

## 2 Energy Market Trends Overview

---

The market dynamics from 2022 continued to influence energy and fuel markets in 2023, contributing to increased price volatility and periods of uncertainty regarding energy supply. Despite this, global supply chains slowly stabilized in 2023, driven by lower energy demand and production, resulting in lower prices. However, uncertainties associated with ongoing global conflicts continued to pose challenges for the energy sector. Lower energy prices relieved consumers of the historically high prices of 2022.

The 2023 energy demand, supply, and pricing in New York State were influenced by the following factors:

- Global conflicts
- Global supply and demand factors
- U.S. economic conditions
- Weather-related market influences

### 2.1 Global Conflicts

Geopolitical unrest has an impactful influence on global market supply and prices for crude oil, refined products, and energy products, along with many other traded commodities. The ongoing Russo-Ukrainian War, and the new conflict in the Middle East in 2023 created significant uncertainty in global energy supply chains, leading to volatile domestic markets in the U.S. These persistent conflicts added to supply chain uncertainty and subsequent volatility in energy and fuel prices.

#### 2.1.1 Continuation of the Russo-Ukrainian War

The Russo-Ukrainian War continued to impact energy product planning for Europe and altered the global supply chain. This conflict prompted European countries to halt most natural gas imports from Russia via pipeline and to reactivate projects to expand liquefied natural gas (LNG) regasification facilities (EIA 2024a). In 2021, Russian pipeline-supplied natural gas made up approximately 50% of Europe's natural gas. LNG was among the most important fuels to balance European natural gas supply because Russian natural gas deliveries were slowed and eventually halted (Natural Gas Intelligence 2023a). The 2022–2023 winter was mild in the Northern Hemisphere, which eased demand during the transition away from Russian-supplied natural gas. However, it also started 2023 with elevated natural gas inventories for Europe and the Northeast U.S. (EIA 2024a).

The U.S. Gulf Coast led the way in maintaining Europe’s supply, while Norway became the largest natural gas pipeline supplier to Europe (Natural Gas Intelligence 2023a). The supply chain adjustments made to address volatility during 2022 stabilized in 2023 as the new planning came to fruition, meeting European demand without Russian products.

Similarly, U.S. exports of coal to the European Union (EU) increased significantly after EU sanctions on Russian coal became effective in August 2022. The U.S., South Africa, and Colombia became the primary sources of coal to replace the lost Russian quantity (EIA 2025a).

### **2.1.2 Israel–Hamis Conflict in the Middle East**

Israel declared war against the Islamic militant group, Hamas, in early October following a Hamas attack on Israeli territory. While the conflict developed in the final months of the year, a second global conflict was growing, increasing market uncertainty. The primary concern was potential disruptions to the global crude oil supply chain, which could impact regional supply chain dynamics in the U.S. (Natural Gas Intelligence 2023b).

## **2.2 Global Supply and Demand Factors**

In addition to the global conflicts described previously, other factors also influenced the energy and fuel markets, including the following:

- Production cuts by the Organization of Petroleum Exporting Countries and allies (OPEC+)
- A rebound in China’s consumer demand following the easing of Coronavirus Disease 2019 (COVID-19) restrictions

OPEC+’s decision to cut production resulted in a reduction in the supply of available crude oil in the market. Due to limited supply, crude oil prices increased in 2023, driven by the impact of these countries on the global supply chain. The cuts were in place during the first half of the year and extended in July 2023 for the rest of the year (EIA 2023b).

In addition to OPEC+ supply, global demand increased in 2023 as China eased travel restrictions and pandemic lockdowns. Due to the strict nature of China’s pandemic response, the 2023 reopening led to increased domestic travel and a rise in crude oil movement to China, at levels last observed in 2019 (OPIS 2023a). By the end of 2023, China was processing an average of 14.8 million barrels per day of crude oil into petroleum products, marking an all-time high record due to economic growth and increased refinery capacity (EIA 2024b).

## **2.3 U.S. Economic Conditions**

In May 2023, the U.S. Federal Reserve, in an effort to continue managing inflation, raised interest rates, which increased the borrowing costs for consumers and businesses. Consumer spending increased significantly following the easing of COVID-19 pandemic restrictions in 2021 and 2022. While inflation reached a peak of 7% in June 2022, the 4.4% rate it fell to in June 2023 was still below the Federal Reserve's 2% goal (Board of Governors 2023). In addition to relatively high interest rates, several bank failures occurred in 2023, most notably those of Signature Bank, First Republic Bank, and Silicon Valley Bank, increasing volatility in equity markets. Fearing a recession, many market participants engaged in conservative investing and sold off assets to mitigate potential losses (Board of Governors 2023; OPIS 2023b).

