

[Trump Administration's Imposition of Tariffs on Imported Solar Cells and Modules](#)

Establishes import tariffs on solar cells and modules from 2018 to 2022 in order to protect US solar manufacturers.

Updated last **March 23, 2018**



WHAT IT DOES

On January 22, 2018, President Donald Trump signed into a law [new tariffs](#) that will raise barriers to foreign competition in the United States for manufactured solar cells and modules. This move was recommended by the [United States International Trade Commission \(USITC\)](#) based on their research into market conditions for solar panel manufacturing. They found that cheaper pricing from competitor countries like China and South Korea had reduced the number and viability of US manufacturers of solar cells of modules. The purpose of the protective tariffs is to help revive the US solar panel production industry.

The tariffs will charge 30% of the product's value for solar panels to enter US markets from foreign producers. This percentage will drop annually by 5% in each of the subsequent three years, with the tariffs expiring in 2022. The first 2.5 gigawatts of solar cells or modules will be excluded from the tariffs.

While the tariffs may protect the U.S. solar panel production market, [most](#) jobs in the US solar industry are in supporting industries like installation rather than in panel manufacturing. This means more US jobs could be at risk from this new policy than would be protected. The Solar Energy Industries Association (SEIA), a solar trade group, estimates around [23,000 jobs](#) being lost under the new tariffs. In terms of capacity, industry experts estimate that the tariffs will decrease the projected installation of solar power systems in 2018 from [11 GW to 9 GW](#), and eliminate [7.6 GW](#) of installed capacity through 2022. For context, the size of the overall US solar market through 2017 was [53.3 GW](#) of total installed capacity.

BACKGROUND

On April 26, 2017, the solar manufacturing company Suniva filed a petition to USITC alleging that increased foreign imports in the solar industry had damaged domestic solar panel manufacturing markets. SolarWorld, another solar manufacturer, joined the petition on May 25, 2017. These actions initiated a USITC investigation under Section 201 of the [Trade Act of 1974](#). They found that, between 2012 and 2017, twenty-five companies based in the US [declared bankruptcy](#) and exited the market. Meanwhile, imports of solar cells and modules had [increased 500% and prices had fallen around 60%](#). The ITC connected these trends to a Department of Commerce investigation that reported that China had been providing [subsidies](#) to their solar manufacturers to work around existing US sanctions.

The [Trade Act of 1974](#) gives the President the power to “determine that any existing duties or other import restrictions of any foreign country or the United States are unduly burdening and restricting... [and]...reduce, or eliminate such barriers to (and other distortions of) [international trade](#).” This gives the President the right to impose protective tariffs following an ITC investigation based on a petition invoking the Trade Act. Suniva's and SolarWorld's case, specifically, invokes [Section 201](#). This section is triggered when an ITC investigation comes to the conclusion that “an article is being imported into the United States in such increased quantities as to be a substantial cause of serious injury, or the threat thereof, to the domestic industry.”

RELEVANT SCIENCE

Science Module: Solar Power

Tariffs: A tariff is a tax or duty imposed by a nation on goods and services in foreign trade. The purpose of a tariff is to increase the price of a good or service in order to support domestic economic goals. Most commonly, tariffs are applied to imports of a good or service, which may have the effect of raising revenue from imports or increasing the competitiveness of domestic version of that good or service. In rarer cases, tariffs may be set on exports in order to ensure domestic supply of some good or service by keeping it within a nation's borders. The use of tariffs goes against the general idea of [free trade](#) and may indicate [protectionist](#) tendencies on the part of a nation's government.

Solar cells, modules, and arrays: A photovoltaic solar cell is a semiconductor-based device that creates electricity by absorbing photons from sunlight. A single typical solar cell will only create a voltage of about [0.33 volts](#), so several cells are connected together in order to supply more electricity similar to how several batteries may be needed to power a flashlight. When multiple cells are connected together and then encased in a protective covering, this is referred to as a module or panel. The terms are equivalent. When many panels are connected together and their combined output is connected to a load, such as a house or the electric grid, the entire system is called an array.

CONTROVERSIES & IMPLICATIONS

The primary sources of uncertainty surrounding this decision are whether the tariffs will have any positive impact on US solar manufacturing, and whether that positive impact will outweigh the potential negative effects on other parts of the solar industry. The tariffs could even the solar playing field from the perspective of manufacturing, but risk US jobs in the solar installation and management industry while negatively impacting global trade agreements.

