

Remedy Presentation of the U.S. Solar Industry

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Crystalline Silicon Photovoltaic Cells (Whether Or Not
Partially or Fully Assembled Into Other Products)

USITC Inv. No. TA-201-75

October 3, 2017

Introduction

- The Commission's Injury Finding
- Legal Standards for Remedy
- Petitioners' Remedy Proposals
- Benefits to the U.S. Industry
- Important Issues: Hoarding, Circumvention
- Need for Immediate Relief
- Conclusion

Goals of Proposed Remedies

- Restore U.S. solar cell and module manufacturing
- Scale-up production to secure long-term manufacturing competitiveness
- Ensure continued solar demand and deployment, and jobs
- Increase solar innovation and R&D
- Bring back rationality to the market

The Commission's Injury Finding

- Increased quantities of CSPV imports were a substantial cause of serious injury to the U.S. industry
- NAFTA: Mexico included; Canada excluded
- FTA: Korea included; Singapore (and others) excluded

Legal Standard for Remedy: The Commission

- The Commission must:

“recommend the action that would address the serious injury, or threat thereof, to the domestic industry and be most effective in facilitating the efforts of the domestic industry to make a positive adjustment to import competition” (19 U.S.C. § 2252(e)(1))

Forms of Remedy: The Commission

- Under 19 U.S.C. § 2252(e)(2), the Commission may recommend:
 - Tariffs
 - Tariff-rate quotas
 - Quantitative restrictions (quotas)
 - Appropriate adjustment measures
 - Any combination of the above measures
 - Initiation of international negotiations to address the underlying cause of the increase in imports
 - Any other action authorized under law that is likely to facilitate positive adjustment to import competition

Legal Standard for Remedy: The President

- The President shall:

“take all appropriate and feasible actions within his power which the President determines will facilitate efforts by the domestic industry to make a positive adjustment to import competition and provide greater economic and social benefits than costs” (19 U.S.C. § 2253(a)(1)(A))

Forms of Remedy: The President

- Under 19 U.S.C. § 2253(a)(3), the President may impose/take the following actions:
 - Tariffs
 - Tariff-rate quotas
 - Quantitative restrictions (quotas)
 - Appropriate adjustment measures
 - Negotiations to limit exports from foreign countries
 - Import licenses
 - Initiate international negotiations to address the underlying cause of the increase in imports
 - Submit legislative proposals to facilitate positive adjustment to import competition
 - Any other action authorized under law
 - Any combination of the above actions

Limitations on Remedy: Tariffs

- The rate of duty cannot be “more than 50 percent ad valorem above the rate (if any) existing at the time the action is taken.” (19 U.S.C. § 2253(e)(3))
- “The term ‘ad valorem’ includes ad valorem equivalent.” (19 U.S.C. § 2481(3))
- “The ad valorem equivalent shall be determined by the President on the basis of the value of imports of the article concerned during **the most recent representative period.**” (19 U.S.C. § 2481(4))

Limitations on Remedy: Quotas

- A quota “shall permit the importation of a quantity or value of the article which is not less than the average quantity or value of such article entered into the United States **in the most recent 3 years that are representative of imports of such article** and for which data are available, unless the President finds that the importation of a different quantity or value is clearly justified in order to prevent or remedy the serious injury.” (19 U.S.C. § 2253(e)(4))

Petitioners' Remedy Proposal: Tariffs

Year	Cells	Modules
Year 1	\$0.25/watt	\$0.32/watt
Year 2	\$0.245/watt	\$0.31/watt
Year 3	\$0.24/watt	\$0.30/watt
Year 4	\$0.235/watt	\$0.29/watt

- Cent-per-watt basis (rather than *ad valorem*) to minimize tariff absorption
- No distinction based on type (monocrystalline vs. multicrystalline)
- No distinction based on size (60-cell vs. 72-cell v. other formats)

SolarWorld's Remedy Proposal: Tariffs + Quotas

- In addition to tariffs, SolarWorld proposes quotas on cells and modules:

Year	Cells	Modules
Year 1	0.22 GW	5.70 GW
Year 2	0.27 GW	8.50 GW
Year 3	0.32 GW	8.75 GW
Year 4	0.37 GW	9.00 GW

- Quarterly reviews and adjustments
- No more than 60% allowed to enter in any six-month period
- Effective monitoring system (such as licensing system)