While rising inflation and a looming recession affected the U.S. economy, supply and demand dynamics from China also affected the U.S. and the global economy. As China eased COVID-19 pandemic restrictions, demand for products like crude oil was poised to jump, as more consumers traveled and spent money saved during the pandemic (S&P Global 2023). The relationship between global markets and the U.S. economy had a significant impact on energy and equity markets in 2023 as geopolitical uncertainty, supply and demand dynamics, and high prices contributed to challenging economic conditions.

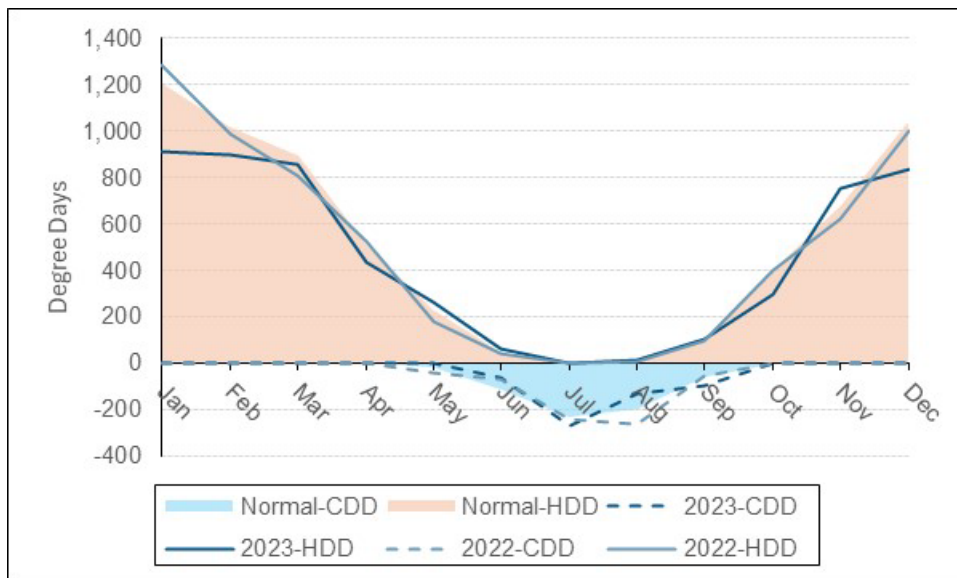
## **2.4 Weather-related Market Influences**

Energy market prices and consumption are sensitive to weather conditions. During periods of cold temperatures, New York State requires increased use of a variety of heating fuels. Additionally, periods of hot temperatures put pressure on the electricity, and by extension natural gas, system to meet demand for cooling. These fundamental relationships exist under normal seasonal conditions and are amplified during extreme temperature events (e.g., polar vortices in winter; heat waves in summer). In 2023, weather was a stable factor for the State's energy sector, as analyzed using degree-day values from the National Oceanic and Atmospheric Administration (NOAA 2025). Figure 1 depicts the monthly degree-day summary for 2023, compared with 2022 and the meteorological normal.

**Figure 1. New York State Degree-Day Summary, 2023**

Source: NOAA (2025).

Negative values represent cooling degree days (CDD), and positive values represent heating degree days (HDD).



Based on 2023 degree days, two key observations can be made:

- Winter months were generally warmer than normal, with HDDs averaging approximately 13% below normal.
- Spring and summer were cooler than usual, with CDDs averaging approximately 4% below normal.

While regional temperature conditions differed from the statewide summary, the overall year was warmer than the normal winter and cooler than the normal summer, which took pressure off energy demand for these seasons.

The 2023 Atlantic hurricane season was above-average, producing 20 named storms, including 2 U.S. landfalls: one hurricane and one tropical storm (NOAA 2023).

- Hurricane Idalia made landfall near Keaton Beach, FL, as a Category 3 storm on August 30. It caused widespread damage in North Carolina due to the heavy rainfall, strong winds, and significant river and storm surge flooding.
- Tropical Storm Ophelia struck near Emerald Isle, NC, on September 23 as a powerful tropical storm.

Aside from the areas directly affected by hurricane landfalls, the 2023 storms did not significantly disrupt the energy and fuel supply chains serving New York State. However, several weather events throughout the year had short-term impacts on the State and the broader Northeast (NOAA 2024), including:

- **February 2023 winter storm:** A winter storm swept across the Northeast, followed by brief but intense cold temperatures. In New York State, this was a typical winter storm, requiring snow management to ensure safe travel. The cold blast prompted some adjustments to the energy system, particularly within the natural gas system, but operations returned to normal after the event.
- **March 13–15 nor'easter:** A nor'easter impacted Upstate New York, producing snow that required snow management and caused localized power outages. The storm, however, did not have long-term impacts on the State.
- **Strong nonhurricane storms:** Throughout 2023, New York State experienced several strong storms unrelated to major hurricanes or nor'easters. These spring storms caused localized flooding and significant damage in affected communities.