



# INDUSTRY UPDATE

## MAY – JUNE 2023

# 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 or technology, affording us tremendous flexibility to find the most cost-effective packaging solutions for our customers.

## RESINS & RAW MATERIALS

**Even with an uncertain economy and lukewarm demand, prices for some packaging raw materials continue to move upwards.** Several factors contribute to the higher costs, including inflation, supply tightness, and processor restocking.

Following four straight quarters of decline, spending on goods in the U.S. rose in the first quarter. Consumer spending on goods and services increased by 3.7% — the highest jump since mid-2021 when the availability of COVID vaccines helped to re-open the economy. But many businesses are cutting back on investments and are hesitant to add inventory, fearful of a recession.

Based on the latest U.S. government data, inflation appears to be subsiding. The Producer Price Index for final goods decreased by 1% in March, following a 0.3% drop in February. Falling energy prices drove the March decline. Another inflation measure — the Consumer Price Index — climbed by 0.1% in March and was up 5% for the preceding 12 months.





## PLASTIC RESINS

The Gulf Coast — home to most of the petrochemical operations in North America — is susceptible to hurricanes from June through November. These damaging storms can wreak havoc on resin production and supplies.

In March, scientists at the National Oceanic and Atmospheric Administration (NOAA) said there were early signs the Gulf Coast could see fewer hurricanes this year. NOAA plans to release its 2023 Atlantic hurricane season forecast in late May.

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



### **PET (Polyethylene Terephthalate):**

PET prices are up slightly due to increasing demand for bottled water, carbonated drinks, hot-fill applications, and flexible packaging.



### **HDPE/MDPE/LDPE (Polyethylene):**

Supply improvements and strengthening demand are keeping PE prices relatively flat.



### **PVC (Polyvinyl Chloride):**

Sufficient supplies and weak demand have resulted in flat PVC prices.



### **PP (Polypropylene):**

Following recent price hikes, PP prices are decreasing due to higher inventories, lower demand, and additional capacity.



### **PS (Polystyrene):**

Fluctuating benzene feedstock costs are triggering roller-coaster prices for PS resins.

### **Post-consumer recycled (PCR):**

While prices for natural post-consumer rHDPE pellets for blow-molding applications have been flat lately, they still command a premium (more than 2X) over their virgin resin counterparts. Although demand remains steady from big-brand CPG companies, some observers believe an rHDPE pellet price adjustment will attract more buyers. Prices for post-consumer colorless and food-grade rPET flakes remain flat due to steady domestic supplies and plentiful imports amid weak global demand.



## GLASS

Following a prolonged period of tight supplies during the pandemic, domestic glass manufacturing continues to show signs of gradual capacity improvements throughout 2023. Supplies of natural gas, which fuels most glass furnaces, are beginning to exceed demand. This market condition offers potential cost reductions in the second half of this year.

Except for the EMEA (Europe, Middle East, and Africa) region, global glass production has sufficient capacity. Decreases in ocean freight costs to near pre-pandemic levels have bolstered the competitiveness of global glass supplies.



## ALUMINUM

In April, the Can Manufacturers Institute (CMI) and its aluminum beverage can manufacturer and can sheet producer members endorsed a plan for net-zero greenhouse gas emissions by 2050 while complying with a target of limiting global warming to 1.5°C from pre-industrial levels.

CMI's strategy is two-fold: lower the carbon footprint of any primary aluminum incorporated into beverage cans, and increase the recovery of used beverage cans to increase the recycled content in new cans.



## **TINPLATE STEEL**

Domestic steel manufacturers in the U.S. have asked the Biden Administration to impose tariffs (up to 300%) on imported tinplate steel from eight countries. Since U.S. producers supply only 60% of the domestic supply of steel food cans, the tariffs would likely increase prices for steel containers.

Global tinplate steel prices rose slightly in March. In the first quarter, steel prices are down by 20% to 30% compared to Q1 2022.

