



Bottom Line Up Front

- The Iran war is causing broader industrial supply disruption by directly damaging key Gulf production assets, including helium output in Qatar and aluminum facilities in the United Arab Emirates (UAE) and Bahrain, while also disrupting Strait of Hormuz shipping routes that support petrochemical and resin flows. As a result, shortages are beginning to affect U.S.-relevant semiconductor, healthcare, packaging, and manufacturing supply chains.
- Helium is the most immediate operational pinch point, with shortages likely to affect semiconductor fabrication and create added strain for medical equipment users that depend on helium-intensive systems, such as magnetic resonance imaging (MRI) scanners, and cannot easily substitute supply.
- Aluminum is already facing upward pricing pressure, increasing near-term costs for packaging, automotive, aerospace, and electronics manufacturers that rely on stable metal inputs.
- Plastics should also be treated as a meaningful spillover risk, with resin shortages already beginning to disrupt packaging producers and other manufacturers that depend on steady polymer inputs, adding pressure to sourcing, pricing, and production schedules.

Risks and Vulnerabilities Summary

- **Manufacturing continuity risk:** Semiconductor and microchip fabrication, aerospace, automotive, and medical device producers rely on steady helium and aluminum inputs for specialized production steps, testing, and component assembly, so shortages can slow output or force temporary shutdowns.
- **Packaging and consumer goods exposure:** Food packaging, household products, and other consumer goods manufacturers depend on resins and aluminum for containers, films, and finished packaging, making them vulnerable to production bottlenecks and delivery delays when supplies tighten.
- **Healthcare and life sciences strain:** Hospitals, imaging providers, and medical equipment suppliers use helium-intensive systems and related industrial materials, so tighter supply can affect maintenance schedules, service availability, and procurement timelines.
- **Supply chain and logistics disruption:** Logistics providers, distributors, and import-dependent manufacturers are exposed because these materials move through long, interlinked supply chains, and shortages can lead to rerouting, longer lead times, and higher transport costs.
- **Cost pressure across downstream sectors:** Retail, food service, electronics, and microchip-dependent industries are likely to absorb higher input costs as shortages work their way through the supply chain, putting pressure on margins and pricing, within a broader environment of elevated oil and gas prices, tighter fuel availability, and wider petrochemical supply disruptions.

Outlook and Assessment

- Immediate to short term, helium is likely to remain the first operational bottleneck, with semiconductor fabrication and medical imaging users facing the earliest allocation pressure and production delays.
 - **Confidence: High.** Because helium is hard to substitute quickly, the next likely effect is allocation pressure and schedule changes for the most dependent users, especially in chip production and imaging.
- Short term, aluminum is likely to stay expensive, keeping pressure on packaging, automotive, aerospace, and electronics manufacturers through higher input costs and thinner margins.
 - **Confidence: Moderate to High.** The key question for aluminum is whether producers can restore output before buyers work through existing inventories, so the next likely effect is continued pricing pressure and tighter margin management.
- Near to medium term, plastics and resin markets are likely to become a more visible secondary constraint, especially for packaging producers and consumer-goods manufacturers that depend on steady polymer flows.
 - **Confidence: Moderate.** Plastics are more likely to become a slower-building downstream issue, with the next impact showing up in packaging and consumer-goods procurement rather than as an immediate across-the-board shortage.
- Medium to longer term, the more important consequence is likely to be a sustained materials-and-logistics squeeze rather than a one-time price spike, with higher oil and gas prices reinforcing the problem across supply chains.
 - **Confidence: High.** Energy disruption is already feeding inflationary pressure and broader supply chain strain, which makes recurring cost shocks and rerouting more likely than a quick normalization.

- **Potential indicators of escalation:** further price spikes across metals, energy, or petrochemicals; extended shipping delays or rerouting through Gulf corridors; and additional damage to regional energy or industrial infrastructure.
- **Potential indicators of de-escalation:** production restarts or increased output; easing spot prices and reduced allocation pressure; improved shipping times through key routes; and fewer reports of delivery delays or downstream production disruptions.
- **Business implications:** Business leaders should plan for a period in which material constraints begin to shape operating decisions, not just procurement costs. Organizations exposed to helium, aluminum, or resin-dependent inputs are likely to face slower production, tighter inventory management, and more frequent delivery slippage, making supplier diversification, buffer stock, and flexible sourcing strategies increasingly important in the weeks ahead.

Global Insights Confidence Levels

High

This judgment is based on strong, credible, and typically corroborated reporting, supported by a clear analytic basis and relevant precedent or observable indicators. Some uncertainty may remain, but it is unlikely to change the core assessment.

Moderate

This judgment is based on a reasonable body of reporting and sound analytic reasoning, but important gaps, conflicting information, or a fluid environment leave meaningful uncertainty. New information could materially refine or alter the assessment.

Low

This judgment is based on limited, fragmentary, weakly corroborated, or highly uncertain reporting, or on a scenario with several unresolved variables. The assessment is plausible, but it should be treated with caution because new information could significantly change it.