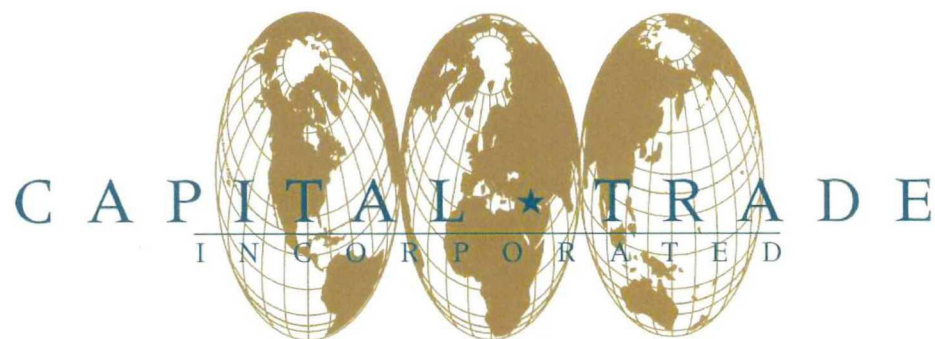


Certain Crystalline Silicon Photovoltaic Products from China and Taiwan

701-TA-511 and 731-TA-1246-1247 (Final)

December 8, 2014

Presentation on Behalf of SolarWorld Americas, Inc.



