

COVID-19: Supply Chain Assessment

February 25, 2022 | Volume 3, Issue 2

Across the country, port congestion persists. Although container backup at the ports of Long Beach and Los Angeles is abating and has reached its lowest levels since September, ongoing West Coast congestion has diverted container ships to other ports. Fueled by a surge in imports and amplified by labor shortages due to rapid Omicron spread, East Coast ports face growing backlogs as container ships await terminal space to unload cargo. Creative solutions have emerged in efforts to alleviate backlog, such as pop-up storage facilities at the Port of Savannah to circumvent limited terminal space.

Findings

1. Product Availability

a. Across Technologies

Microchips remain in short supply, leaving some manufacturers with less than five days' worth of inventory, compared to a 40-day supply in 2019. Despite production plants running at over 90% capacity and companies partnering to meet demand, the limited supply is exacerbated by COVID outbreaks among workers and extreme weather events such as January's nor'easter blizzard.

b. HVAC

A major manufacturer has opted for air transport to circumvent port congestion and ensure their distributors stay stocked. Although stocking capacity has somewhat improved and manufacturers report movement of some materials, production timelines and manufacturing plans continue to be affected by staffing problems from COVID. One manufacturer of residential heat pump products has been on heavy backorder, with few distributors able to snag an available unit while others wait for high-efficiency condensing units (HECUs) until July.

c. Water Heating

Distributors report lengthy lead times, with quotes ranging from four to six months depending on the manufacturer and product type. Even as lead times are expected to decline as manufacturers catch up on backlogs, expensive freight continues to plague distributors.

Trade Ally Team Communications
per Technology Domain

	This Issue	Volume 3 to Date
HVAC	24	64
Foodservice	24	46
Water Heating	21	42
Pumps	15	26
Lighting	18	27
Life Sciences	16	25
Total	118	230

TABLE 1.



d. Foodservice

Dealers note lead times ranging from four to nine months. Fryers and convection ovens remain difficult to secure for some, with one dealer still waiting on an order placed in August 2021. The inability to secure key cast iron components has caused some major manufacturers to temporarily suspend production of their standard fryers and convection ovens to focus on other equipment lines in hopes of shrinking lead times to ten weeks or less. Delays in imported parts such as oven thermostats and temperature sensors have stalled factory builds among manufacturers, while representatives face backorders expected to remain unresolved for many months. Challenged by delayed shipments pushed out months past order placement, dealers are met with new and increased prices when orders do ship and must rely on selling stocked product.

e. Lighting

Distributors cite significant issues securing product components resulting in long lead times. Controls are backordered by six months while switchgear products are up to 12 months out. One distributor awaits orders from October 2021 due to arrive in April 2022.

f. Life Sciences

Stocking remains a challenge. Rebate-eligible ultra-low temperature freezers (ULTs) are back-ordered and face delays of 12 weeks exceeding quoted lead times. One manufacturer reports having quotes out for up to 40 units.

2. Equipment Sales

a. HVAC

Variable refrigerant flow (VRF) has seen rapid year-over-year sales growth as one of the fastest-growing HVAC technologies. In response to this trend, major manufacturers have partnered to expand VRF market share and provide complementary product offerings such as advanced control solutions. These partnerships have created new VRF product lines, enabling more qualifying sales and participation among programs incentivizing these measures.

b. Water Heating

A major manufacturer notes that tankless product prices are up 13% and are catching up to storage and heat pump water heater costs.

c. Foodservice

Dealers' sales projections remain optimistic despite sudden spot price jumps and as much as a 40% increase across equipment. The National Restaurant Association (NRA) forecasts that restaurant industry business purchases will grow by 12.4% in 2022 compared to last year.

d. Lighting

- i.** Multiple manufacturers implemented another wave of price hikes in the last month. Although the price increases vary among product lines and models, all equipment types are affected.
- ii.** In December 2021, the U.S. Department of Energy announced plans to issue a federal standard that will enact a minimum requirement of 45 lumens per watt for general service lamps (GSLs). Once issued, the GSL standard will apply to most screw base bulbs and prohibit the sale of non-complying products such as incandescent and halogen light bulbs, meaning a shift from A-lamps and other common light bulb types to LEDs. Distributors do not expect to be greatly impacted by the standard, but Energy Solutions continues to monitor market sentiment and anticipated effects.



3. Service Providers / Contractors

a. Foodservice

For contractors, lengthy lead times on supplies and equipment have postponed project installs and affected eight out of ten customers awaiting product.

4. Administrative / Application Submittal

a. HVAC and Water Heating

Distributors continue to strategize ways to improve submissions of qualifying sales through billing system flagging and install address reference sheets. One manufacturer has even developed a filtering system to submit claims on behalf of their distributors to reduce administrative burden.

From the Field

The **Manufacturers' Agents Association for the Foodservice Industry (MAFSI)** conference was held from January 23rd through 27th, gathering commercial foodservice manufacturers, manufacturer representatives, and dealers. Energy Solutions met with industry leaders to advance a range of partnership opportunities inclusive of [Instant Rebates](#) engagement and ongoing participation, overall strategy, and measure testing and validation pathways for emerging energy-efficient products to continue driving results to programs.

The **AHR Expo**, the world's largest HVACR, water heating, and pumps event, was held from January 31st to February 2nd. Energy Solutions attended to meet with manufacturers and distributors to promote program awareness, engagement, and participation.

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 been especially important during the COVID-19 pandemic and 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. We will update this forecast continually and add details as more information becomes available and the specific impacts of the pandemic on the markets are felt. These updates will be versioned and dated to indicate at what time they apply.

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