



# Supply Chain Assessment

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A global IT systems outage on July 19 disrupted freight network operations with varying degrees of impact. While logistics experts anticipate air freight systems could take weeks to fully recover, most major US rail and port operations were largely restored the same day. Concerns about limited freight capacity have been heightened amid rising global demand that elevated year-over-year shipments by 13 percent in June.

In Texas, the devastating impacts of Hurricane Beryl caused power outages and facility damages that disrupted operations at the Port of Houston and caused delays across all freight modes. Since Beryl made landfall on July 8, most freight operations have resumed as carriers work through cargo backlogs created from facility closures.

## Findings

### 1. Product Availability

#### a. HVAC

In ongoing preparation for federal global warming potential (GWP) limits that will take effect beginning January 1, manufacturers continue to introduce residential and commercial heat pump products that feature lower-GWP refrigerants for availability in 2025.

#### b. Water Heating

Two leading manufacturers have launched new hybrid electric heat pump water heater (HPWH) models that are ENERGY STAR® certified and available in various sizes up to 80 gallons.

#### c. Life Sciences

Manufacturers continue to introduce new ultra-low temperature (ULT) freezers in 2024 as demand remains steady.

#### d. Clean Transportation

- i. In June, the Port of Nevada announced an expansion of its intermodal services with a direct rail connection to a major West Coast port to improve inland distribution and attract manufacturers seeking to grow their electric vehicle (EV) footprint.
- ii. The anticipated Q4 2024 launch of a manufacturer's EV production facility in Georgia is spurring a series of auto supplier investments and driving increased cargo volumes at the state's ports that contributed to a year-over-year growth of 22 percent in May.

### Trade Ally Team Communications per Technology Domain

	This Issue	Volume 5 To Date
HVAC	49	301
Foodservice	21	128
Water Heating	35	191
Pumps	21	67
Lighting and Electrical	30	129
Life Sciences	17	78
Clean Transportation	16	45
<b>Total</b>	<b>189</b>	<b>939</b>



## Program Spotlight

Illinois Shines, a state-administered solar program overseen by the Illinois Power Agency (IPA) and implemented by Energy Solutions, concluded its 2023–24 Program Year on May 31. More than 27,000 project applications were verified by Energy Solutions and approved by the Illinois Commerce Commission, with nearly 650 megawatts of photovoltaic capacity allocated to accelerate solar development in Illinois. The Program implemented critical consumer protection activities and continued its equity emphasis with implementation of the Minimum Equity Standard and the Equity Eligible Contractor Mentorship Pilot. On June 3, the 2024–25 Program Year launched with an increased annual allocation capacity of 800 megawatts, detailed in the IPA press release [here](#).



## 2. Equipment Sales

### a. HVAC

- i. Citing rising raw material costs and regulatory changes such as the forthcoming GWP refrigerant limits, major manufacturers predict price increases for both R-410A and mildly flammable (A2L) systems. Some estimate increases of 15 percent or more for A2L equipment over the course of 2024 and 2025.
- ii. Distributors are leveraging midstream heat pump rebates to boost sales amid strong demand for mini split equipment and increased customer interest to implement large-scale residential and commercial equipment upgrades. Crediting programs like TECH Clean California, some distributors estimate that heat pump sales have grown to account for up to 65 to 80 percent of their overall sales.

### b. Water Heating

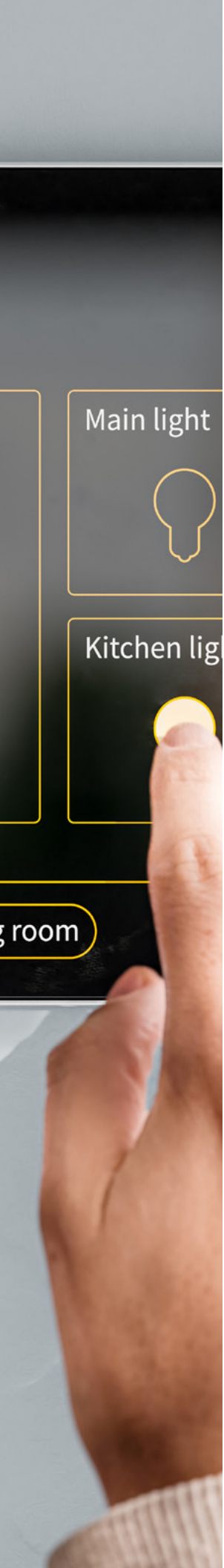
Northeastern distributors attribute a lagging trend in HPWH sales to seasonal delivery delays, federal election uncertainty, and stocking behavior influenced by the forthcoming refrigerant limits. Those that report having had the same units in stock for at least six months or a static contractor customer base are using midstream rebates to promote HPWH technology and bolster their sales.

### c. Foodservice

In Massachusetts, updated state regulations will eliminate program rebates for energy-efficient gas equipment in September 2024. This has prompted concerns about sales impacts among dealers with fully stocked inventories of units that will no longer qualify.

### d. Lighting and Electrical

- i. According to a Q2 2024 industry survey, distributor respondents report a small increase in year-over-year sales and predict only slight growth in Q3 2024, curbed by a shortage of large projects and persistent pricing pressures that nearly half of respondents expect will translate to additional cost increases. Still, many distributors expect conditions to improve with seasonal trends and fulfillment of previously quoted projects.



ii. Ahead of program changes that will disqualify products without integrated controls in 2025, Massachusetts distributors are working with their manufacturers who have controls products to expand contractor resources through interactive learning tools and events.

**e. Life Sciences**

Leading ULT manufacturers report high-volume summer sales to pharmaceutical companies, government agencies, and universities in the Northeast.

**f. Clean Transportation**

Although a top EV producer's Q2 2024 sales tumbled nearly ten percent compared to 2023, overall year-over-year EV sales growth of more than 11 percent indicates sustained strength in US consumer demand.

### 3. Service Providers and Contractors

**a. Life Sciences**

On July 2, the Wisconsin Biohealth Tech Hub was awarded nearly \$50 million in federal grant funding to expand the state's biotechnology industry. The funding is projected to create more than 140,000 jobs and support workforce development initiatives.

### 4. Administrative and Application Submittal

**a. Across Technologies**

A major manufacturer with a goal to grow their residential program participation in 2024 is hiring additional staff to support claim submission processes. Meanwhile, distributors that have hired students for the summer report positive impacts to program participation and improved staff bandwidth to prioritize making sales.

## 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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