Dr. Seth T. Kaplan

skaplan@captrade.com

202-955-6814

Overview

Changes Since Prior Investigation

Injury Due to Subject Imports

Conditions of Competition

Threat Considerations

Changes Since Prior Investigation

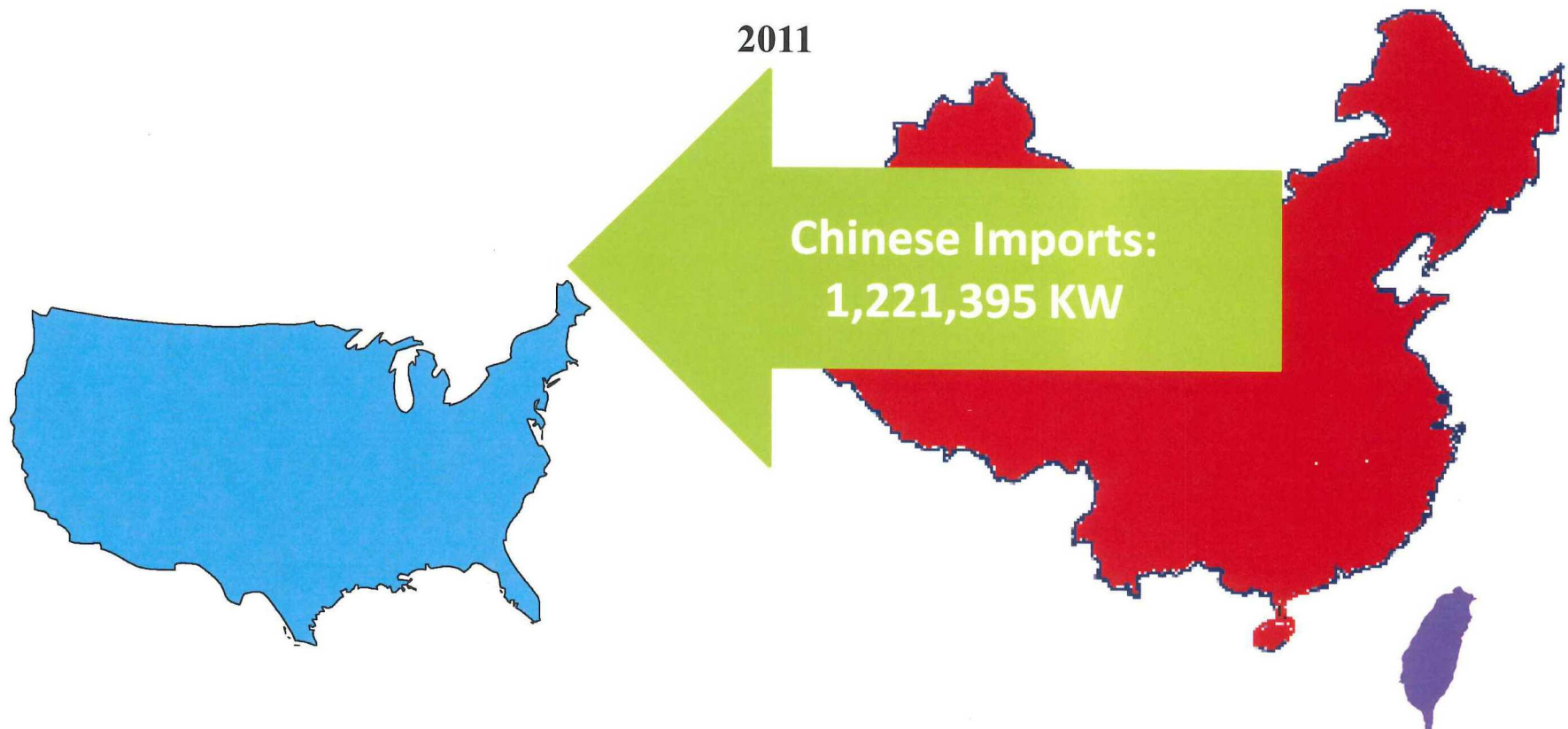
Injury Due to Subject Imports

Conditions of Competition

Threat Considerations

Changes Since Prior Investigation

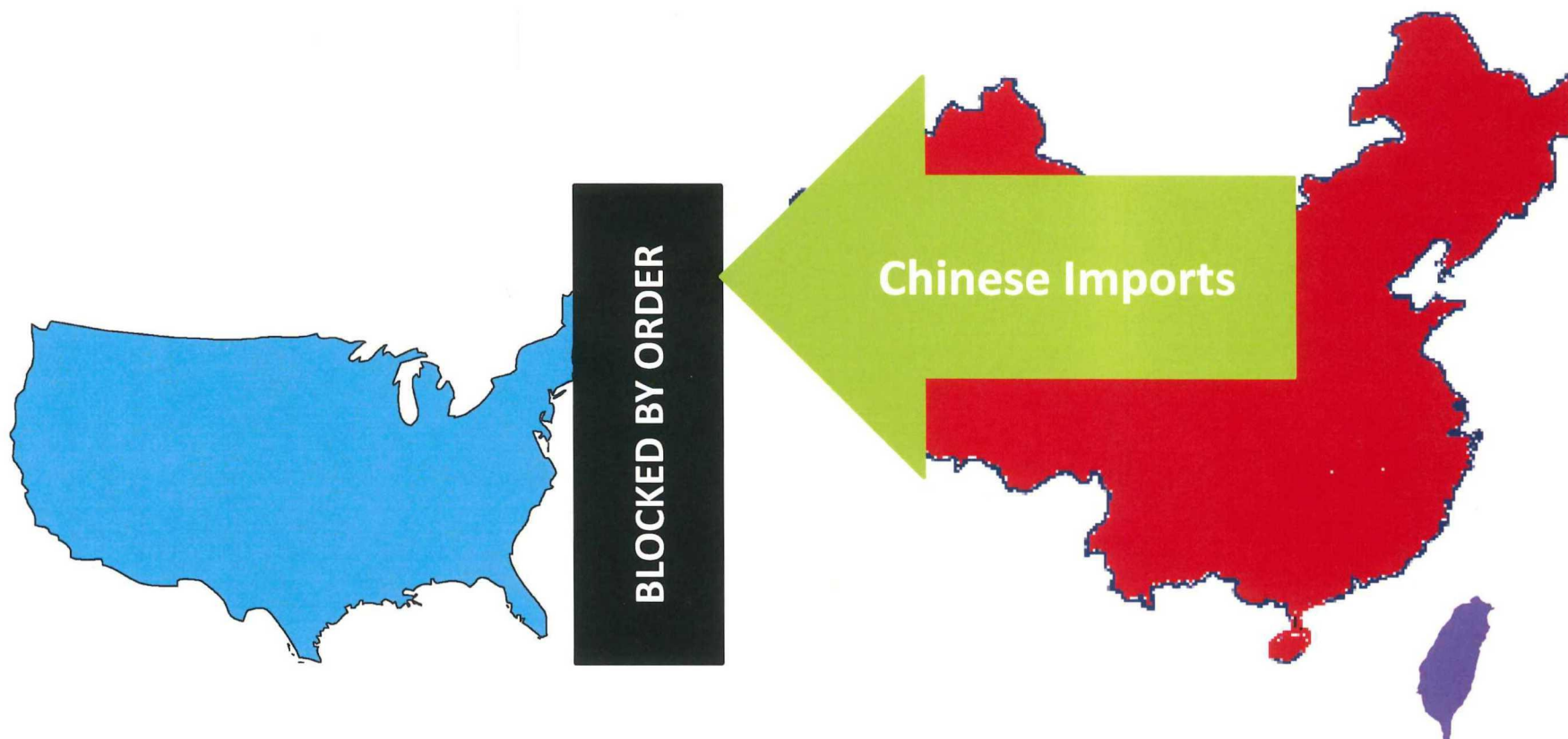
Taiwanese Subject Imports Replaced Chinese Covered Imports Over POI



