



Supply Chain Assessment

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Following the catastrophic collapse of the Francis Scott Key Bridge, four temporary channels have opened to allow commercial vessels partial access to the Port of Baltimore amid ongoing efforts to restore access to full capacity by the end of May. Railroads have added intermodal services and some neighboring East Coast ports have extended their operating hours to handle additional volumes and mitigate congestion driven by diverted coal, automobile, and other shipments.

Meanwhile, sustained disruptions to the Red Sea trade corridor contributed to 45 percent fewer commercial ships sailing through the Suez Canal in Q1 2024 compared to 2023. As shippers continue to adjust their supply chain strategies to circumvent the crisis, many are opting to fly cargo to avoid up to a ten-day delay, a decision that has led to a rapid rise in air freight volumes and rates.

Findings

1. Product Availability

a. HVAC

i. Manufacturers continue to introduce new products ahead of federal requirements that will set global warming potential (GWP) limits for refrigerants beginning January 1, 2025. A leading manufacturer is releasing an updated residential product portfolio of high efficiency heat pumps and air conditioners that features energy efficiency upgrades and R-454B refrigerant. Another manufacturer began delivering their new R-454B-compatible heat pump product to warehouses nationwide. Some distributors predict that the refrigerant transition will challenge their summer stocking capabilities for equipment like variable capacity heat pumps as they sell through noncompliant inventory.

ii. On April 3, the US Department of Energy (DOE) announced the Better Buildings Commercial Building Heat Pump Accelerator. From 2024 through 2027, the initiative will engage commercial end users and manufacturer partners to spur the production and market adoption of high-efficient, cost-effective heat pump rooftop units.

b. Water Heating

A manufacturer's 50- and 80-gallon models of their first residential heat pump water heater will ship to distributors beginning May 1.

Trade Ally Team Communications per Technology Domain

	This Issue	Volume 5 To Date
HVAC	32	128
Foodservice	17	76
Water Heating	18	88
Pumps	9	26
Lighting and Electrical	18	59
Life Sciences	10	37
Clean Transportation	10	10
Total	114	424



c. Foodservice

Two of the nation's top ten equipment dealers completed acquisitions to broaden their distribution footprints and customer base, indicating a continuing trend of industry consolidation and focus on expansion to new markets.

d. Lighting and Electrical

The DOE published a final rule that will require all general service lamps to meet a minimum efficacy standard of 120 lumens per watt, compared to the current standard of 45 lumens per watt, beginning in mid-2028.

e. Life Sciences

In March, a manufacturer released an ultra-low temperature freezer that consumes 0.18 kWh per day, the lowest energy consumption per cubic foot of any rated by ENERGY STAR® to date. Manufacturers are launching similar products in response to the revised ENERGY STAR product specification for laboratory grade refrigerators and freezers that will take effect in 2025.

f. Clean Transportation

An automobile manufacturer committed to expanding their EV offerings to 60 percent of their portfolio by 2030 will introduce more than 30 new EVs, with nearly half of these models planned for release in the next three years.

2. Equipment Sales

a. Across Technologies

- i. A national distributor of HVAC and water heating equipment will open three new warehouses in major US cities over the next two years to expand their existing distribution network, enhance rapid-delivery capabilities to contractor customers, and capture a greater share of the construction market.
- ii. Northeastern distributors are planning counter days to promote high efficiency equipment sales and generate increased interest among contractors by leveraging program rebates.

b. HVAC

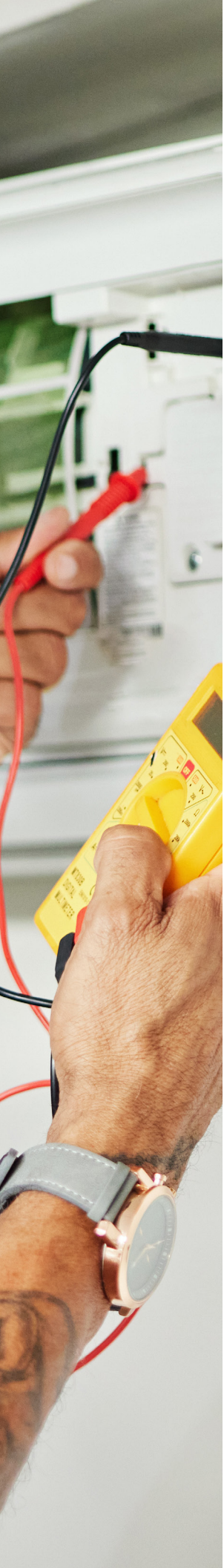
- i. In Massachusetts, updated program requirements for heat pumps under 5.4 tons to comply with ENERGY STAR Version 6.1 cold climate specifications have impacted claimed heat pump savings in 2024. However, strong sales of heat recovery and energy recovery ventilators have provided a counterbalance.
- ii. A distributor anticipates that heat pump equipment costs for models using A2L refrigerants will increase by approximately 15 percent when the federal GWP requirements take effect in 2025.

c. Foodservice

According to an industry study surveying the top 100 equipment and supplies dealers, respondents note that order activity and inventory levels are normalizing, despite ongoing challenges of inflationary pressures and high interest rates that have impacted project quotes and bids. Many dealers report an uptick in order activity since January and increased sales from contract business compared to walk-ins.

d. Lighting and Electrical

A distributor reports increased sales of integrated controls products amid growing market demand. In Massachusetts, some distributors are quoting large projects for troffer and high bay equipment and hiring more sales staff to boost commercial sales in 2024.



3. Service Providers and Contractors

a. Across Technologies

On March 29, the DOE announced that states can apply for up to \$40 million in grants for the Training for Residential Energy Contractors Program (TREC) to train residential energy efficiency and electrification contractors. Funded by the Inflation Reduction Act, TREC funding will support the development and implementation of workforce training programs and reduce costs for contractor training, testing, and certification.

b. HVAC

The industry predicts that a shift from equipment replacements to repairs, attributed to higher costs and decelerated customer spending, is a trend that will continue to impact the residential market in 2024.

4. Administrative and Application Submittal

a. Across Technologies

Some distributors are streamlining internal claim processing by coding their billing systems to prompt required data collection for eligible submissions or developing software that allows contractors to self-populate installation addresses.

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