Suniva's Remedy Proposal: Tariffs + MIP

- In addition to tariffs, Suniva proposes a minimum import price on modules:

Year	MIP on Modules
Year 1	\$0.74
Year 2	\$0.70
Year 3	\$0.66
Year 4	\$0.64

- Petitioners agree that an effective remedy must include tariffs and either a quota or minimum import price

Petitioners' Remedy Proposal: Additional Elements

- Promotion programs for U.S. solar innovation and leadership
- Presidential Executive Order requiring all U.S. government agencies to use U.S.-origin cells and panels for all U.S. government projects
- Revisions/Amendments to prior tax credit programs and the Investment Tax Credit
- International negotiations to address global solar cell and module overcapacity
- DHS study of cyber, electrical grid, and national security risks of using foreign origin solar panels in the United States
- Immediate certification of all shuttered facilities for TAA
- Settlement negotiations on U.S. AD/CVD orders on solar products from China and Taiwan, and Chinese AD/CVD orders on polysilicon
- DOE should fully fund its SunShot Initiative research grants

Petitioners' Remedy Proposal: Additional Elements Cont'd

- Presidential Executive Order directing all U.S. government agencies to require that electricity obtained through power agreements be generated by U.S.-origin solar cells
- Disbursement of funds to those seeking development of new or additional manufacturing capacity relating to the CSPV cell/module chain
- Equitable resolution to the AD/CVD funds under liquidation suspension due to CIT litigation.

We Need U.S. Solar Manufacturing

- Manufacturing in the United States is critical – innovation, energy independence, national security
- SolarWorld used to perform the entire solar manufacturing process in the United States, from crystallization to module assembly, and is eager to do so again.
- GTM Research agrees:

“Quite simply, manufacturing drives technology innovation. . . If we believe that solar is a key part of the future of electricity, that the U.S. should be a leader in the clean electricity future, and that technology innovation is a key driver toward realization, then we must increase investment in domestic manufacturing.”

– MJ Shiao & Shayle Kann, *6 Ways to Encourage American Solar Manufacturing Without Import Duties*, GTM Research (Sept. 25, 2017)

America's largest solar panel manufacturer since 1975

America's solar leader American-made, from silicon to panel

SolarWorld is proud to have been the largest U.S. manufacturer of solar panels since 1975. But most of all, we are proud to be an American manufacturer. While other companies look overseas for cheaper production or merely assemble on American soil, we remain committed to sourcing, manufacturing, assembling and hiring right here in the U.S.A.

We create American jobs

SolarWorld employs more than 1,100 Americans in our Hillsboro, Oregon, and Camarillo, California, facilities. And this number keeps growing.

We advance American technology

SolarWorld has been a pioneer in solar technology since 1975. Our engineers continually push the limits of renewable energy innovation.

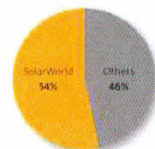
We exceed the highest standards

We meet or exceed America's high environmental and employment standards. In fact, we were named the greenest solar company in the world in 2011 by the Silicon Valley Toxics Coalition.

We help achieve energy independence

By making solar here and keeping it here, we help break America's dependence on foreign and non-renewable energy supplies—in a clean, sustainable way.

In 2010, SolarWorld manufactured more crystalline silicon solar cells in the U.S. than all other manufacturers combined.



As reported by Photon Magazine, March 2011

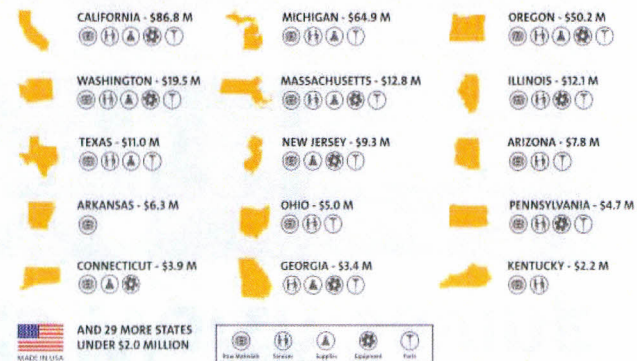


We perform the entire solar manufacturing process in America



"Made in America" claims are not created equal. Unlike solar companies that only assemble the panels in America, SolarWorld performs every step of the manufacturing process right here.

