

Q2 2022 Electrical Supply Chain Update

Consumers and contractors will continue to pay more for electrical supplies and face product shortages.

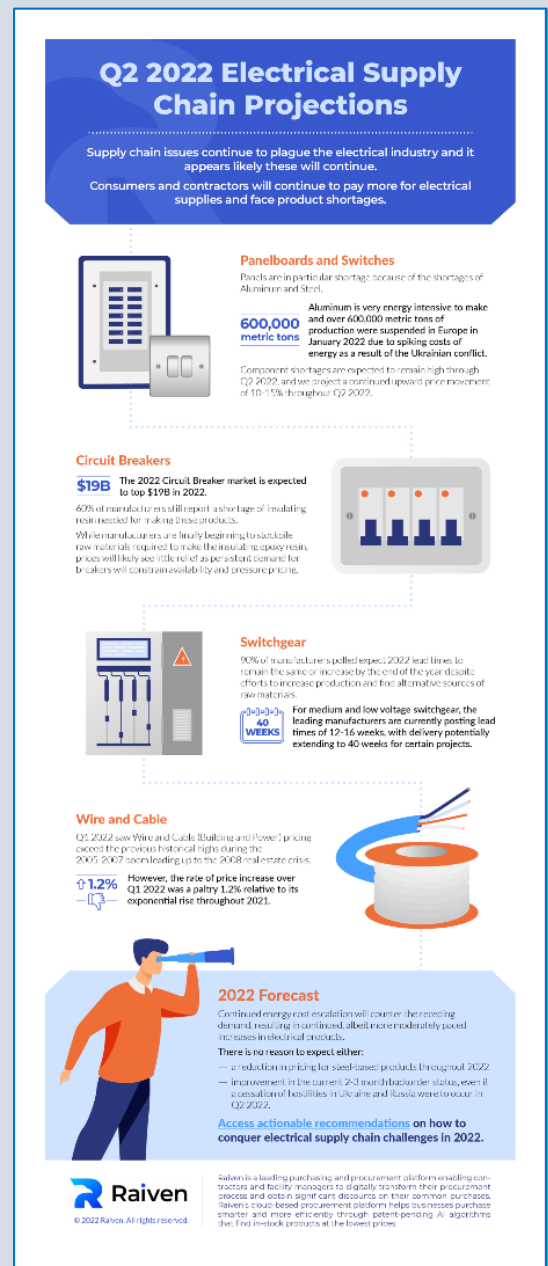
Supply chain issues continue to plague the electrical industry and research shows this likely to continue for the foreseeable future. End buyers of electrical projects should expect escalating costs and project delays due to product shortages.

Raiven analyzed its platform pricing trends and contacted electrical contractors, distributors, and manufacturers to gather the latest intel on the state of the electrical supply chain.

Q2 2022 Expectations

The significant price increases seen over the last 12 months were largely attributable to spikes in demand post-Covid (Q1-Q3 2021) and the subsequent shortage of transportation resources (Q3-Q4 2021), which showed potential signs of abatement until the Ukrainian crisis brought on a surge in energy costs. These events have contributed to the largest electrical materials price increase in the last 30 years. Q2 2022 will see the beginning of ebbing demand from interest rate increases and declining consumer confidence. However, continued energy cost escalation will counter the receding demand, resulting in continued, albeit more moderately paced increases in electrical products.^[1]

Manufacturing energy costs increased 54% in Q1 2022, leading to pronounced increases in those materials using the most energy to make: cement, steel, and concrete. Russia and Ukraine together constituted the world's second largest exporter of steel before the conflict, further compounding both availability and price increases for products made from steel. British Steel announced a 25% price increase in all its products effective March 2022 due to higher energy prices and limitations on raw materials. There is no reason to expect either (a) a reduction in pricing for steel-based products throughout 2022 or (b) improvement in the current 2–3-month backorder status, even if a cessation of hostilities in Ukraine and Russia were to occur in Q2 2022. Products most effected will include metal conduit, conduit fittings, panels, and boxes.





Panelboards and Switches

Q1 2022 saw an unprecedented 22% spike^[2] in prices relative to Q4 2021. Going back to 1990, the previous high for a quarter-on-quarter increase was only 4.8% in 2005.^[3] Component shortages are expected to remain high through Q2, and we project a continued upward price movement of 10-15% throughout Q2.

Panels are in particular shortage because of the shortages of aluminum and steel. Aluminum is very energy intensive to make and over 600,000 metric tons of production were suspended in Europe in January 2022 due to spiking costs of energy as a result of the Ukrainian conflict. Further constraining aluminum supply is the low voltage replacement of power lines with the less expensive aluminum wiring. Together, this is leaving manufacturers below production levels and at operating costs that make product hard to find and expensive to make.

