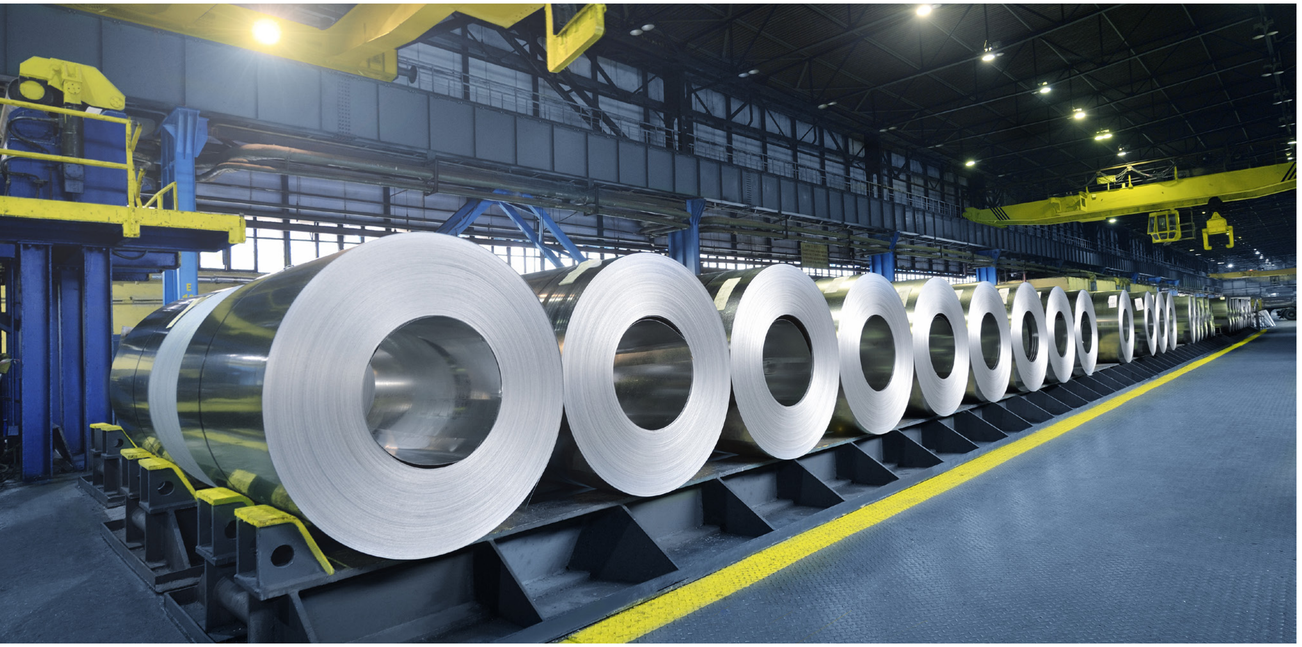
Following skyrocketing costs in 2022, the Producer Price Index for steel cans and tin-ware end products flattened in 2023. From January through November, the PPI decreased by nearly 2%. For aluminum cans and can components, the PPI dropped over 5% in 2023.

PULP & PAPER

Paperboard milk carton shortages are causing nationwide problems for U.S. school nutrition programs, which stock the 8-oz and 4-oz cartons for breakfasts and lunches. An unexpected increase in demand appears to have created the carton deficit. In response to the shortage, some schools are serving milk in cups poured from jugs or other package formats, such as pouches and plastic bottles.

The corrugated packaging industry has significantly reduced its environmental impact since 2006, reports a study sponsored by the Corrugated Packaging Alliance. The life-cycle assessment evaluated the environmental performance of a U.S. industry-average corrugated product and found a nearly 50% reduction in greenhouse gas emissions, a 13% drop in energy use, and an 18% decrease in water use. However, fossil fuel extraction increased by 20% from 2006 to 2020.

Although Berlin Packaging cannot control the price of raw materials, we do offer multiple value-added services and income-boosting solutions to help our customers Package More Profit®. Over the past few years, Berlin Packaging has added more than $200 million in profit to our customers as a unique benefit of doing business with us.



