



# Supply Chain Assessment

December 23, 2024 | Volume 5, Issue 12



## Editor's Note

As the year comes to a close, we reflect on the global, national, and regional developments that impacted energy-efficiency supply chains and industry operations in 2024. Port labor negotiations and geopolitical forces contributed to price volatility and limited resource availability, driving shipping strategies of rerouting cargo or employing land and air alternatives to mitigate disruptions. Additional strategies such as accelerating shipment timelines have minimized impacts on freight network operations in the face of devastating climate events and uncertainty fueled by import tariffs anticipated in 2025.

More than 1,500 conversations with our trade ally partners have revealed an ongoing trend toward electric measures across technology areas. Increased adoption of heat pump technologies has been advanced by state and federal funding and workforce training opportunities, as manufacturers continue to introduce new products. Top-down market collaboration has generated a wide range of resources to support the transition to new industry standards, from training centers and marketing materials that promote confidence to sell and install high-efficiency equipment, to financing options that enable end-use customer accessibility.

We would like to thank our market partners, whose insights inform the content for this series, as well as our program administrator partners for the ongoing support in influencing energy savings and reduced climate impacts. Beginning January 2025, the Supply Chain Assessment series will be published every two months. We look forward to continued collaboration and progress toward our mutual goals.

## Findings

### 1. Product Availability

#### a. HVAC

- i. Two global manufacturers announced a joint venture to enable the US residential market access to inverter compressor technology, delivering enhanced energy efficiency and cost savings, among other benefits. The partnership will promote the acceleration of heat pump adoption and become operational by the first half of 2025. Meanwhile, another manufacturer announced their investment of over \$140M in the production of variable-speed compressors beginning in October 2027 to support growing US demand for heat pumps and other high-efficiency solutions.

#### Trade Ally Team Communications per Technology Domain

	This Issue	Volume 5 To Date
HVAC	44	489
Foodservice	13	184
Water Heating	28	337
Pumps	13	124
Lighting and Electrical	18	235
Life Sciences	9	125
Clean Transportation	4	79
<b>Total</b>	<b>129</b>	<b>1,573</b>



- ii. Administered by the New York State Energy Research and Development Authority (NYSERDA), New York's Clean Heat for All: Packaged Terminal Heat Pump Program announced \$10M in funding to support the production and demonstration of cold-climate heat pumps to replace inefficient air conditioners in multifamily and other large buildings. NYSERDA will work with manufacturers and building owners of selected demonstration sites to test and evaluate prototypes for affordability and ease of installation.
- iii. In preparation for updated federal global warming potential (GWP) limits that will become effective in 2025, manufacturers continue to introduce new products or redesign their existing portfolios to feature lower-GWP refrigerants. Some distributors face ongoing stocking challenges as they sell through R-410A systems and replenish inventories with compliant equipment timed to manufacturer releases.

#### **b. Water Heating**

Ahead of launching new heat pump water heater (HPWH) equipment in 2025, some manufacturers are proactively engaging distributors and targeting additional supply chains like the electrical market to expand distribution channels.

#### **c. Foodservice**

In California, ice machine manufacturers are preparing to transition their equipment from R-410A to lower-GWP refrigerant use to comply with state limits that will take effect beginning in 2025 and 2030.

#### **d. Lighting and Electrical**

In Massachusetts, 2025 program changes requiring controls have prompted distributors to bolster their control-ready and integrated controls product inventories.

#### **e. Life Sciences**

A major manufacturer reports lead times of two weeks for smaller, 20- to 30-cubic foot freezers, and more than five weeks for larger, 50-cubic-foot freezers.

## **2. Equipment Sales**

#### **a. HVAC and Water Heating**

- i. A leading HVAC manufacturer will raise prices between two and five percent on select applied, ductless, and controls commercial equipment effective January 12, 2025.
- ii. Despite some reports of summer sales slowdowns and staff shortages impacting operations, Northeastern distributors observe strong sales of heat pumps and HPWHs attributed to midstream program rebates. Some distributors are planning vendor days in Q2 2025 to promote eligible equipment sales and leveraging available rebates to expand their regional market share or facilitate their entry into the hydronics market.

#### **b. Foodservice**

According to the Manufacturers' Agents Association for the Foodservice Industry Business Barometer, Q3 2024 represented the second consecutive quarter of negative sales growth. However, sales have rebounded in Q4, supported by increased use of automation, optimized production to curb labor expenses, and reduced diesel costs that have stabilized logistics and freight operations. Manufacturers predict that these operational efficiencies, paired with increased consumer spending, will lead to slight but continued improvement in 2025.



### c. Lighting and Electrical

Northeastern distributors report that program incentives, paired with sales staff rebate training and increased familiarity, have helped bolster commercial equipment sales and secure bids for new projects. Ahead of the controls requirements beginning in 2025, distributors that sell most of their equipment with controls or have extensively prepared their sales teams expect that their sales will not be significantly impacted by the change.

### d. Life Sciences

In the Northeast and Midwest, manufacturers' representatives and distributors credit program rebates as an effective tool that offers a competitive advantage in driving large sales of energy-efficient equipment.

## 3. Service Providers and Contractors

### a. HVAC

- i. To promote greater awareness of the incentives available through the Inflation Reduction Act (IRA), manufacturers are providing contractors with training opportunities, marketing materials, websites and guidebooks, rebate calculators, and other resources to drive eligible sales and educate consumers about IRA rebates and tax credits.
- ii. The Building Performance Institute and the US Partnership for Education for Sustainable Development released a new toolkit to recruit heat pump professionals and bolster the residential energy-efficiency workforce. In January, a leading manufacturer will launch a certified ductless program for contractors within their network to access training opportunities, financing options, and industry recognition as a qualified installer.

## 4. Administrative and Application Submittal

### a. Across Technologies

Some distributors report that staff shortages have challenged end-of-year claim submissions.

### 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:  
[jjohnston@energy-solution.com](mailto:jjohnston@energy-solution.com) | [energy-solution.com](http://energy-solution.com)

**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.

*Confidentiality Notice: This document is confidential and contains proprietary information of Energy Solutions.*