Source: *Crystalline Silicon Photovoltaic Cells and Modules from China*. USITC Inv. No. 701-TA-481 and 731-TA-1190 (Final). Pub. No. 4360 (November 2012) at Table C-1.

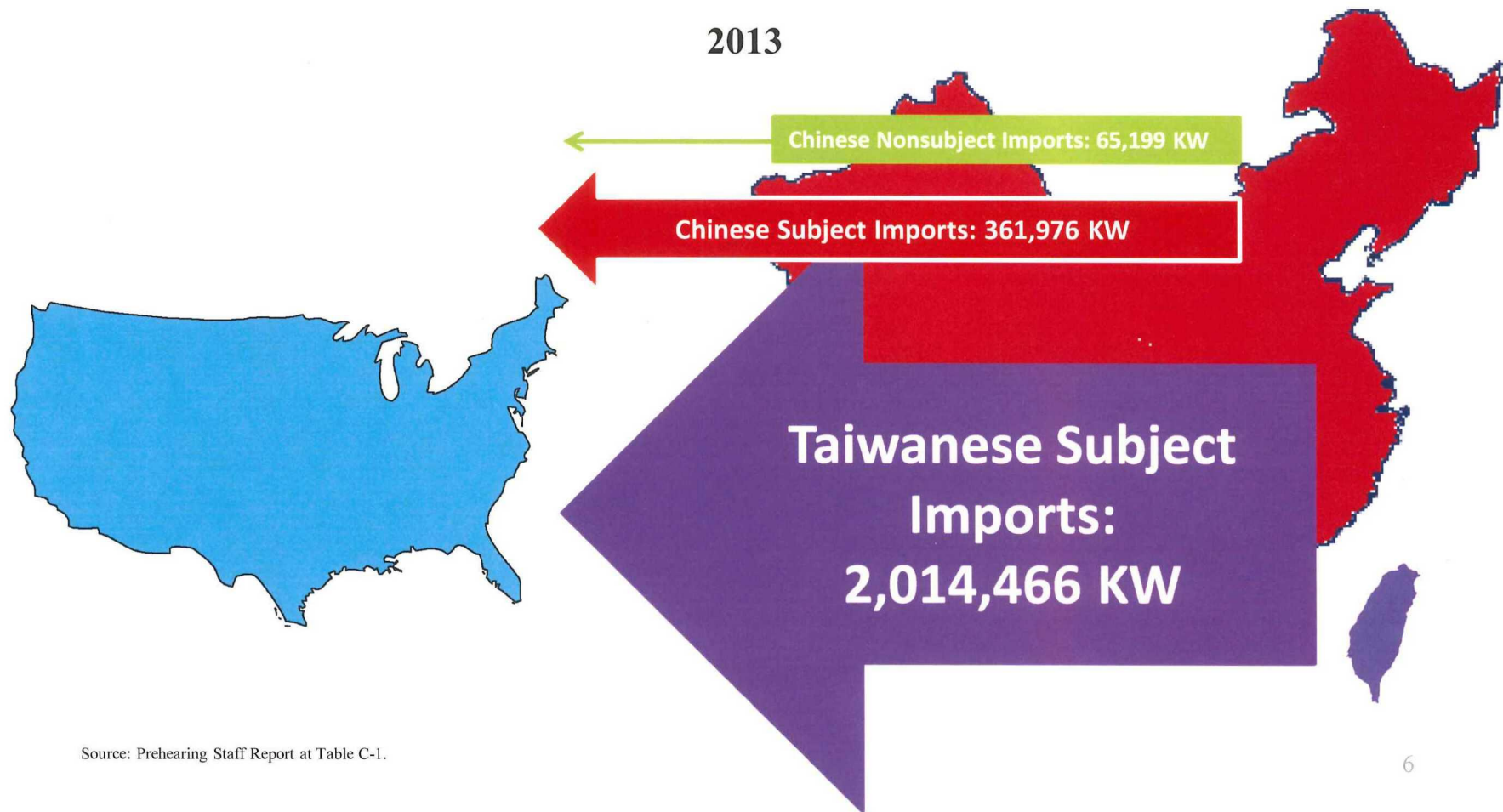
Changes Since Prior Investigation