ECONOMIC INDICATORS

Berlin Packaging's mission is to improve our customers' net income through our packaging products and services. We help to increase their sales, reduce costs, and/or improve productivity. Along with having a positive impact on their income, we are committed to providing accurate and timely information and products.

Here’s a snapshot of recent economic news and data impacting the consumer packaged goods (CPG) market and the packaging industry in North America.

- Following a MOM drop of 0.2% in October, U.S. consumer spending rebounded with a 0.3% MOM increase in November.
- Consumer sentiment jumped 13% in December, with year-ahead inflation expectations falling to 3.1%.
- Held in check by declining fuel prices, U.S. inflation inched up by 0.1% in November.
- At its December meeting, the U.S. Federal Reserve held interest rates steady amid cooling inflation and suggested interest rate cuts in 2024.
- Canada’s third-quarter GDP shrank 0.3%, a stark contrast to the 4.9% jump in U.S. Q3 GDP.

CONSUMER SPENDING AND SENTIMENT

U.S. consumer spending rose 0.3% month over month (MOM) in November, following a 0.2% MOM drop in October. The November rise was driven by health & personal care stores (0.9%), food & beverage stores (0.2%), sporting goods/hobby/book stores (1.3%), and food services & drinking places (1.6%).

In Canada, consumer spending and retail sales ticked up in November, according to a report from RBC. Gains in travel, gasoline, clothing, and restaurant spending helped uplift November retail sales.

Consumer sentiment — a measure of how U.S. consumers view their personal finances and the economy — leaped 13% in December, driven by expectations of lower inflation in 2024, according to the University of Michigan consumer sentiment survey. Year-ahead inflation expectations plunged from 4.5% in November to 3.1% in December. The latest inflation reading is the lowest since March 2021 and sits just above the 2.3% – 3.0% range seen in the two years before the pandemic.

CPG SALES REMAIN SLUGGISH

In November, U.S. retail sales revenue, including discretionary general merchandise and CPG products, declined by 2% compared to the same month last year, and unit sales declined by 3%, according to Circana, formerly IRI and The NPD Group. Discretionary general merchandise spending declined by 7% in dollar sales and 5% in unit sales compared to November 2022.

CPG spending remained sluggish in November, with flat food and beverage revenue performance and a 1% decline in non-edible item revenue compared to last year. Demand levels also waned, with CPG unit sales falling 2% and 5% in edible and non-edible segments, respectively. “Consumers have changed the way they are shopping in response to what is going on around them, focusing their shopping energy on getting what they need at a value,” said Marshal Cohen, chief retail industry advisor for Circana.

INFLATION AND INTEREST RATES

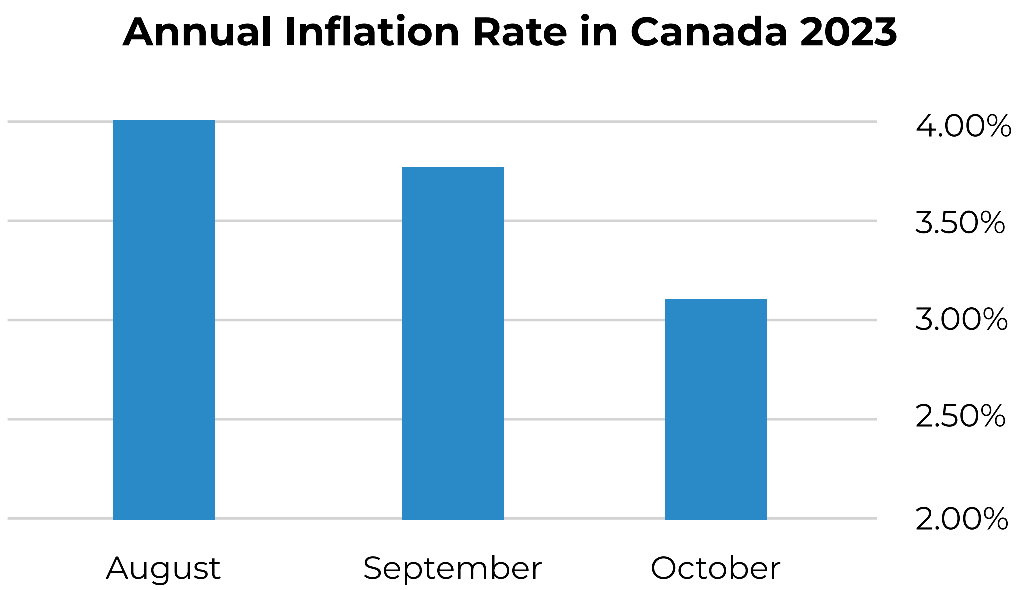
After being unchanged in October, the U.S. consumer price index (CPI) inched up by 0.1% in November, held in check by falling gasoline and fuel oil prices, according to the Bureau of Labor Statistics. Food prices increased 0.2% in November, following a 0.3% rise in October. On an annual basis, the CPI rose 3.1% for the 12 months ending in November. One year ago, the CPI was 7.1%.