## **PULP & PAPER**

A major U.S. containerboard producer reported that its shipments dropped by nearly 13% in the first quarter compared to Q1 2022. The company cited reduced consumer spending and the purchasing shift from goods to services as the reasons for the decline.

Since November, the Producer Price Index (PPI) for pulp, paper, and allied products (including corrugated paperboard) has decreased by more than 7%, while the PPI for corrugated recyclable paper has slumped by more than 60% in the past 12 months.

**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.**



# THE ROI OF CUSTOM DESIGN

Studio One Eleven® embodies Berlin Packaging's mission to improve our customers' net income through packaging products and services. We help to increase their sales, reduce costs, and improve productivity. Over the past three years, our customers earned \$200 million as a direct result of doing business with us.

## THE ROI OF CUSTOM DESIGN

**Impactful custom packaging design is one of the best investments you can make in your brand. Compelling packaging generates trial by standing out on both physical store shelves and screen-based virtual planograms.** It's your brand ambassador, responsible for making the all-important first impression and setting the tone for consumers' interaction with the product inside.

If developed in accordance with sound engineering and operational principles, custom packaging design can improve environmental impact and reduce the total cost of ownership. Most importantly, thoughtfully-crafted packaging delivers memorable consumer experiences that foster loyalty and encourage rebuy.

That said, custom packaging development is not for the faint of heart, and there are innumerable ways to fail. Success requires a strategic, intelligent approach from concept through commercialization.



## HOW WE BRING DESIGN TO LIFE

[Studio One Eleven®](#), Berlin Packaging's in-house design and innovation division, has used our full suite of services to help many brands grow their bottom lines through market insights, brand strategy, brand identity and label communication design, structural package design, sustainability strategies, manufacturing optimization, and promotional and secondary packaging.

To bring diverse perspectives and deliver world-class solutions, our global team of industrial and graphic designers, engineers, strategists, analysts, researchers, and program managers collaborate across borders and speak over a dozen languages. We operate eight state-of-the-art design studios around the globe in the United States, Italy, Spain, the Netherlands, and the United Kingdom.

Beyond serving as our creative playgrounds, our Studios host customer workshops, fostering face-to-face, real-time interactions to share design concepts and allowing us to implement feedback on the spot. We can even generate physical models of new package concepts during our customers' visits.

Whether a project involves revitalizing an outdated label, adding modifications or custom components to a stock package, or developing an entirely new-to-the-world package, our team creates innovative solutions that help build winning brands. Studio capabilities include packaging life-cycle analyses, advanced 3-D modeling, real-time photorealistic visualizations, in-house rapid prototyping, and custom tooling development.

For qualified customers, Studio One Eleven® waives its fees for these vital services in exchange for packaging supply opportunities.

Here's a closer look at these innovative design services and how they can help grow your brand.





## MARKET INSIGHTS AND BRAND STRATEGY

Our branding strategists identify key category trends and insights, the competitive landscape, shifting consumer attitudes and purchase behaviors, and new market opportunities to inform your brand innovation, product messaging, and visual branding strategies.

Studio One Eleven® creates holistic visual and verbal positioning boards for new brands and existing brand redesigns that bring your brand story to life through imagery and storytelling. This strategic tool helps brand owners gain buy-in from retailers and senior management.

## LOGO AND LABEL DESIGN

Our graphics design team creates dynamic brandmarks and impactful label architectures that establish meaningful connections with consumers, build brand equity and loyalty, and stand out on physical and virtual shelves.

With the rise of e-commerce and a growing online presence, Zenwise sought new dietary supplement packaging for the digital age that was unique and impactful. They partnered with Studio One Eleven® for a custom bottle and label design that works online and on the shelf.