**Taiwanese Subject Imports Replaced Chinese
Covered Imports Over POI**



Changes Since Prior Investigation

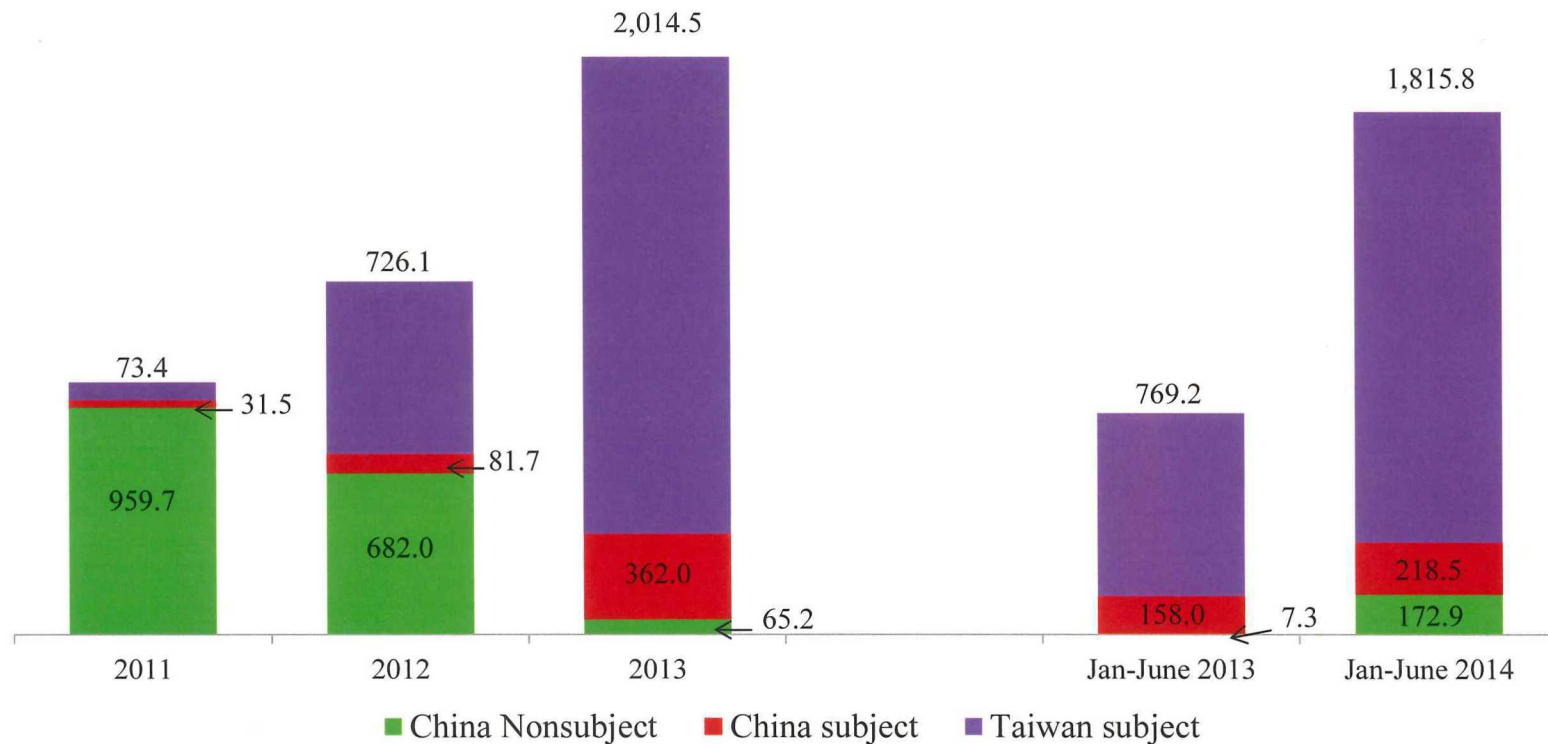
Taiwanese Subject Imports Replaced Chinese Covered Imports Over POI



