

# Russia's War Against Ukraine Continues to Impact Global Supply Chains



Here are some good starting points for coping with supply chain management complexities and the uncertain environment that we're all operating in.

Global supply chains have been rocked by numerous external factors over the last 2+ years, and Russia's continued war against Ukraine is taking its toll on these vital, intertwined networks. At the recent Modex 2022 trade show in Atlanta in March, one representative from a large industrial manufacturer pointed to neon as the next silicon chip component to be thrust into the "scarcity" spotlight.

That prediction was right on target (and obviously well-researched in advance of the show). A gas that's crucial for making chips, neon is produced in Ukraine. And according to *Reuters*, Ukraine's two leading suppliers of neon—which produce about half the world's supply of the key ingredient for making chips—halted their operations in Moscow in March.

"Some 45% to 54% of the world's semiconductor-grade neon, critical for the lasers used to make chips, comes from two Ukrainian companies, Ingas and Cryoin," *Reuters* reports. "The stoppage casts a cloud over the worldwide output of chips, already in short supply after the coronavirus pandemic drove up demand for cellphones, laptops and later cars, forcing some firms to scale back production."

This is just one of many ways that the ongoing Russia-Ukraine crisis is impacting global supply chains, and those negative impacts aren't expected to wane anytime soon. "As Russia's war against Ukraine escalates and sanctions by the U.S. and other countries intensify, so does their impact on supply chains around the world," *Forbes* reports. In fact, recent data shows that nearly 300,000 U.S. and European firms have suppliers that are based in Russia and/or Ukraine.

The publication goes on to say that supply chains are affecting people and industries in different ways. For example, food supply chains are snarled because Russia and Ukraine can't deliver fertilizer, wheat and sunflower oil, while producers of aluminum, steel and platinum face similar challenges. "The largest broad effect comes from the rise in the price of oil," *Forbes* adds, "which is more contributing to inflationary pressures than it is affecting the actual delivery of goods."

## The Change May be Permanent

In "[Russia's war with Ukraine could permanently reshape the global supply chain](#)," Tinglong Dai of the Carey Business School at Johns Hopkins University, says that supply chains already in disarray due to the global pandemic have been further strained by the war and the resulting sanctions against Russia.

Beyond the immediate impacts, he says the invasion could "drastically reshape global supply chains" in a way the pandemic never did. With Russia providing almost 40% of Europe's natural gas supply—and 65% of Germany's—and being the third-largest oil exporter worldwide, any sudden impacts will produce a bullwhip effect throughout the energy sector.

"After the Biden administration signaled it would stop importing Russian oil, the price of crude topped \$130 per barrel for the first time in 13 years," Dai writes, "and consumers in some parts of the U.S. have seen average gasoline prices rise above \$5 per gallon." Russia and Ukraine also account for nearly one-third of all global wheat exports, which means the ongoing conflict could potentially "disrupt the still-recovering

global food supply chain and endanger the livelihoods of millions of people,” Dai adds.

With Russia’s war against Ukraine ongoing, Dai says there’s no way of knowing for certain just how long the sanctions will remain in place or whether companies that have chosen to leave Russia will return. “But I believe one thing is certain,” he concludes, “Global supply chains, like the rest of the world, will never be the same again.”

### **Steps to Take Now**

Organizations are using different strategies and tactics to deal with the current disruptions and prepare for any that may be coming around the next corner. In “[War in Ukraine: Responding to supply chain disruption](#),” Baine & Company’s Joe Terino and Peter Guarraia say now would be a good time to assess potential risk across the value chain (with a focus on single points of failure); establish signposts that predict changes to your supply chain risk profile (and then monitoring them); and identify the main indicators of potential risks (e.g., geopolitical trade tensions, industry capacity-to-demand ratios, supplier health, and commodity capacity and geographic concentration).

“Develop capabilities to provide early warning notifications and set up processes to simulate risk scenarios and prioritize mitigation,” they write. “Create a digital roadmap using advanced analytics and leading technology for greater precision and accuracy.” For procurement professionals, good strategies include enhancing traceability by mapping your supply base from the top tier downwards.

“Initiate a plan to achieve visibility at each tier of the value chain—from raw materials to finished goods to recycling,” they write, “to improve operational, sustainability, regulatory and resilience outcomes.”