The annual inflation rate in Canada fell to 3.1% in October, a decline from 3.8% in September and 4% in August.

At its December meeting, the U.S. Federal Reserve held interest rates steady for the third straight time amid easing inflation. The U.S. central bank signaled that interest rate hikes are likely over and suggested three small interest rate cuts in 2024.

FOOD & BEVERAGE GROWTH AREAS

Circana predicts modest food and beverage volume growth in 2024, after three consecutive years of volume declines. Beverages and deli products are forecast to lead the pack in volume growth. Health-conscious consumers will seek out beverage options with more protein and energy boosters. In the deli case, consumers will look for convenient grab-and-go options to match their diverse meal needs.



THE U.S. AND CANADA: TWO DISTINCT ECONOMIES

While the U.S. and Canada share a 5,525-mile border (the longest international border), their two economies are linked but different. In the first 10 months of the year, two-way commerce between the U.S. and Canada totaled $648 billion, making Canada the second-largest trading partner of the U.S.

However, the economic conditions within the two countries are dissimilar. While the U.S. posted a 4.9% gross domestic product (GDP) increase in the third quarter, Canada's Q3 GDP shrunk by 0.3%. Canada avoided a "technical recession" (i.e., two consecutive quarters of GDP contraction) when Q2 GDP figures were revised from a 0.2% decline to a 0.3% increase.

What's behind the disparity between the two GDPs? While both countries have raised benchmark interest rates to around 5% to tame inflation, the impact of these higher borrowing costs appears to have hit Canadian businesses harder than in the U.S. Canadians have higher debt loads that renew faster than in the U.S

Hefty U.S. government outlays and robust consumer spending have bolstered the American economy.

Canadian consumers may be more cautious shoppers because of their mortgage structure. In the U.S., the average home mortgage is 30 years. In Canada, it's only five years. And many of those mortgages are coming up for renewal with much higher interest rates than five years ago. Canadians are factoring those higher mortgage payments into their total expenditures by spending less and saving more. Meanwhile, U.S. households are spending more and saving less.

As the world's largest Hybrid Packaging Supplier®, Berlin Packaging continually tracks consumer behavior, product trends, macroeconomics, and packaging innovation to fully understand what is happening in the market so we can best help our customers succeed.

OCEAN FREIGHT

As volatility persists in many global trade lanes, Berlin Packaging continues to proactively provide alternate routings and real-time visibility of the global freight market to help our customers minimize any disruptions to their supply chains. We partner with all major ocean carrier alliances to help mitigate delays due to route changes or blank sailings from a single carrier.

Disruptions at two major vessel waterways — the Suez Canal and the Panama Canal — are impacting ocean container shipping lanes between Asia, North America, and some EMEA regions, skyrocketing spot rates, lengthening transit times, increasing lead times for importers, and reducing capacity.

Missile and drone attacks on container ships in the Gulf of Aden and the Red Sea, which leads to the Suez Canal, have prompted most ocean carriers to temporarily suspend ship transits through this vital passageway between the Indian Ocean and the Mediterranean Sea and reroute their vessels around the southern tip of Africa. About 12% of global trade and 20% – 30% of container shipments traverse the Suez Canal.