Recommendation: Stock up and factor in 10-15% above current pricing into 30-day project bids.

Circuit Breakers



The 2022 circuit breaker market is expected to top \$19B in 2022.^[4] Q1 2022 saw an unprecedented 25% spike^[5] in prices relative to Q4 2021. One contributing factor is 60% of manufacturers still report a shortage of insulating resin needed for making these products. Also, a significant tax on imported resin to the United States was reinstated in January 2022, compounding price increases due to shortage with higher taxes. While manufacturers are finally beginning to stockpile raw materials required to make the insulating epoxy resin, prices will likely see little relief as persistent demand for breakers will constrain availability and pressure pricing.

Recommendation: While a slight increase in product availability is likely to return toward the end of Q2, the price for breakers is likely to hold or slightly increase in Q2 with potential relief in Q3/Q4 2022.



Switchgear

Large switchgear projects are already backlogged for Q1/Q2 2023 delivery with transformers having a 54-week lead time vs the historic average of 14-16 weeks.

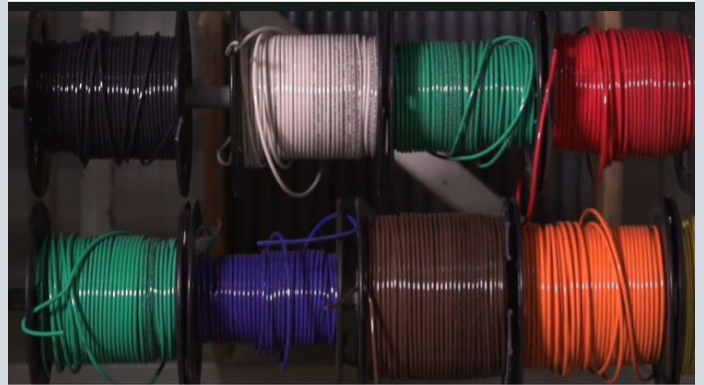
90% of manufacturers polled expect 2022 lead times to remain the same or increase by the end of the year despite efforts to increase production and find alternative sources of raw materials. The resulting impact will be continued increasing pricing pressure regardless of any potential economic downturn, given the extensive backlogs already in place through 2023.

For medium and low voltage switchgear, the leading manufacturers are currently posting lead times of 12-16 weeks, with delivery potentially extending to 40 weeks for certain projects.

Recommendation: 2nd and 3rd tier manufacturers are surfacing, but safety and reliability concerns are leading most to stay with established manufacturers like Schneider Electric, Eaton, ABB, Siemens, and others, despite the longer lead times.

Wire and Cable

Q1 2022 saw Wire and Cable (Building and Power) pricing exceed the previous historical highs during the 2005-2007 boom leading up to the 2008 real estate crisis. However, the rate of price increase over the quarter was a paltry 1.2% relative to its exponential rise throughout 2021. Copper pricing volatility is primarily being driven by the Ukrainian conflict as well as unpredictability over China production levels due to Covid and certain production reductions as part of an environmental initiative.



Recommendation: There is a 60% chance we see a 2-5% increase in pricing over Q2 2022 with limited availability and typical lead times ranging from 3-12 weeks. There is a 20% chance we see a reduction based on slowing demand and a 20% chance we see pricing hold steady over the several months.

Brett Knox, CEO of Raiven, describes how technology advancements can help contractors save time and money in these precarious times, “Technology is now available that searches in real-time across distributors to find product availability at the lowest prices. Raiven launched its sophisticated algorithm in a browser extension during the pandemic to help contractors and facility managers find COVID essentials. It’s now available for a wide variety of electrical, HVAC and building maintenance products.” Brett continues, “We’ve never seen pricing volatility like we saw in Q1 2022 and unfortunately, it appears likely it will continue. Raiven’s algorithms continue to identify pricing anomalies and product availability for high-demand products in short supply.”

ABOUT RAIVEN

Raiven is a leading purchasing and supply chain management software platform enabling contractors and facility managers to digitally transform their procurement process and obtain significant discounts on their common purchases. [Raiven’s cloud-based procurement platform](#) helps businesses purchase smarter and more efficiently through patent-pending AI algorithms that find in-stock products at the lowest prices.

[1] [Construction Materials Shortage: Increased Energy Costs Driving Up Materials Prices by Jack Woodfield April 25, 2022 as published in Homebuilding & Renovation](#)

[2] [Electrical Marketing EPI Report](#)

[3] Ibid

[4] [Marketwise.com April 2022 Report](#)

[5] [Electrical Marketing EPI Report](#)