



# **GOES Quarterly Report on Price Developments within China, Europe and US Markets**

December 2024-March 2025

**MetalMiner**<sup>SM</sup>

## Introduction

The global market for grain-oriented electrical steel (GOES) is witnessing significant developments across major regions, including China, Europe, and the United States. As we delve into the first quarter of 2025, this report aims to provide a comprehensive overview of the current price trends, market conditions, and macroeconomic influences affecting the GOES industry.

## Key Market Developments

- ArcelorMittal announced plans to move forward with the construction of a non-electrical steel (NOES) manufacturing facility in Alabama.
  - The facility will boast an annual capacity of 150,000 metric tons intended to support automotive, renewable energy and industrial/commercial sectors.
  - Construction will commence in H2 2025, with production anticipated to start in 2027. Although no plans were announced to do so, the facility could eventually be used to expand domestic GOES capacity.
- Tariffs pose a significant inflationary risk to GOES prices. Should the global 25% steel tariff go into effect in March without a specific carveout for the material, U.S. prices would see a significant uptick. AK Steel (Cleveland-Cliffs) controls the U.S. market, while Japan is the primary supplier of U.S. GOES imports. Meanwhile, a blanket 25% tariff on imports from Mexico would impact transformer supply. Mexico stood as the largest supplier to the U.S., accounting for \$5.74 billion worth of transformer imports into the U.S.
- On top of tariffs, rising U.S. energy demand will place an increased strain on U.S. transformer supply. As a result, major companies have announced plans to expand domestic transformer manufacturing. Eaton announced a \$340 million investment, which will convert an existing facility in Jonesville, SC into a manufacturing site. The move comes as part of over \$1 billion of investments Eaton has made in the U.S. since 2023.
  - Highlighting tight supply conditions, a September report for the National Infrastructure Advisory Council showed transformer lead times for small transformers more than doubled to 120 weeks over recent years, while lead times for large transformers reached as long as 210 weeks in 2024.

## Macroeconomic Factors Influencing the GOES Market

The GOES market is at a critical juncture, influenced by a myriad of factors ranging from regional electricity price trends to broader macroeconomic dynamics. As we progress through 2025, continuous monitoring of these trends will be vital for making informed decisions in the GOES market.

## U.S.

- Trade policy in the U.S. will have a strong influence over both the GOES and transformer markets. As the largest electrical transformer importer in the world, trade barriers combined with grid infrastructure plans will offer longstanding support for the industry. While tariffs may lead to increased GOES and transformer capacity in the U.S., the construction of new facilities will lag demand needs amid the proliferation of data centers and the energy required to power them.
- While President Biden blocked the sale of U.S. Steel to Nippon in early January, hope remains for Nippon to be allowed at least partial ownership of the company. As a leading GOES producer, Japan's Nippon could help expand U.S. capacity and serve as a strategic partner for U.S. Steel. Amid ongoing lawsuits following President Biden's blockage, Trump could have the opportunity to reverse course and open a pathway for Nippon to invest in the steelmaker, potentially opening the door for increased competition in the domestic GOES market. This could come in the form of minority ownership, which would still align with Trump's previous goals to maintain U.S. ownership of the mill.
- The Federal Energy Regulatory Commission (FERC) and the Department of Energy (DOE) are playing pivotal roles in shaping the power sector's agenda, focusing on surging demand growth and energy cost reduction efforts.

## Europe

- The electricity market is stabilizing after experiencing extreme volatility in 2024. The European Union continues to face challenges due to reduced gas imports from Russia, which has led to elevated electricity prices. However, increased investments in renewable energy and energy efficiency initiatives are expected to alleviate some of the price pressures.
- Geopolitical shifts and energy security concerns continue to impact supply chains and market stability. The ongoing transition towards cleaner energy sources is further complicated by political dynamics and regulatory changes.

