

Supply Chain Assessment

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Ongoing cargo diversions around the Red Sea have continued to tie up shipping capacity and trigger congestion, driving up freight rates that have been exacerbated by strong demand and are expected to climb further through the end of 2024. Meanwhile, a federal index for freight truckload indicated improved stability in May. However, rising fuel costs among other persistent market challenges are expected to negatively impact trucking conditions until early 2025.

Findings

1. Product Availability

a. HVAC

- i. As part of the Better Buildings Commercial Heat Pump Accelerator initiative, a major manufacturer is partnering with the US Department of Energy to develop heat pump technologies for high-efficiency light commercial rooftop units (RTUs) to be available as early as 2027.
- ii. Comprised of state agencies, manufacturers, and utilities, the California Heat Pump Partnership launched on May 29 to advance the

Trade Ally Team Communications per Technology Domain

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HVAC	62	252
Foodservice	21	107
Water Heating	39	156
Pumps	12	46
Lighting and Electrical	24	99
Life Sciences	19	61
Clean Transportation	14	29
Total	191	750

state's climate objectives and goal to install six million heat pumps by 2030. In support of this goal, a global manufacturer has committed to enabling production of one million heat pumps by 2030, introducing new distribution and training centers, and promoting the adoption of inverter-based technologies through increased education and incentives. This pledge follows an October 2023 agreement signed by the world's largest manufacturers to expand heat pump manufacturing capacity, enhance efficiency and load flexibility, and facilitate policy and market support in partnership with the California Energy Commission.

2. Equipment Sales

a. Across Technologies

- i. In Vermont, distributors are leveraging residential midstream program incentives to bolster their high-efficiency gas HVAC and water heating equipment sales.
- **ii.** A Northwestern distributor is marketing heat pump and heat pump water heater (HPWH) equipment incentives with custom reference guides and will partner with a manufacturer to host a contractor training in August.

b. HVAC

i. Two leading manufacturers announced their partnership to sell ductless HVAC systems beginning in the second half of 2024. Through expanded product offerings and additional distribution channels, the joint venture is expected to mutually strengthen the manufacturers' North American market share.



ii. In the Northeast, some distributors report an uptick in mini split and RTU equipment sales amid steady heat pump sales attributed to midstream rebate promotion.

In Washington, a distributor anticipates that one of their branches will sell an estimated \$1 million in heat pump equipment in 2024.

c. Water Heating

Manufacturers' representatives and distributors are coordinating counter days, trade shows, and other events to promote HPWH incentives to their contractors and end-use customers.



Program Spotlight

In June, the quick-service restaurant industry publication QSR Magazine interviewed Energy Solutions about the California Foodservice Instant Rebates (IR) program. Supporting IR marketing and promotional efforts, the feature provides an overview of the program and how it incentivizes high-efficiency commercial equipment sales by offering instant discounts to foodservice operators while contributing to energy use reduction goals. Read the full article here.

d. Foodservice

The Manufacturers' Agents Association for the Foodservice Industry predicts a continued stagnation in sales growth, as observed in Q1 2024, attributed to high interest rates and inflationary pressures that have impacted pricing. Despite concerns, some anticipate improved growth in the second half of 2024.

e. Lighting and Electrical

- i. In surveys conducted by the National Electrical Manufacturers Association in May, more than 40 percent of respondents anticipate market conditions to improve in six months amid expectations of increased sales in Q4. Still, half of respondents anticipate no change to current conditions, citing market uncertainty due to inflation, elections, and tariffs. Reporting slow industry growth since spring, some distributors plan to leverage midstream program incentives to boost sales of equipment like high bay fixtures.
- ii. Increased spending on data center, semiconductor plant, and electric vehicle (EV) factory construction has led to a growing trend in large project quotes among the industry's leading electrical distributors.

f. Life Sciences

A manufacturer reports high quoting activity for ultra-low temperature and high-performance laboratory-grade freezers in Wisconsin, with sales expected to be completed in Q3. Meanwhile, another manufacturer is concerned about the potential impact of upcoming revisions to ENERGY STAR® specifications for laboratory-grade refrigerators and freezers on midstream incentive programs. The revised specification is expected to take effect in 2025 and could impact high-volume sales orders that extend over the next 12 to 18 months.

g. Clean Transportation

In the Pacific Northwest, distributors are observing increased homeowner interest in EV charger rebates to help offset high installation costs that have impacted purchasing decisions.



3. Service Providers and Contractors

a. HVAC

A leading distributor in the Western region has launched a public website to educate homeowners and renters about heat pump rebates and tax credits available through Inflation Reduction Act funding and connect them with a qualified contractor for installation.

4. Administrative and Application Submittal

a. Across Technologies

Although limited staff resources have challenged consistent sales data collection and claim submissions for some distributors, configuring invoicing system pop-ups for qualifying equipment has reportedly helped to simplify these processes.

From the Field

From June 10 to 15, the European Council for an Energy Efficient Economy hosted their 2024 Summer Study. Energy Solutions staff presented three informational sessions that discussed the challenges and opportunities with compensating customers for electricity grid services, the role of micro heat pumps in the global decarbonization effort, and how California's water heating regulations can help inform a larger decarbonization strategy.

The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) held its Annual Conference from June 22 to 26 and gathered HVAC/R professionals to discuss legislative initiatives and building decarbonization topics. Energy Solutions attended to participate in Technical and Project Committee meetings and connect with manufacturers to discuss market needs for accelerating heat pump deployment. During a panel discussion, Energy Solutions elevated the value of engaging manufacturer and community-based organizations in program development and the creation of workforce, education, and training opportunities for underserved communities in the US.

About Energy Solutions

For more than 25 years Energy Solutions has provided costeffective, market-driven solutions that deliver reliable, largescale 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 | energy-solution.com

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