The original recommendation from the USITC was for a tariff level of [35%](#). However, the Trump administration settled on 30%. This means that the Administration is imposing about a [10 cent/watt](#) import tax on solar panels, as calculated by [Bloomberg New Energy Finance](#). The original Suniva petition desired a 32 cent/watt tariff on solar panel imports with a 74 cent/watt floor on the pricing. Clearview Energy Partners has [estimated](#) a 6% rise in pricing for commercial solar, 4% rise in residential rooftop installations, and a 10% rise in utility scale installations.

Some US solar companies are concerned that the new tariffs will compromise the industry as a whole. The US solar industry has benefitted from the manufacturing price drop and most industry workers are in [support roles](#) in solar installation and management. Chinese manufacturers had been producing modules that cost less than [one-third](#) of the price of a solar installation done in the United States. These low panel costs allowed the American solar industry to reduce prices, leading to market viability against other energy sources like coal and nuclear. Ultimately, there is concern from within the industry that [rising prices](#) for installation and production will cause solar to lose market share to fossil fuels and other sources of energy in the near future.

While the tariffs are designed to restrict Chinese imports and protect American jobs, [an industry](#) group expects a loss of 23,000 American jobs – mainly from the residential installation industry – out of the estimated 260,000 jobs in the overall US solar industry. [Some commentators](#) have pointed out that many of these lost jobs may come from Trump-supporting states like North Carolina, South Carolina, Georgia, and Florida. Meanwhile, the Trump Administration is claiming that American jobs and companies will be improved as a result of the tariffs. The White House cited companies like [Tesla](#), which opened a new factory in Buffalo, NY that created 500 jobs in solar manufacturing. Tesla, however, [opposed](#) the new tariffs and some industry commentators are [less optimistic](#) about the tariffs leading to a revival in US solar manufacturing.

These tariffs have alienated [China](#) and other solar manufacturing nations, who have appealed to the World Trade Organization for compensation from the US over the tariffs being alleged trade violations. The US has so far [rebuffed](#) the European Union's request for an alternative to the tariffs.

ENDORSEMENTS & OPPOSITION

Endorsements

Steel Manufacturers Association, in a [formal letter](#) to USITC: “As the backbone of the solar industry in America, domestic cell and module production must not be lost to foreign imports. These core competencies must be allowed to grow and thrive. Strengthening U.S. solar manufacturing will serve to strengthen demand for solar energy overall- as domestic manufacturers grow, healthy and fair competition and technological advancements will see overall costs decline and demand for solar products increase.”

Opposition

Solar Energy Industries Association, in a [formal letter](#) to USITC: “SEIA strongly believes that to the extent there is any excess manufacturing capacity worldwide, erection of trade walls through tariffs and minimum prices does not stimulate domestic solar cell and module manufacturing. In fact, it would cause wide scale economic hardships on thousands of American workers and their families.”

Katie Tubb, policy analyst at the Heritage Foundation in an [op-ed](#): “Government intervention akin to what Suniva and SolarWorld have requested distorts the incentives that drive companies to find new technological solutions, reduce costs, adapt to changing markets, and develop successful business models. Such intervention would also punish competitive American solar companies in order to keep two failing ones afloat. Refusing new tariffs on solar imports allows the best parts of the solar industry to rise to the top.”

STATUS

These tariffs came into effect on February 7, 2018 and will expire in 2022.

RELATED POLICIES

The same document signed by President Trump also puts tariffs on the washing machine industry based on a petition from [Whirlpool](#), which claimed similar damages to those claimed by the solar manufacturing companies. Whirlpool’s competition for market share in the US is mainly LG and Samsung, both South Korean companies.

POLICY HISTORY

- May 17, 2017: Suniva and SolarWorld file a petition with the USITC to initiate an investigation on whether there was “substantial injury” to the domestic industry
- September 22, 2017: The USITC votes 4-0 in favor of Suniva and SolarWorld after finding “serious injury” to them
- November 13, 2017: After consultation with the interagency Trade Policy Staff Committee, the USITC [recommends](#) that the President implement tariffs
- January 22, 2018: President Trump approves the tariffs over the next four years

PRIMARY AUTHOR

Alfre Wimberley

EDITOR(S)

Dan Copple; Jack Zhou, Ph.D.

ENERGY SUBCATEGORY

[Source](#)

RECOMMENDED CITATION

Duke SciPol. "Trump Administration's Imposition of Tariffs on Imported Solar Cells and Modules" available at <http://scipol.duke.edu/content/trump-administrations-imposition-tariffs-imported-solar-cells-and-modules> (03/23/2018).

LICENSE



This work is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/). Please distribute widely but give credit to Duke SciPol, linking back to this page if possible.