Changes Since Prior Investigation

Taiwanese and Chinese Subject Imports Replaced Chinese Covered Imports Over POI

Quantity in Megawatts



Source: Staff Report Table C-1

Changes Since Prior Investigation

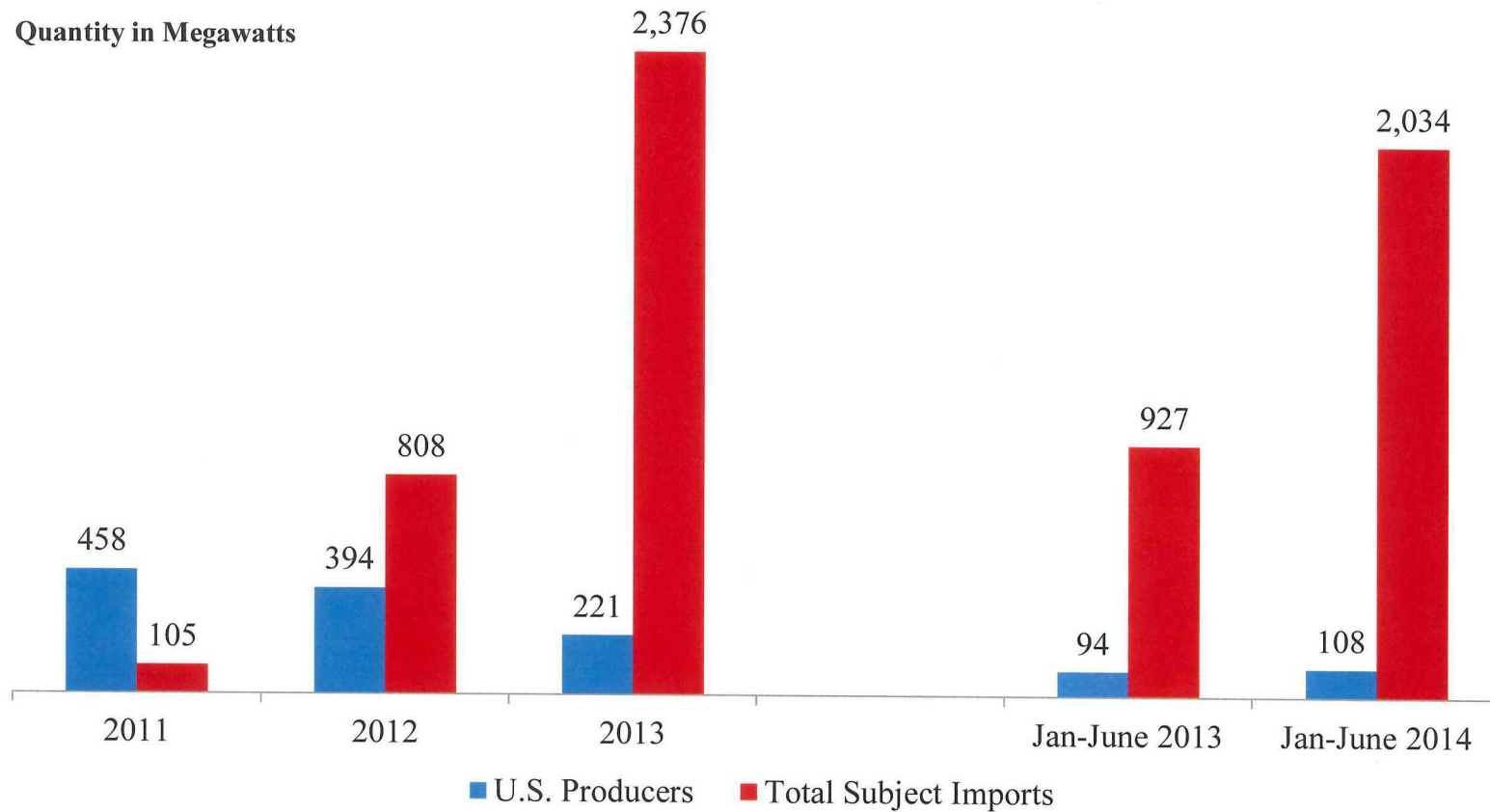
Injury Due to Subject Imports

Conditions of Competition

Threat Considerations

Injury Due to Subject Imports: Volume

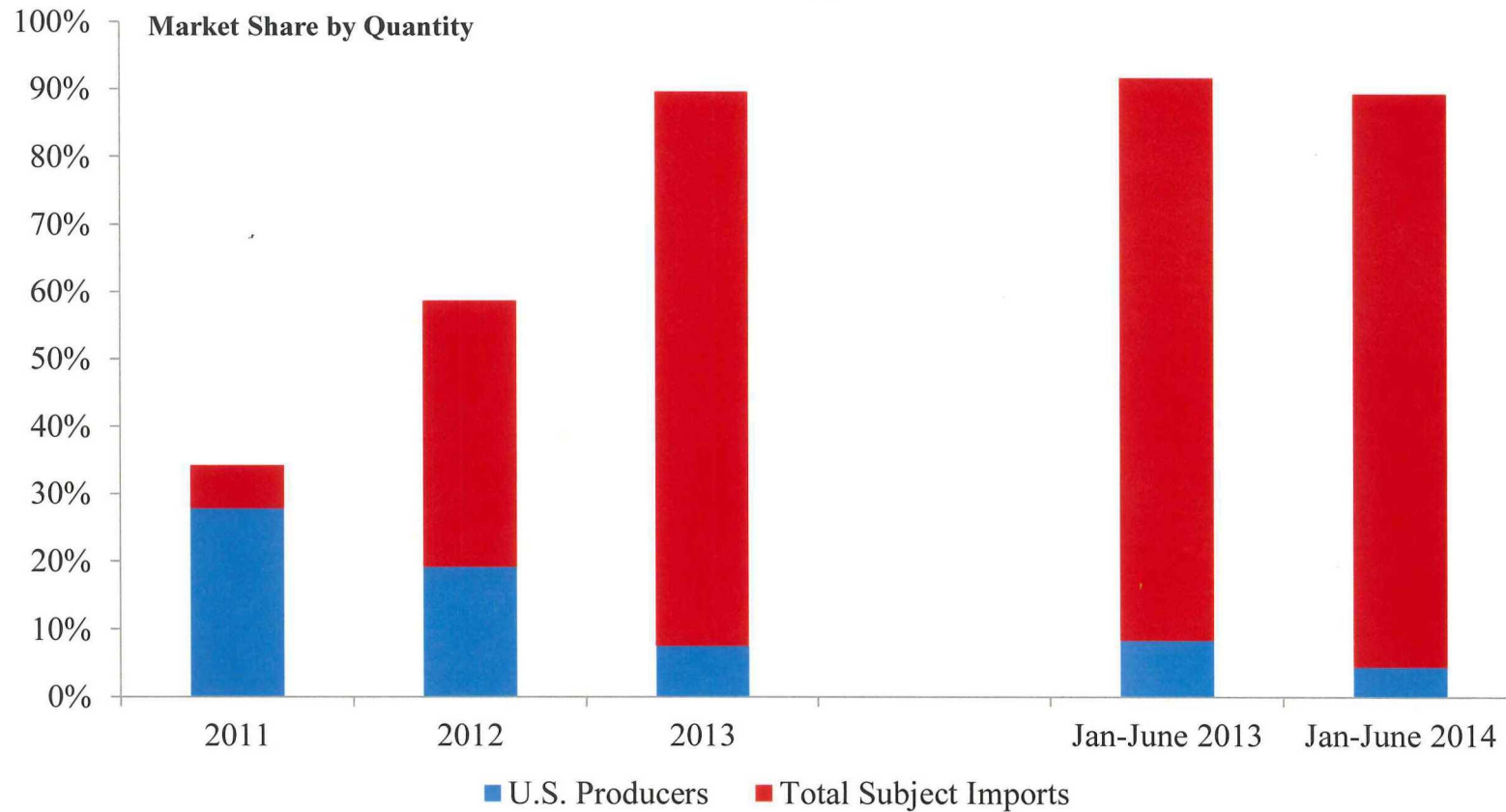
Subject Imports are Increasing Absolutely