Our structural designers created a rounded square shape that breaks free from conventional round forms, with a unique concave shoulder that establishes an ownable equity element for the brand. The Studio's graphic designers crafted a new label, which marries the brand's commitment to nature and mindful wellness with a compelling brandmark and transformational leaf icon. A clean, fresh white background contrasts with the bottle, and bold color bars quickly communicate the product benefit for easy shoppability.



## STRUCTURAL AND PRODUCT DESIGN

Studio One Eleven's structural designers and engineers create one-of-a-kind package options that differentiate your brand from the competition. We improve the user experience, enhance functionality, and maximize manufacturing efficiencies.

For Life's Rejuvenate Dual System Outdoor House Wash and Window Cleaner represents a revolutionary leap in the home cleaning space. Combining the functions of a house wash and a window wash in one single easy-to-use packaging system isn't hard to imagine but extremely difficult to execute.

To make it happen, the Studio designed and engineered a patented handled hose-end sprayer that not only precisely dispenses two cleaning chemistries at their proper concentration ratios but also meets demanding flow performance requirements across a wide range of residential water pressures. We developed a patented 64-oz dual-chambered bottle with a unique anti-back-off feature to keep the two cleaning chemistries separate.

To ensure product protection and integrity in e-commerce applications, the liquid container ships with a Studio-designed plug and threaded closure. From conceptual development to fulfillment, the Studio team worked closely with our manufacturing partners to achieve a groundbreaking outcome.





## SUSTAINABILITY

Consumers actively seek out environmentally friendly products and services and prefer supporting companies that prioritize sustainability. Packaging significantly contributes to a brand's environmental impact through various factors, such as material selection, weight, manufacturing, shipping distances, and fuel usage.

To help our customers transition to more responsible packaging, we present them with solutions that optimize sustainability, brand impact, and performance. We offer an expansive suite of sustainability services, including product life-cycle analyses, circularity road mapping, sourcing post-consumer recycled (PCR) materials, and assisting with sustainability reporting and communications strategies.

The Studio partnered with Branch Basics, a home care company, to transition them to a more sustainable packaging system with refillable pouches that weigh 71% less than the original canister package while holding twice as much product. Plus, the pouches are space efficient, with 8X more fitting on a pallet than the canisters. Implementing this refill solution eliminates the equivalent of 14.6 tons of carbon emissions annually.





## PROMOTIONAL AND SECONDARY PACKAGING

We leverage trends, seasonal opportunities, and design strategies to conceptualize and develop promotional and secondary packaging for your brand to drive usage occasions.

Following the success of their Christmas and Valentine's Day seasonal collections, American Vintners partnered once again with Studio One Eleven® for a summertime wine sampler. The Studio design team developed the name "Kindred Spirits" and created simple, spirited packaging graphics that borrow cues from the spirits category, including wood barrel details, earth tones, and bold fonts. We sourced 187 mL clear glass bottles that complement the wine varietals, with a screw-top closure that makes them easy to open and reseal at home or on the go.



At Berlin Packaging, our value-added specialty services — **custom design, global sourcing, supply chain management, warehousing, inventory, sustainability, and quality advocacy** — enable you to **Package More Profit®**.

