

# Supply Chain Assessment

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Persisting drought conditions at the Panama Canal and commercial vessel attacks along Red Sea trade routes have sustained uncertainty among shippers. To mitigate these challenges, some shippers are diverting routes toward the West Coast and using intermodal routes to ship cargo back eastward. Increased demand from seasonal factors has additionally contributed to an uptick in cargo volumes at the Port of Los Angeles, which saw a year-over-year rise of 18 percent in January. Meanwhile, concerns about cybersecurity risks impacting US port facility operations have prompted federal investments to bolster maritime cybersecurity, supply chain resilience, and domestic manufacturing capacity.

## Findings

### 1. Product Availability

#### a. HVAC

A ventilation system manufacturer introduced a high efficiency energy recovery ventilator (ERV) that is compatible with cold climate variable refrigerant flow systems for rooftop unit (RTU) retrofit applications. To promote use of the ERV in the Northeastern commercial market, the manufacturer is exploring pilot opportunities to demonstrate the product's energy savings potential.

#### b. Water Heating

Following a trend in heat pump water heater (HPWH) launches and use in demand response applications, a manufacturer introduced an ENERGY STAR® certified, solar assisted HPWH. In April, another manufacturer will introduce a HPWH available in 50- and 80-gallon sizes.

#### c. Life Sciences

On February 19, ENERGY STAR released Draft 2, Version 2.0 of a revised product specification for laboratory grade refrigerators and freezers. A major manufacturer reports that their new line of ultra-low temperature freezers meets the revised specifications with lowered energy consumption of 0.2 kWh per day.

### 2. Equipment Sales

#### a. Across Technologies

- i. Led by Northeast States for Coordinated Air Use Management, environmental officials from California, Colorado, Maine, Maryland, Massachusetts, New Jersey, New York, Oregon, and Rhode Island signed an agreement to expand residential heat pump sales to accelerate their widespread adoption. Under the agreement, the participating states share a goal for heat pumps to meet at least 65 percent of their residential heating, air conditioning, and water heating shipments by 2030 and 90 percent by 2040.

#### Trade Ally Team Communications per Technology Domain

	This Issue	Volume 5 To Date
HVAC	39	71
Foodservice	31	41
Water Heating	23	46
Pumps	4	7
Lighting and Electrical	4	14
Life Sciences	5	14
<b>Total</b>	<b>106</b>	<b>193</b>



ii. A Northeastern supermarket chain with a goal of transitioning to all-electric by 2038 will leverage commercial incentives to upgrade their gas foodservice and water heating equipment to electric fryers, rotisserie ovens, and HPWHs.

**b. HVAC**

Distributors report success in leveraging midstream incentives to bolster high efficiency packaged terminal, RTU, and unitary heat pump equipment sales and achieve greater market share. Meanwhile, an ERV distributor is using program rebates as a tool to influence customers to purchase equipment from them rather than from competitors who do not offer incentives.

**c. Water Heating**

- i. Effective March 1, three leading manufacturers will raise prices for HPWH equipment by up to eight percent. The increase is attributed to higher material costs due to inflationary pressures and increased investments in production capacity to meet rapidly growing demand.
- ii. Distributors are coordinating sales initiatives, sales staff and contractor trainings, and showroom exhibits to promote available HPWH incentives. In Massachusetts, a program update qualifying new construction projects is expected to bolster residential HPWH sales as multifamily buildings amass greater market share in 2024.

**d. Foodservice**

- i. California dealers report a decline in demand since the holiday season, with most sales sourced from in-store customer foot traffic as opposed to large projects. Still, equipment sales have improved in February, a trend that one dealer predicts will continue into April.
- ii. A Massachusetts dealer reports that program incentives and special promotions have helped to offset high equipment costs and bolster sales of pre-rinse spray valves and dishwashers.

**e. Lighting and Electrical**

A leading industrial distributor anticipates increased sales in 2024 as growing adoption of fluorescent lamp bans and heightened emphasis on controlled products have strengthened sales staff messaging to promote eligible fixtures.

### 3. Service Providers and Contractors

**a. Water Heating**

In New Hampshire, some distributors share that sales have been impacted by a lack of contractor education on HPWH equipment and how to upsell to customers.



## Session Spotlight

From March 12 to 14, the American Council for an Energy-Efficient Economy (ACEEE) Hot Water Forum and Hot Air Forum will gather manufacturers, utilities, program administrators, and government representatives to discuss water use efficiency and heat pump technology as a solution to building decarbonization. Energy Solutions staff representing TECH Clean California will present at sessions highlighting TECH HPWH incentives that relaunched in October 2023 with demand management requirements; insights from heat pump retrofit savings data to inform incentive design, customer targeting, and policy contributions; and pathways to sustainable solutions through fostering industry relationships and workforce development opportunities.





## 4. Administrative and Application Submittal

### a. Across Technologies

Staff turnover and the collection of required customer information from contractors continue to pose challenges to claim submissions for some distributors. Those that have identified their internal billing system as an additional barrier are programming improvements to flag eligible equipment and evaluating new point-of-sale systems.

## From the Field

From February 5 to 8, the **Association of Energy Services Professionals (AESP) Annual Conference** gathered program managers, policy experts, manufacturers, and other clean energy and efficiency professionals. Energy Solutions staff represented CalNEXT on the panel *Moving From Demonstration To Deployment: The Shifting Role of Emerging Tech in the Age of Decarbonization, Demand Management, and Grid Infrastructure*. The panel discussed how Wisconsin, Illinois, and California are each modifying their emerging technology programs to meet the new challenges of today's grid and the evolving regulatory structure. Key examples included how programs are shifting project types or adjusting program metrics, such as through incorporating increased electric measures and focus on peak demand, or aligning their deployment scale with state efficiency and decarbonization targets.

### 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.

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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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