Source: Prehearing Staff Report at Table C-1.

Injury Due to Subject Imports: Volume

Subject Imports are Increasing Relative to U.S. Consumption



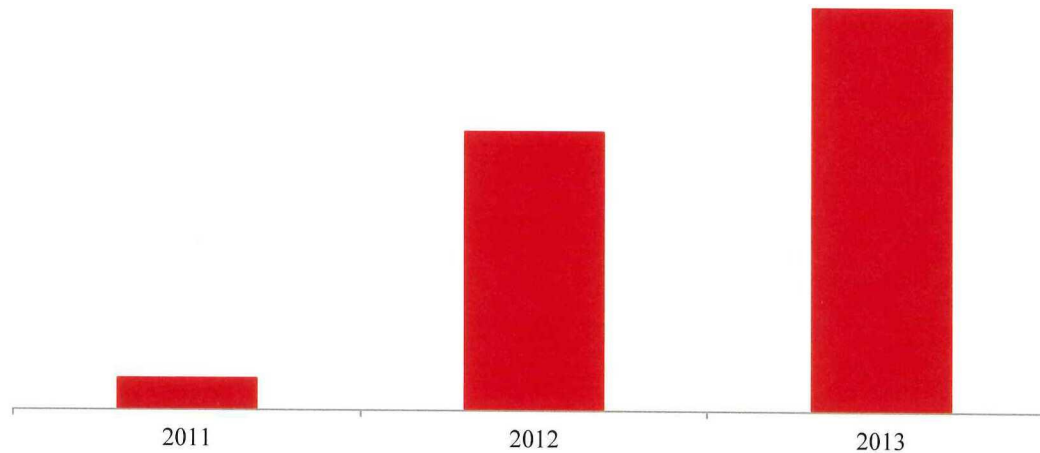
Source: Prehearing Staff Report at Table C-1.

Injury Due to Subject Imports: Price

Underselling Occurred Throughout the POI

- Instances of underselling increased throughout the POI, and the margin of underselling was significant.