The longer routes from Asia to Europe, the Mediterranean Sea, and the East/Gulf Coasts of North America are adding costs (i.e., more fuel, emergency surcharges, insurance premiums, labor bonuses), increasing transit times, and, in effect, reducing cargo capacity. Rerouting ships around Africa versus traveling through the Suez Canal requires 5% – 6% of additional global container capacity, according to data from Sea-Intelligence. Getting empty shipping containers back to Asia presents another logistics hurdle.

Persistent drought conditions near the Panama Canal have reduced the daily number of ships allowed through the waterway. While container ships appear to be mostly unaffected, the situation is fluid, and some delays may occur as daily passage restrictions peak in February. In November, some carriers began to bypass the Panama Canal in favor of the Suez Canal.

CHINESE NEW YEAR HOLIDAY

Spot ocean freight rates expect to rise in January as shippers pull orders forward in anticipation of the Chinese New Year Holiday, which runs from February 10 (New Year's Day) 10 through February 24 (Lantern Festival). Several Asian countries (China, Vietnam, South Korea) celebrate the holiday, with factories and offices closed before, during, and after the holiday to allow workers to travel home and return.

PORT ACTIVITY

While import volumes at major U.S. container ports were down YOY in 2023, they are higher than before the pandemic. From January through November, import volumes increased by 4% compared to the same period in 2019, according to data from Descartes.

In November, U.S. container import volumes fell by 9% from October, with the highest declines at East and Gulf Coast ports, reports Descartes. These regional declines may reflect the shipping restrictions through the Panama Canal.

For four consecutive months (August through November), cargo volumes grew YOY at the Port of Los Angeles. In November, cargo volumes increased 19% compared to the same month in 2022. At the Port of Long Beach, cargo volumes leaped 24% YOY in November, creating a string of three consecutive monthly gains over 2022. However, cargo volumes at both Southern California ports are down by 14% for the year-to-date compared to the same period in 2022.

With October container volumes recording the highest monthly totals for the year and November cargo volumes 7.5% higher than pre-pandemic November 2019, the Port of New York and New Jersey is on track to be the second-busiest port for loaded containers handled in the U.S. in 2023.

In November, container volumes at the Port of New Orleans jumped 32% YOY, led by exports of plastic resins. For the year through November, container volumes were up 11.5% compared to the same period in 2022. The port recently received a federal grant to support the construction of its new Louisiana International Terminal in Violet, LA. Once completed in 2028, the $1.8 billion terminal will be able to handle two million twenty-foot equivalent units (TEUs) annually.

As a Customs-Trade Partnership Against Terrorism (C-TPAT) certified importer, Berlin Packaging and our customers reap multiple benefits, such as reductions in customs freight examinations, "front of the line" status during inspections/ exams, shorter wait times at the border, and more.

DOMESTIC TRANSPORT

With a dedicated and accomplished team of logistics specialists, Berlin Packaging excels in all modes of transportation to ensure our customers benefit from competitive rates and freight expertise. We are flexible and nimble, ready to tackle urgent and expedited shipments and special requests like drop trailer services for customer convenience.

Domestic transportation costs — both spot and contracted rates — in North America continue to favor shippers. Carrier capacity generally exceeds freight demand, and benchmark diesel fuel prices, which help to calculate most fuel surcharges, have fallen in the fourth quarter of 2023.

The war in the Middle East and recent attacks on shipping in the Red Sea, which connects to the Suez Canal, are causing spikes and volatility in crude oil markets, which may ultimately impact the price of diesel fuel.

RETAIL IMPORTS BEGIN TO CLIMB

Freight volumes in North America may pick up in the first quarter because of recent monthly year-over-year (YOY) increases in retail imports. According to the National Retail Federation, retail import volumes at major U.S. container ports rose in October, up by 1.3% from September and by 2.5% compared to October 2022. This October improvement is the first monthly YOY increase since June 2022.

The NRF forecasts monthly YOY import volume growth for November, December, and Q1 2024, with January rising by 6.6%, February growing by 14.5%, and March increasing by 7.7%.

