

Opening Statement of Chairman Sheldon Whitehouse
Senate Committee on the Budget
“Bottlenecks and Backlogs: How Climate Change Threatens Supply Chains”
October 25, 2023

Chairman Whitehouse’s remarks, as prepared for delivery:

Ranking Member Grassley and members of the Committee, in ten hearings so far this year, we’ve laid out serious risks climate change poses to the federal budget, to American families and businesses, and to the economy at large. Today’s hearing will examine yet another threat posed by climate change: disruption of global supply chains, causing economic disruptions, product shortages, and higher prices for businesses and consumers—climate inflation.

Our global economy relies on a network of interdependent supply chains. Its end products may be a simple soybean, or may—like this cellphone—comprise thousands of parts sourced from around the globe. Think of the interconnected systems that enable the production and distribution of a cellphone: the raw mineral extraction, the manufacturing of thousands of individual components, the assembly of those components into a single device, and the distribution of those devices worldwide.

Supply chains support almost \$20 trillion each year in global trade and are foundational to our everyday lives. Yet almost no one thought about them until the COVID-19 pandemic laid bare the fragilities in our system. Almost overnight, we saw how shocks can disrupt supply chains, triggering cascading effects both upstream and down.

Just as the pandemic wreaked havoc throughout our supply chains, climate change is poised to do the same—only much more frequently. In fact, it has already begun.

Already, we are seeing climate disruptions in the procurement of raw materials.

At our hearing on climate change and the agricultural sector, there was bipartisan agreement that extreme weather is damaging crop yields and increasing food prices. Last year, Hurricane Ian devastated Florida’s orange trees, driving up the cost of orange juice. Climate-fueled droughts and heatwaves made growing chicken feed more expensive, which contributed to higher egg prices. Drought and wildfires in Spain have cut olive oil production in half and catapulted prices to record highs. Hotter and drier climates are stunting cacao harvests and making cocoa—an essential ingredient in chocolate—more expensive than it has been in decades.

The added costs of climate change now have a seat at kitchen tables around the world.

Climate upheaval is also affecting supply of the critical minerals used in electronics. Extreme weather events threaten mining infrastructure, and it’s estimated that 30 to 50 percent of the world’s copper, gold, iron ore, and zinc are produced in areas that are now facing water shortages. Raw material scarcity, decreases in material quality, and higher raw material prices—all translate into harder-to-source components and higher prices for consumers.

We're seeing similar climate-caused disruptions in manufacturing.

In China last August, a record-breaking drought reduced hydropower production so much that factories lost power, crippling production of automobiles and electronics. In Puerto Rico in 2017, Hurricane Maria damaged or destroyed dozens of medical device factories.

Outright destruction of manufacturing facilities is an immediate consequence of extreme weather, but heat stress or lack of water can also pause production. Most manufacturing facilities weren't built to endure the climate extremes and climate shifts we see today, and once-in-a-blue-moon disasters are now chronic.

Transportation is experiencing similar climate-triggered disruptions.

The Panama Canal is an essential link in our global supply chains. In 2022, more than 14,000 ships—\$270 billion in cargo—passed through. But this year brought the worst drought in a century, and in August, water levels were too low for ships to pass. As a result, August wait times were four times what they were in June, with boats waiting as long as 21 days to pass. Things are still not back to normal. The drought persists, and daily transit limits are expected through the end of the year.

The Mississippi River, which transports 60 percent of U.S. grain exports, is experiencing similar problems.

For the last two years, extreme heat and drought have brought water levels dangerously low, limiting barge shipments and causing shipping costs to soar. Today, the cargo rate from St. Louis southward is almost 80 percent higher than the three-year average.

CDP, one of the premier organizations quantifying the effects of climate change, has analyzed data from over 8,000 suppliers. They estimate that environmental risks in supply chains will cost companies \$120 billion by 2026—costs companies will pass on to consumers in higher prices.

As sea levels and temperatures rise and extreme weather becomes more frequent and more intense, the effects of climate change on supply chains will only get worse. Recently, the White House Council of Economic Advisors warned that climate change will make supply chain disruptions more common; that “as networks become more connected, and climate change worsens, the frequency and size of supply-chain-related disasters” will grow.

More bottlenecks and backlogs. More delivery delays and empty shelves. Higher prices. Climate-driven disruption causing climate-driven inflation.

Some of the economic threats we've warned of are crashes, that can hit suddenly and systemically—across the whole economy. Supply chain disruptions are more likely to cause local shocks, but nationally will erode buying power as prices rise. If you care about inflation, you'd better care about climate disruption.