## MANUFACTURING INTEGRATION

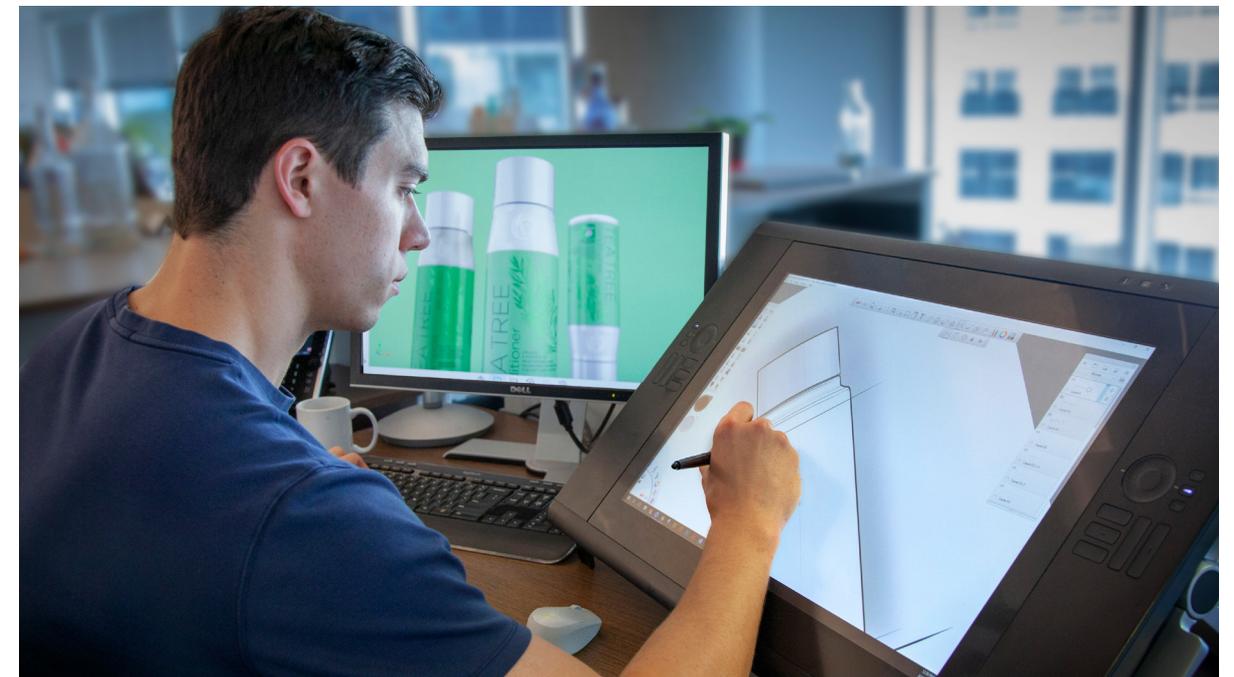
Most package design firms can visualize something that looks (on paper, at least) like a striking package, but that's where their work ends. The customer is then left to figure out how to turn a picture of something they want into a package that addresses engineering and commercial realities.

Ours is a superior approach. We design for manufacturability and manage the entire package innovation process from concept through commercialization. After we design and engineer the package, we source, contract manufacture, inspect/test, warehouse, and deliver it to our customer.

Because we work with more than 900 qualified domestic and international manufacturing partners, we are not limited to any material type or process. This unique model allows us to maintain the commercial focus of a traditional manufacturer without being limited to any material or process.

## TAILORING SERVICES AND SOLUTIONS

While Studio One Eleven® can perform a wide range of custom design services, each project is unique and dependent on the client's need. We can create a new brand from ideation to commercial production or come in at any point in the design process and work on a particular aspect, such as label design, secondary packaging, design manufacturability, etc.