We keep millions in America 2010: \$310 million spent in 44 states




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U.S. Manufacturing Is Worth Saving

BLOOMBERG INTELLIGENCE

CALIFORNIA MODULE PROVIDERS BY UNITS INSTALLED UNDER NEM

Module Provider	2016	2015	2014
SunPower	4.412M	3.803M	1.732M
Canadian Solar	581,482	413,842	184,246
SolarWorld	561,924	249,771	295,067
REC Solar	557,695	418,780	198,330
LG Electronics	455,270	616,251	92,259
Kyocera Solar	354,320	214,616	96,718
Hanwha Q-Cells	266,969	417,081	43,605
Hyundai Heavy Industries	266,472	222,907	56,572
Yingli Green Energy	250,017	114,369	17,148
Trina Solar	189,138	276,425	129,492
Other	185,054	323,209	223,408
	744,119	535,838	395,203

Source: California PUC, Bloomberg Intelligence. Modules Interconnected Under Net Metering Program

Proposed Remedies Will Benefit the U.S. Industry

- Carefully crafted to benefit the entire industry, not just Petitioners
- Proposed remedies are intended to rebuild the U.S. industry and allow for further growth
- Will allow U.S. cell and module producers to increase production, capacity utilization, and employment, while earning a sustainable profit
- Intended to ensure sufficient supply in the market
- Projected to create thousands of solar jobs

Industry Participants Recognize the Potential Benefits

- *“We are also thinking about putting a factory in the U.S. if the 201 case comes into place...Made in U.S. may be a good solution to try to help our customers here.”*

– Tom Zhao, Managing Director for Global Sales at Chinese producer BYD’s Solar and Energy Storage division (quoted in: Julia Pyper, *Foreign Solar Manufacturers Weigh Opening US Facilities as Tariff Decision Looms*, GreentechMedia.com (Sept. 20, 2017))

- *“New tariffs aren’t necessarily a bad thing. . . If {new tariffs} come into effect, I think the clear direction that will emerge from this is that manufacturing in the U.S. will be incentivized, or supported by direct or indirect means.”*

– Gagan Pal, Chief Marketing Officer of Indian producer Adani Solar (quoted in: Julia Pyper, *Foreign Solar Manufacturers Weigh Opening US Facilities as Tariff Decision Looms*, GreentechMedia.com (Sept. 20, 2017))

The Proposed Remedy Incentivizes U.S. Production

- *“One major solar project developer indicated that a supply deal is already in the works. Separately, a solar panel manufacturer said plans to open a U.S. factory are already underway.”*

— Julia Pyper, *Foreign Solar Manufacturers Weigh Opening US Facilities as Tariff Decision Looms*, GTM Research (Sept. 20, 2017)

Solar Developers Hoard Panels as U.S. Tariff Threat Looms

By **Joe Ryan** and **Chris Martin**

September 11, 2017, 7:01 PM EDT *Updated on* September 12, 2017, 2:56 PM EDT

From **Climate Changed**

- *“Solar developers are suspending construction as the looming threat of U.S. import tariffs has driven up prices and **spurred hoarding, crimping panel supplies.**”*
- *“The supply of panels has just evaporated **as everybody is grabbing what they can.**”*
- *“The disruptions date to about May, after bankrupt panel manufacturer Suniva Inc. filed a trade complaint asking for protection from cheap imports. As the case gained steam, developers **rushed to stockpile every available panel.**”*

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- IEC: 61215
- IEC: 61730-1
- IEC: 61730-2
- IEC-61702(SALT MIST)
- ISO: 9001
- ISO: 14001
- ISO: 18001

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The U.S. Industry Needs Relief Now

- Petitioners urge the Commission to issue an effective remedy to prevent additional injury to the U.S. industry
- Import stockpiling will exacerbate injury
- Nearly 30 producers have shut their doors, and closures have continued in upstream industries:
 - Ulbrich Solar Technologies, Inc., a producer of copper-based components for CSPV products, shut down in August 2017 due to “tremendous pricing pressure”
 - Ingot producer Panasonic Eco Solutions Solar America LLC announced in September that it will shut down in November 2017

Conclusion

- Petitioners' remedy proposals are reasonable and necessary to rebuild and grow the U.S. solar industry
- The proposed remedy will encourage investment in U.S. production, and will create thousands of U.S. jobs
- Petitioners urge the Commission to act to prevent additional harm to the U.S. industry

