



Supply Chain Assessment

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After more than a year of tense negotiations and a new series of disruptions impacting California and Washington state cargo operations in early June, West Coast ports and dockworkers have reached a tentative six-year contract agreement that includes a 32 percent pay increase for dockworkers through 2028 among other improvements in benefits and provisions. Despite forecasts of rising interest rates slowing global consumer spending into 2024, businesses are preparing for a surge of imports characteristic of summer peak shipping season and exploring ways to accelerate delivery times. Shippers have found success in diversifying their carrier mix, moving inventory closer to end consumers, and investing in regional fulfillment models. In June, major rail carriers launched new intermodal services at Port Houston, adding capacity and routing opportunities for one of the nation’s fastest growing ports.

Findings

1. Product Availability

a. HVAC

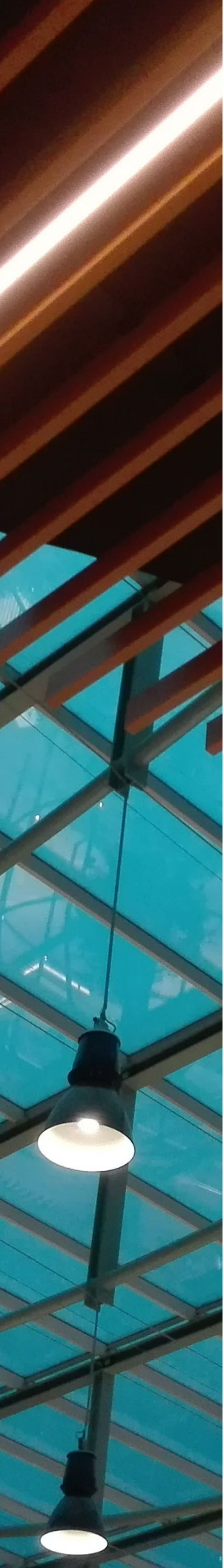
- i. In compliance with 2023 Department of Energy (DOE) code changes, manufacturers are conducting M1 equipment testing to meet SEER₂, EER₂, and HSPF₂ efficiency standards. A limited supply of testing chambers has strained production timelines, particularly for manufacturers reengineering heat pumps with new refrigerants. Manufacturers predict these delays will postpone the launch of new compliant products into 2024 and impact program participation due to a lack of qualified inventory. Material and labor shortages have posed additional challenges, prompting some manufacturers to transition from aluminum to copper products, place advanced orders to secure local warehouse stock, and open new factories to improve production capacity.
- ii. Some distributors quote lead times of four weeks for air-source heat pumps, six to eight weeks for variable refrigerant flow (VRF) systems, ten weeks for water-source heat pumps, 20 to 30 weeks for direct expansion (DX) units, and 42 weeks for air-cooled chillers.

b. Water Heating

A major manufacturer will launch a new 120-volt shared circuit HPWH available as 66- and 80-gallon units in July.

Trade Ally Team Communications per Technology Domain

	This Issue	Volume 4 To Date
HVAC	34	212
Foodservice	26	118
Water Heating	31	151
Pumps	11	62
Lighting and Electrical	12	109
Life Sciences	14	66
Total	128	718



c. Lighting and Electrical

An automotive and battery manufacturer partnership announced plans to invest over \$1 billion in cathode active material (CAM) production to strengthen their EV battery supply chain and accelerate annual output into 2025.

2. Equipment Sales

a. HVAC

A Northwestern distributor reports sales increases of more than 100 percent for their inverter unitary heat pumps.

b. Water Heating

Northeastern manufacturers predict that after a summer decline, strong HPWH sales volume will return in the fall and will remain consistent through winter and spring aligning with a typical regional water heating sales cycle. Although some are already observing this anticipated summer slowdown, others report strong HPWH sales and even a slight year-over-year increase. A Massachusetts distributor's recent marketing campaign is expected to further drive eligible HPWH sales.

c. Foodservice

Despite slower industry growth in recent months indicated by the National Restaurant Association's Restaurant Performance Index, 58 percent of operators plan to spend on equipment, expansion, or remodeling over the next six months and sales remain strong. A California dealer reports that program incentives have bolstered rack oven sales volume.

d. Lighting and Electrical

In May, the National Electrical Manufacturers Association (NEMA) saw the lowest industry confidence index since the COVID-19 lockdowns in 2020, due to concerns of economic uncertainty. Less than 15 percent of manufacturer survey respondents reported improved market conditions.

3. Service Providers and Contractors

a. Across Technologies

Manufacturers and distributors are hosting training events on residential ventilation equipment and HPWH systems that educate contractors about installation requirements, midstream program incentives, and Inflation Reduction Act (IRA) tax credit opportunities. Meanwhile, workforce development concerns have surfaced in Colorado about a limited supply of contractors qualified to handle new refrigerants introduced by growing heat pump adoption.

b. Water Heating

New construction projects are expected to account for a large portion of HPWH summer sales.



Program Spotlight

On June 1, QSR Magazine published an article featuring an interview with Energy Solutions about the California Foodservice Instant Rebates program: *How a California Rebate Program is Changing the Way Operators Buy Equipment*. The article provides an overview of the program and how it incentivizes participating restaurant operators to upsell energy-efficient equipment, achieves cost savings with rebate eligible sales, and supports California's decarbonization goals through energy use reduction. Read the article at qsrmagazine.com.



4. Administrative and Application Submittal

a. Across Technologies

Understaffed distributors report delays in claim submissions due to competing business priorities and limited time for eligible sales data entry.

From the Field

From June 5 to 8, the **Biotechnology Industry Organization (BIO)** held its **International Convention** as the world's largest trade association of biotechnology companies, academic institutions, state biotechnology centers, and related organizations. Energy Solutions joined over 14,000 attendees representing the leading biotechnology and pharma companies to strengthen relationships with regional trade organizations, connect with cold storage manufacturers and distributors to promote life sciences programs we implement, and explore new technologies as future measure additions.

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:
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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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