## China

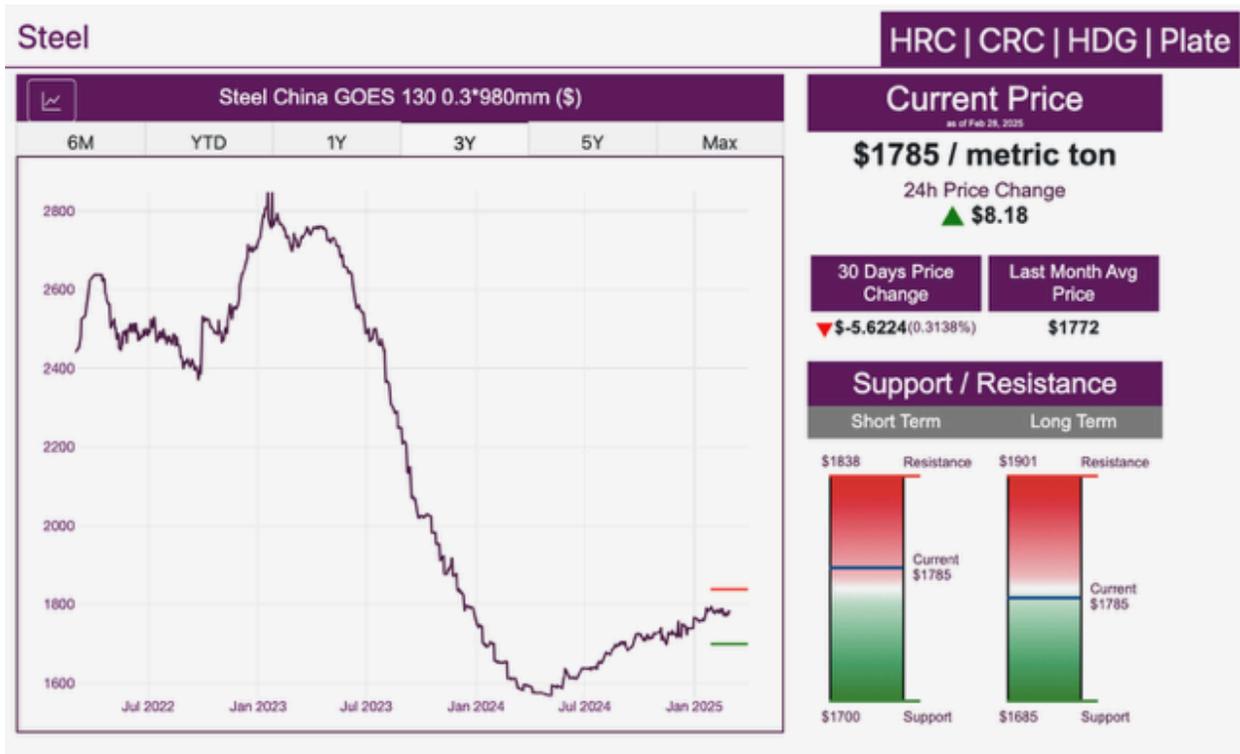
- China's power demand is evolving rapidly, driven by advanced industrial growth and urbanization. The International Energy Agency (IEA) highlights China's increasing reliance on weather-dependent energy sources, which poses challenges for maintaining a stable electricity supply. The phenomenon of negative wholesale electricity prices in some markets underscores the complexities of integrating renewable energy into the grid.

- China's power sector is navigating the challenges of expanding power systems and increasing electrification. The IEA report emphasizes the need for resource adequacy and resilience in power systems to ensure a reliable electricity supply amidst growing demand and environmental considerations.

## Global Price Trends in the GOES Market

### China

The Chinese market for Grain-Oriented Electrical Steel (GOES) has experienced significant fluctuations over the past few years. In January 2023, Chinese export prices reached a peak, followed by a substantial decrease of 45% until prices hit a bottom in May 2024 at their lowest level since September 2017. This decline in prices can be attributed to several macroeconomic factors, including changes in domestic demand and international trade dynamics. The reduction in prices has been influential in global markets, given China's dominant role in the export of GOES. Prices have subsequently rebounded, albeit at a slow but consistent pace, rising over 13% from their May low.



While price increases since early May continue to lack strong momentum, they showed a consistent upside bias. Considering the fundamental outlook for increased electricity demand,