# OCEAN FREIGHT

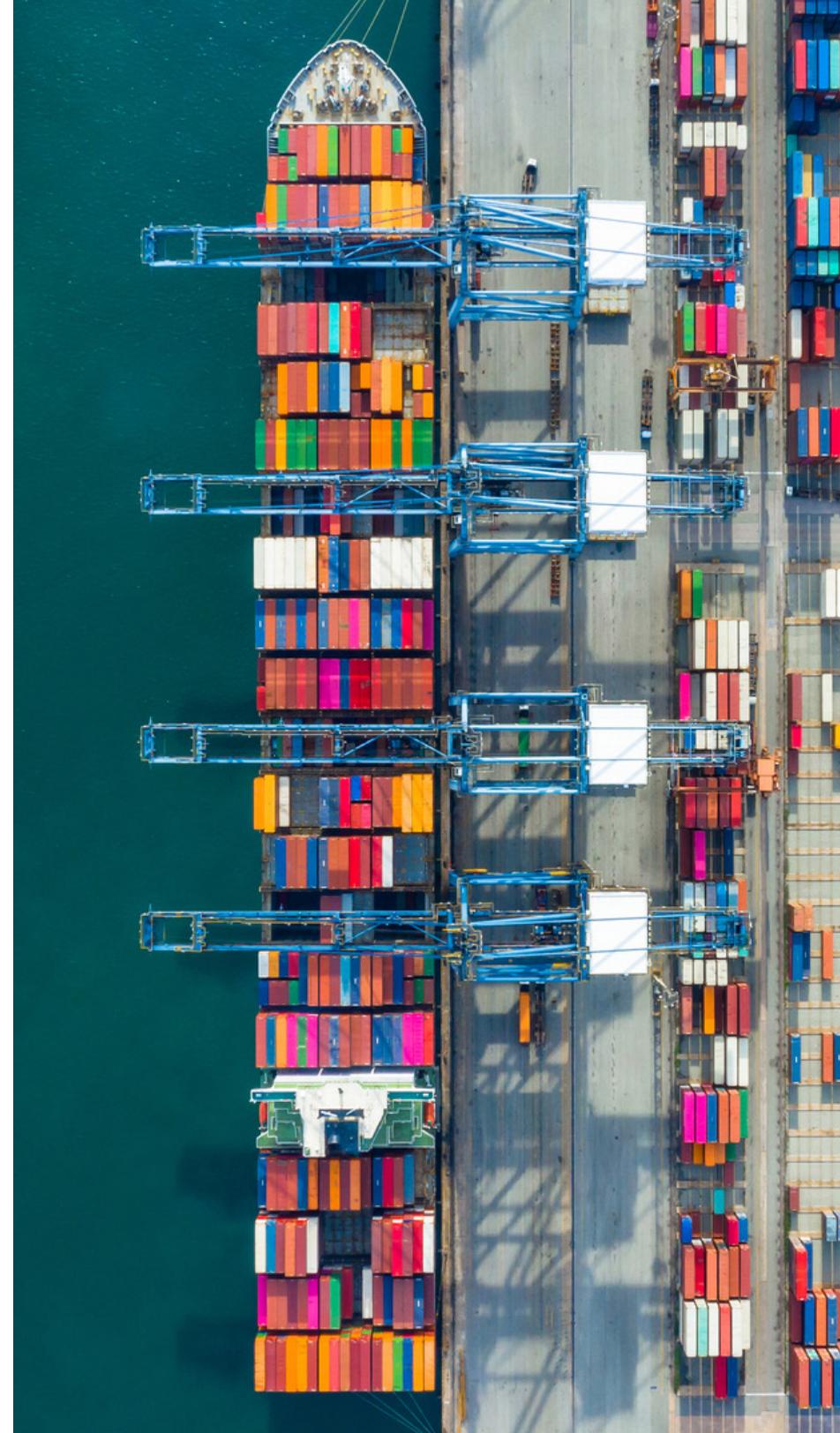
As volatility persists in many global trade lanes due to blank sailings, Berlin Packaging continues to proactively search for alternate routings and provide real-time visibility of the global freight market to help our customers minimize any disruptions to their supply chains.

## OCEAN FREIGHT

**Following a gradual decline in the first quarter, ocean freight spot rates from Asia to the West Coast and East Coast rose significantly in April due to general rate increases and skipped or blank sailings from carriers.** The trans-Pacific lanes from Asia/China to the East Coast and the trans-Atlantic lanes from Europe to the East Coast continue to command the highest spot rates.

While prices are rising, container volumes remain well below the record-high shipments in the first half of last year. Continuing weak import demand and surplus inventories are moderating volume. The National Retail Federation reports that they expect import cargo volumes at major U.S. container ports to drop by 20% in the first six months of this year compared to the same period in 2022.

