

Supply Chain Assessment



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After two years of rising transportation costs, U.S. shipping rates are declining, prompting renegotiations of high-price shipping agreements made during the period of heightened pandemic-driven demand. Container import volume remains strong while disruptions to port activity continue. In anticipation of work slowdowns due to ongoing labor contract negotiations on the West Coast, importers are rerouting cargo to East Coast ports, which is exacerbating congestion. This month, a weeklong trucker strike at the Port of Oakland, the third busiest port on the West Coast, inhibited dockworkers' access and the movement of cargo, causing lasting congestion.

Findings

1. Product Availability

a. HVAC

- i. Major manufacturers face continued challenges with production, shipping, and regional availability that have fueled lengthier lead times and project delays. A distributor reports heat pump lead times are starting to improve while another, carrying a different brand, notes lead times on variable refrigerant flow (VRF) units of up to 16 weeks.
- ii. To meet increased demand, one major manufacturer is introducing a new facility to bolster production capacity by 2024. Other manufacturers have been expanding their product offerings from new boiler lines to heat pump models that meet the 2023 Department of Energy (DOE) minimum efficiency requirements.

b. Water Heating

Manufacturers are launching new Tier 4 heat pump water heater (HPWH) products with a built-in CTA-2045 port. Manufacturer representatives and distributors face significant delays on HPWHs, with some reporting current lead times for 119-gallon commercial units extending into October.

Trade Ally Team Communications per Technology Domain

	This Issue	Volume 3 to Date
HVAC	20	209
Foodservice	29	152
Water Heating	15	125
Pumps	7	67
Lighting	19	101
Life Sciences	8	70
Total	98	725

TABLE 1.

c. Foodservice

As high prices and labor shortages limit production for some manufacturers, stock varies among dealers depending on brand and product type. Dealers report lead times as long as one year for new fryer orders with some customers choosing to wait rather than purchase an alternative brand. Meanwhile, a manufacturer's representative relays that the earliest delivery of some pasta cooker equipment will be in September.



d. Lighting

- i. The reopening of Shanghai production factories has helped reinvigorate lighting equipment stock for many. Still, distributors are challenged by persistent price increases and delays for certain materials like plastic wire coatings as well as metal gears, which face lead times of up to a year. One manufacturer is waiting for multiple crates of product to be moved onshore.
- ii. Some lighting distributors are introducing heat pumps to their portfolios due to heightened customer interest and increased rebates. Energy Solutions will continue to assess this trend and how it may impact midstream program participation from the lighting market.

e. Life Sciences

Ultra-low temperature freezers (ULTs) and lab grade refrigerators and freezers have lead times ranging from six to 12 weeks which fluctuate depending on stock of individual components.

2. Equipment Sales

a. HVAC

- **i.** A major manufacturer, citing persistent high costs, will increase prices across commercial equipment, accessories, and components in August.
- **ii.** Despite shipping delays creating uncertainty for job quotes and timelines, distributors report strong sales of heat pumps and other energy-efficient equipment. Many attribute this trend to programs with high customer incentives that support efficient unit upsells and competitive bids.

b. Foodservice

Dealers are responding in various ways to ongoing supply chain disruptions by diversifying suppliers or increasing stock. Additionally, incentives offered through Instant Rebates programs implemented by Energy Solutions have been credited as helping to bolster sales.

c. Lighting

- **i.** A major manufacturer will increase prices in August that will impact many of its product lines and brands.
- ii. Manufacturers and manufacturers' representatives reported a sales increase of at least 7% in Q2 2022 compared to Q2 2021. Distributors reported a year-over-year increase of more than 9%, though some have observed a slowdown in sales that has limited their ability to place new orders and maintain sales staff.
- iii. The DesignLights Consortium (DLC) has finalized the transition to Version 5.1 of the Solid-State Lighting (SSL) Technical Requirements that mandate most qualified fixtures and lamps to be dimmable and use integrated controls, thereby improving their efficacy, quality, and controllability. The DLC has delisted products from the SSL Qualified Product List (QPL) that do not meet the V5.1 requirements. As reported in Issue 5, some distributors have already transitioned their inventory to V5.1 products.

d. Life Sciences

There is a decline in high performance lab grade refrigerator and freezer sales in the healthcare and clinical segments as COVID-related testing and vaccine infrastructure has peaked. ULT sales continue to remain strong in most markets.



3. Service Providers / Contractors

a. HVAC

- **i.** Programs featuring high heat pump incentives are inspiring a rising trend in heat pump installations. One distributor observes trending demand of split systems for multifamily jobs.
- **ii.** In response to the ongoing HVAC labor shortage and need to stabilize a qualified and extensive contractor workforce, a global manufacturer has launched a training program designed to provide participants with the skills, certifications, and hands-on preparation necessary to launch their careers as skilled service providers.

From the Field

From July 10th through 12th, Energy Solutions attended the **School Nutrition Association's Annual National Conference**. Our staff strengthened existing manufacturer and dealer relationships and developed new connections with school districts and state agencies to promote opportunities through foodservice <u>Instant Rebates programs</u>.

Program Spotlight



Energy Solutions, with an expert team of partner organizations, has launched CalNEXT, a statewide initiative that will help to identify, test, and grow emerging electric technologies and delivery methods that demonstrate scalability and have the potential to make significant impacts within the California investor-owned utility energy efficiency portfolios. To help California reach its energy efficiency and decarbonization goals, CalNEXT will support the implementation of 170 projects over the next six years. Entrepreneurs, supply chain actors, designers and builders, research laboratories, and energy efficiency program administrators can submit eligible ideas or projects through the CalNEXT website. For more information about the CalNEXT program, how to participate, or to register for our next event, please visit calnext.com or contact the CalNEXT team at info@calnext.com.

About Energy Solutions

For more than 25 years Energy Solutions has provided cost-effective, market-driven solutions that deliver reliable, large-scale impacts. We implement more midstream and upstream programs in North America than any other company, which gives us access to valuable insights across technologies.

Our program success is fueled by a deep connection to the market. These market relationships have allowed us to closely monitor supply chain impacts to keep you informed.



To learn more about Energy Solutions' programs and services, contact Jeff Johnston at: jjohnston@energy-solution.com | www.energy-solution.com

Disclaimer: This report reflects our best estimate of market impacts, with the information available at this time. Energy Solutions will continue to provide valuable reporting on supply chain conditions. These updates will be versioned and dated to indicate at what time they apply.

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