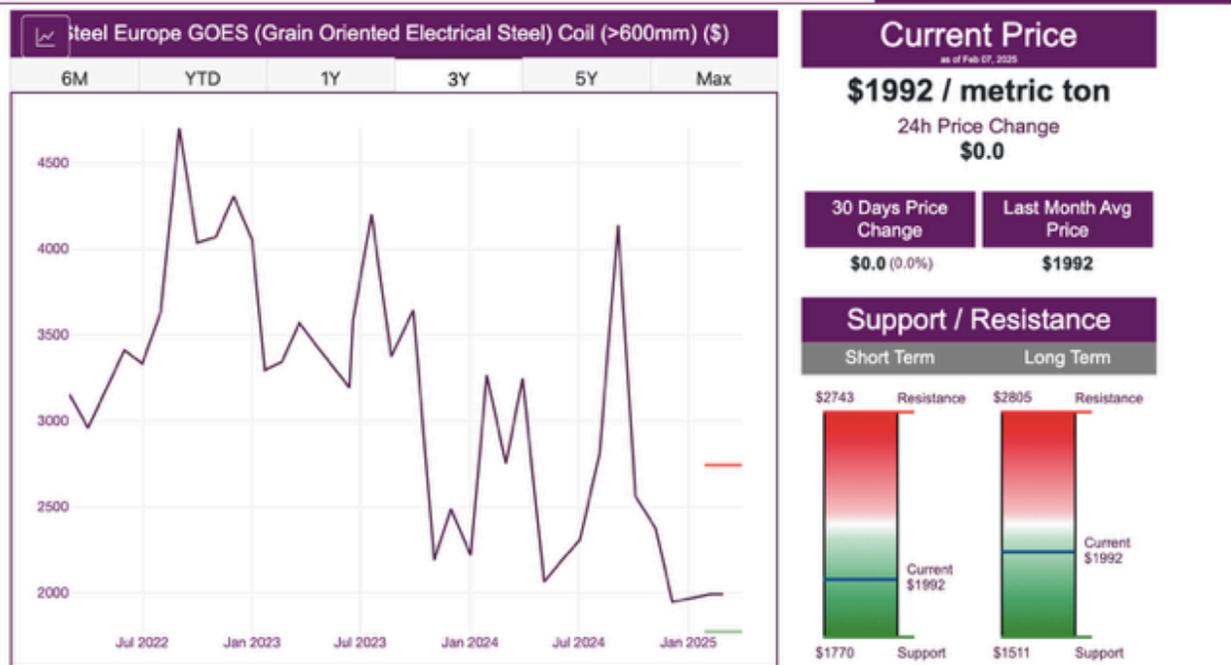
industrial purchasing organizations may buy ahead 0-3 months until prices stabilize or the trend shifts bearish.

## Europe

In Europe, GOES >600 prices found their peaks in September 2022. The markets showed a highly volatile, bearish trend in the following year, likely dragged down by the influence of lower Chinese GOES prices. Since their high, GOES >600 have fallen 58%.

While Chinese prices do not show a meaningful correlation to their global counterparts, the recent increases in Chinese GOES prices, should they continue, could impact European prices due to the European market's reliance on Chinese imports, which accounted for 37% of total EU imports from extra-EU countries in 2023. This underscores the impact of Chinese pricing strategies on European market dynamics.