Schedule reliability jumped to 60% in February, up more than 26 percentage points compared to one year ago, reports Sea-Intelligence. The average delay for late vessel arrivals fell to a little more than five days, down from about 7.5 days in February 2022.



## **LABOR ISSUES AT LA/LB PORTS**

In early April, dockworkers at the ports of Los Angeles (LA) and Long Beach (LB) disrupted operations through work absences (which closed the terminals) on the night shift of April 6th and the day shift of April 7th, red tagging automated equipment for inspections (which idles the equipment until workers examine it), and scheduling breaks at the same time instead of staggering them.

Approximately 22,000 longshore workers at 29 ports on the West Coast have been working without a labor contract since July 2022. The work stoppages and slowdowns at the LA/LB ports appear to have brought the two sides — the Pacific Maritime Association (PMA) and the International Longshore and Warehouse Union (ILWU) — closer to a resolution. On April 20th, the ILWU representing the dockworkers announced that they had reached a tentative agreement on “certain key issues” with the PMA, and talks were continuing.

Many industry observers believe the protracted negotiations over a new labor contract have played a role in the continued shift of imports from the West Coast to the Gulf and East Coast. In February, the West Coast’s share of total U.S. imports fell to 44%. In February 2022, the West Coast accounted for more than 50% of U.S. imports.

## **IMPORTS DROP, BUT HIGHER THAN PRE-PANDEMIC**

While import volumes are down this year at North American ports, the drop is highest on the West Coast. In March, the LA and LB ports reported that import volumes decreased by 35% compared to one year ago. The LB port attributed the import decline to slow consumer spending and full warehouses.

Even with the plunge in imports in March, the monthly volume exceeded the import levels in 2019 and 2020. Import volumes in the first quarter of 2023 were similar (less than a 1% difference) to the same period in 2019. But where those imports arrived changed significantly. Compared to the first quarter of 2019, import volumes increased by 43% this year at Gulf Coast ports, by 3% at East Coast ports, and were down by 10% at West Coast ports.

**As a Customs Trade Partnership Against Terrorism (CTPAT) 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 team of logistics specialists, Berlin Packaging has expertise in all modes of transportation — truckload, LTL, intermodal, and parcel — to ensure our customers receive competitive rates.

## DOMESTIC TRANSPORT

**Transportation costs in North America are being kept in check by tepid seasonal demand, sufficient carrier capacity, inventory destocking, declining diesel fuel prices, and flat fuel surcharges.** If the transportation market follows historical patterns, the demand and shipment volumes may begin to increase around the Memorial Day holiday in the U.S.

Produce season, which begins in spring and ends in early summer, typically boosts shipping costs in the Southeast U.S. — from Texas to Florida. Because of its limited shelf life, produce must be transported quickly from the growing regions to markets throughout the U.S. and Canada, increasing the demand for carriers.



## TRUCKLOAD RATES & SHIPMENTS DROP

Throughout the first quarter, there was a gradual decline in the line-haul costs per mile for the dry van spot market. In mid-April, the average dry van spot rate per mile had decreased to \$1.84, a 30% drop from one year ago. Spot rates are 62 cents less per mile than contracted rates.

As of mid-April, the weekly count of dry van spot shipments had declined by almost 17% compared to one year ago. Despite this decrease, the number of shipments recorded for 2023 still managed to exceed the average count observed during mid-April between 2016 to 2020.

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 fallen from 3 loads per truck in January to approximately 2 in March. In general, smaller ratios typically suggest lower shipping costs.

## NEARSHORING TO MEXICO ACCELERATES

Freight shipments from Mexico are on the rise as industrial output expands and more companies move their manufacturing operations there. By the end of this year, 25 new industrial parks representing \$2.5 billion worth of investments are expected to open in Mexico, with most of them located in the northeast and northern regions of the country.

