

## Understanding Solar Tariffs

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The solar industry is beginning to experience whiplash due to a recent flurry of regulatory changes, [according to the law firm Sheppard Mullin](#), rendering solar tariffs among the most intricate in the history of U.S. imports. Homeowners are wondering about the extent of the tariffs' cost impact. Surprisingly, the cost may be minimal.

### Tariffs Have Been Volatile

Tariffs and the resultant price of solar panels have indeed fluctuated tremendously. [According to PV Magazine](#), the first US trade policy to affect solar panels was the original Antidumping and Countervailing Duties (AD/CVD) case of 2012 that applied to all solar cells originating in China.

Tariffs were imposed by former President Trump in 2018 under the 1974 trade act, [Reuters explained](#), to protect the small US solar manufacturing sector against competition from low-priced imports made mainly in Asia.

In August 2023, [NPR reported](#) that Department of Commerce had found that solar panel manufacturers in Vietnam, Malaysia, Thailand, and Cambodia, which are responsible for nearly 75 percent of solar modules imported to the United States, were evading US trade rules by using Chinese-sourced materials without paying applicable duties. Morgan Lewis said the new antidumping and countervailing duty on solar panels from the four Southeast Asian countries, resulting from the finding may create further instability.

In June 2024, [law firm Morgan Lewis observed](#) that the Biden administration continued to navigate an intricate course between fostering domestic solar manufacturing and countering perceived unfair trade practices by China. The administration extended and increased tariffs established in 2018, [PV Magazine noted](#), which cover both solar cells and batteries. The tariff on solar panels rose from 25 percent to 50 percent, and batteries increased up to 25 percent.

In August, though, Reuters reported that the Biden administration more than doubled the volume of solar cells allowed to be imported tariff-free, to help domestic panel producers that rely on components made overseas. The quota on solar cells would increase from 5 gigawatts to 12.5 gigawatts.

If those tariffs sound complex, they are. They have changed regularly, and figuring out which tariffs apply to which panels can require deep analysis.

### The Impact on Homeowners May Be Less Than Many Expect

Consumers and companies that want to install solar energy solutions understandably have concerns about prices rising. However, the actual impact may be limited.

[Data from the National Renewable Energy Labs \(NREL\) shows](#) that the cost of a solar energy system has dropped dramatically over the past dozen year, and prices are continuing to decline. "We're seeing prices come down pretty much across the board," Spencer Fields of EnergySage [told Inside Climate News](#), based on hundreds of thousands of bid prices on his site's marketplace. A reason for the price decrease, Fields explained, is that the supply of installers and equipment for rooftop solar is outpacing demand from customers who are ready to buy, and competition among installers is pushing prices lower.

For more on the NREL's findings, see their [Solar Installed System Cost Analysis](#).

Digging deeper, [EnergySage explained](#) that solar panels represent a small part of the total solar energy system costs. Solar equipment is about 46 percent of the total system price in a typical solar system, with panels being about 12 percent of the total cost while inverters racking and wiring total about 22 percent. Installer costs such as labor and marketing are about 36 percent, while permitting is about 8 percent. Installers make a profit of just over 10 percent.

While estimates of total solar system costs vary, [Solar Reviews said](#) data from NREL showed that the average 6 kilowatt (kW) solar installation in 2010 cost about \$52,200 before incentives, while the cost today is about \$18,000 and more than half of installers say the price they paid for solar panels went down in 2023. [Forbes said](#) the average cost in the US ranges from about \$20,000 to nearly \$30,000.

A 25 percent increase in tariffs may then only raise the cost of an installation by less than 5%. While not negligible, the impact is relatively small.

### **Over time, too, the impact of tariffs may decline**

[Government Market News said](#) the United States is experiencing a significant boost in domestic solar manufacturing, driven by recent federal policies designed to incentivize clean energy production resulting in announcements for at least 32 new factories for a total of more than \$18 billion. [According to Installer Green Ridge Solar](#), as domestic production ramps up, prices may stabilize and lead to more affordable, durable and efficient domestic solar panel options, benefiting homeowners in the long run.

### **Price Impacts of Tariffs may be Moderate**

While the volatility in solar panel tariffs and batteries as well as the resultant pricing are complex, the real impact on homeowners in particular may be nominal. Given the long-term downward trend in costs of installing a solar energy system, the key question may actually be how soon to install it.