### Steel

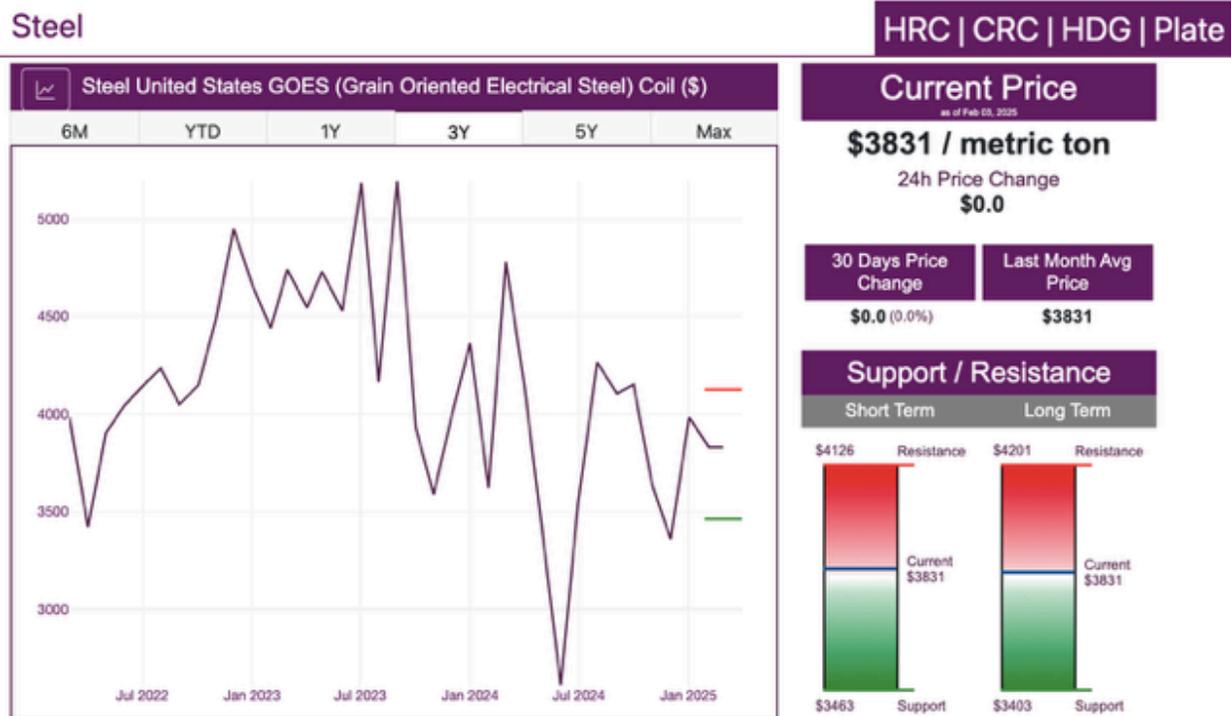


European GOES >600 prices show no evidence of an uptrend, as prices have shown consistent declines since September. Until an uptrend is confirmed, industrial buying organizations may continue to purchase as needed, taking advantage of price dips and using hedging strategies to manage the high level of volatility within this market.

## U.S.

After they found a peak in September 2023, U.S. GOES prices declined by nearly 50% until they found a bottom in July 2024. Despite global price fluctuations, the US market has maintained a relatively stable pricing environment during the second half of 2024, driven by domestic demand for energy-efficient transformers and the modernization of power infrastructure. Like European GOES prices, this market remains subject to high volatility, which could disrupt the current sideways trend.

The US market for GOES has been characterized by a steady growth trajectory, with the market size valued at USD 896.9 million in 2022 and projected to grow at a CAGR of 5.6% through 2030. The ongoing rise of data centers will offset a potential slowdown in this sector.



The U.S. GOES market remains volatile. While prices broke above their short-term range in mid-January, by February, they appear stable. Prices have yet to break above their long-term resistance level nor have they surpassed their last major high in August, which would be necessary to confirm an uptrend. As such, downside risks remain to the current sideways trend. Industrial buying organizations may continue to purchase as needed, taking advantage of price dips to manage volatility.

# Historical Price Analysis

As with many markets, low liquidity and fluctuating market dynamics continue to translate to price volatility. From a fundamental perspective, increased energy demand, driven in part by the proliferation of AI and data centers, will help maintain a price floor across global markets. Chinese prices continue to trend at the bottom of the global GOES market, while U.S. prices remain at the top.

Chinese prices show no meaningful correlation with their Western counterparts. However, U.S. prices show an 85.97% correlation with European GOES >600 prices. As such, those trends appear likely to continue to loosely echo one another.



# Other Factors Impacting Global Prices

Several macroeconomic factors have influenced the GOES market across these regions. Geopolitical tensions and supply chain disruptions have historically played a critical role in shaping market dynamics.

- The increase in lead times for procuring transformers, from around 50 weeks in 2021 to up to 210 weeks for larger units by 2024, has impacted grid modernization efforts in the US.
- The European Commission's anti-dumping measures have aimed to stabilize the market by addressing unfair trade practices.
- The global trade policies have significantly impacted the power generation sector, especially in the context of the GOES market. Recent changes in US trade policies, following a new administration, have led to increased tariffs on certain imports, which in turn have affected the cost structure of power generation equipment. The imposition of tariffs on steel and aluminum, critical components in power transformers, has led to increased production costs for power equipment manufacturers. These cost increases are often passed down the supply chain, ultimately affecting the pricing of electricity for consumers.
- Fiscal policies, particularly those involving economic stimulus packages, have played a crucial role in shaping the power generation landscape. In China, the government has announced a series of fiscal stimulus measures aimed at boosting economic growth, which include investments in infrastructure and energy projects. This includes support for solar and EVs, alongside support for AI development like DeepSeek. These measures are expected to increase demand for electrical steel, including GOES, as new power plants and grid expansions are planned. This increased demand could lead to upward pressure on GOES prices in the region.
- Currency fluctuations have a direct impact on the cost of importing raw materials and finished goods in the power generation sector. The strength of the US dollar, for instance, has made imports more expensive for countries with weaker currencies, such as those in Europe. This has led to increased costs for European power equipment manufacturers who rely on imported components, potentially leading to higher electricity prices for consumers.

## Future Price Forecasts and Market Outlook

Looking ahead, the global GOES market is expected to experience continued volatility, influenced by ongoing geopolitical shifts and advancements in renewable energy technologies. The integration of renewable energy sources and the push for energy efficiency are likely to drive demand for GOES, particularly in regions like the US and Europe, where infrastructure modernization is a priority. However, the market will need to navigate challenges such as fluctuating raw material costs and regulatory and policy changes.

While the GOES market has faced significant price adjustments, particularly influenced by Chinese export trends, the demand for high-performance electrical steel remains robust across China, Europe, and the US. The interplay of macroeconomic factors and regional market dynamics will continue to shape the future of the GOES industry.