Over the past decade, the adoption of nearshoring to Mexico has been steadily growing. However, the trend accelerated in the past couple of years due to the pandemic and global supply chain disruptions. Nearly 90% of U.S.-based small and medium-sized businesses will adjust their supply chains to utilize suppliers closer to home, including Mexico, in 2023, according to a recent survey from Capterra.

## DIESEL FUEL PRICES FALL

In mid-April, the average price for diesel fuel in the U.S. was \$4.09 per gallon — nearly \$1 less than one year ago when energy prices spiked following Russia's invasion of Ukraine. Diesel prices have tumbled about 50 cents per gallon since the start of the year.

**Average price for diesel fuel**  
(per gallon)

**\$5.07**

April 2022

**\$4.58**

January 2023

**\$4.09**

April 2023

## **PARCEL VOLUMES SHRINK, UPS STRIKE LOOMS**

Parcel volumes shrank 2% last year in the U.S., reaching 21.2 billion packages, according to the Pitney Bowes Parcel Shipping Index. Carrier revenues grew 6.5% to a record \$198 billion in 2022. By yearly volume, the U.S. Postal Service led all carriers with 6.7 billion parcels. UPS shipped 5.2 billion parcels, followed by Amazon Logistics with 4.8 billion packages, and FedEx with 4.1 billion parcels. On a revenue basis, UPS controlled 37% of the parcel business — the highest market share among all carriers.

Pitney Bowes predicts U.S. parcel volume will likely reach 28 billion packages annually by 2028, with a 5% CAGR rate from 2023 to 2028.

On July 31, 2023, the five-year labor contract between UPS and its 340,000 Teamsters-represented employees will expire. The Teamsters Union has made it abundantly clear that its members will strike if an agreement is not reached and ratified by that date. The Teamsters' UPS contract is the largest private-sector collective bargaining agreement in North America.

Talks on the new national labor contract began in April, with 30 or so supplemental (local and regional) agreements still to be worked out. The Teamsters told UPS that the union will not participate in national negotiations until the supplemental agreements are resolved.

## **LESS-THAN-TRUCKLOAD (LTL) RATES DECLINE**

As trucking capacity continues to loosen, some freight is moving from LTL to truckload due to more favorable rates. Excess truck capacity and soft demand have created intense competition for shipment loads, driving rates lower during the first quarter. Following these declines, LTL rates appear to be stabilizing in the second quarter. Declining fuel prices may put additional downward pressure on rates.





## **RETAIL IMPORTS DECREASE IN Q1**

Retail import volumes at major U.S. container ports dropped significantly in the first quarter compared to one year ago, reports the National Retail Federation (NRF). “Last spring and summer were the busiest ever as consumers spent freely and retailers brought in merchandise to meet demand,” said NRF Vice President for Supply Chain and Customs Policy Jonathan Gold. “This year won’t repeat that, but the numbers we’re expecting would have been considered normal before the pandemic.”

Following strong gains in January and February, retail sales declined 0.5% month-over-month in March, according to the NRF. Retail categories showing March sales reductions included food & beverage, building materials & garden supplies, and general merchandise. The one bright spot was health and personal care stores, with retail sales up 0.3% month-over-month in March. The NRF predicts retail sales will increase by 4% to 6% this year.

**Berlin Packaging maintains strong and enduring partnerships with local carriers, resulting in best-in-class service and competitive costs that benefit our customers.**



# 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 is not a distributor. We're not a manufacturer. And we're not a packaging consultancy. Instead, we're all three at the same time. We are best-of-breed amongst manufacturing, distribution, and value-added service providers. We are the world's largest **Hybrid Packaging Supplier®**.



Best Elements of a Manufacturer



Distribution & Logistics



Value-Added Specialty Services

## Specialty Service Divisions

We offer value-added services specialized to best address all your packaging needs.

- Branding Strategy & Design
- Quality Advocacy
- Global Capabilities
- Warehousing & Logistics
- Financing & Consulting
- Sustainability Solutions