Spurred by high employment, wage gains, and declining energy prices, holiday spending appears to have met or exceeded forecasts, providing opportunities for retailers to replenish their inventories with new purchase orders. In early November, the NRF predicted record-setting holiday retail sales of between $957 billion and $966 billion, representing a 3% to 4% increase over 2022.

TRUCKLOAD RATES & SHIPMENTS

In Q4 2023, line-haul costs per mile for the dry van spot market rose around the Thanksgiving Day Holiday, following typical seasonal patterns. In mid-December, the dry van spot rate per mile averaged $1.91, a 7% drop from one year ago. The weekly count of dry van spot shipments slipped 1.4% compared to one year ago. Spot rates were 34 cents less per mile than contracted rates in mid-December.

Van load-to-truck ratios, which serve as a measure of both demand (the number of loads) and capacity (the number of available trucks to carry those loads), have lingered around 2.0 since October. The ratio was 2.92 in October 2022 and 5.59 in October 2021. Lower ratios normally signal a reduction in rates.

DIESEL FUEL PRICES FALL

Driven by growing inventories and weaker demand, diesel fuel prices have tumbled in the fourth quarter. In mid-December, the average price for diesel fuel in the U.S. was $3.89 per gallon — a $0.70 drop from one year ago and only $0.13 higher than the lowest 2023 price recorded in early July.

LTL CARRIERS RAISE PRICES

Several less-than-truckload (LTL) carriers have announced general rate increases between 4.9% and 7.5% for 2024, with some adjustments taking place in late 2023. These rate increases face a soft LTL market with declining shipments and sluggish manufacturing output.

Economic activity in the U.S. manufacturing sector contracted in November for the 13th consecutive month, according to the Manufacturing ISM Report On Business. Since manufacturing output influences LTL tonnage, the weakness in manufacturing suggests continued deterioration of LTL shipment volumes.

For products like aluminum cans and bulk glass containers, Berlin Packaging can utilize partial truckloads, which streamline the handling and delivery of packaging at competitive market rates and avoid using LTL networks with preset carrier rates.

Average price for diesel fuel (per gallon)

$4.59	$3.76	$3.89
December 2022	July 2023	December 2023

E-COMMERCE SALES GREW 2% IN Q3

According to recent government data, U.S. retail e-commerce sales reached $284.1 billion in the third quarter of 2023 — a 2.3% increase over the second quarter and a 7.6% leap from the third quarter of 2022. Retail e-commerce sales in Q3 accounted for 15.6% of total retail sales.

Cyber Week holiday spending — online shopping from Thanksgiving through Cyber Monday — posted sales of $38 billion, a 7.8% jump over 2022, according to Adobe. Parcel carriers met the high-volume orders challenge, with UPS delivering 98% of packages on time, FedEx slightly behind at 97.8%, and USPS at 95.2%, reports ShipMatrix.

While the price of diesel fuel fell during Q4 2023, several parcel carriers increased their fuel surcharges in December during the busy holiday season. It appears that fuel surcharges may remain elevated following price drops at the pump, enabling carriers to enhance their margins.

In 2023, Berlin Packaging efficiently managed more than 60,000 shipments in North America, representing over 100 million pounds of packaging components and approximately 30 million transportation miles.

We Believe Anything Is Possible®

With over 100 years in the packaging industry, more than 2,000 packaging professionals and a global network of suppliers and warehouses, we offer 50,000+ SKUs of plastic, glass, and metal containers, closures, and dispensing systems across all markets for customers just like you.

Our Business Model

Berlin Packaging combines the best elements of manufacturing, distribution and logistics, and value-added service providers to deliver cost-effective packaging solutions to our customers. Our mission is to improve our customers' net income through packaging products and services. We are the world's largest Hybrid Packaging Supplier®.

Best Elements of a Manufacturer + **Distribution & Logistics** + **Value-Added Specialty Services**

Value-Added Specialty Services

Our compelling suite of solutions addresses your needs and unlocks profit.

- Custom Design & Innovation
- Quality Service Management
- Global Sourcing & Services
- Inventory Management Services
- Sustainable Packaging Solutions
- Berlin Financial Services