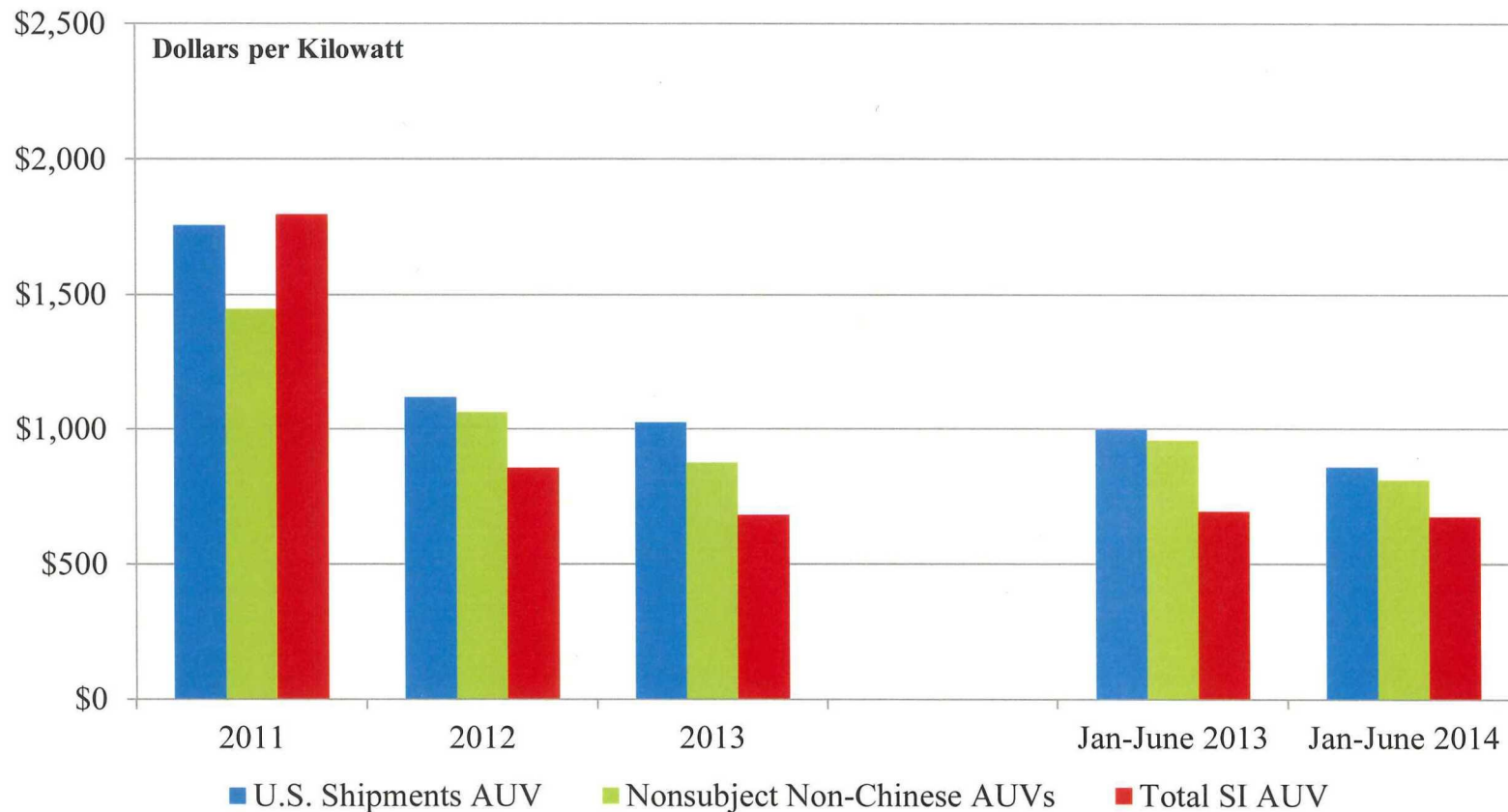
Annual Instances of Underselling



Source: Prehearing Staff Report at Tables V-3 to V-10, Solarworld Prehearing Brief at Exhibit 2.

Injury Due to Subject Imports: Price

Subject Imports AUVs were Consistently Lower than U.S. Producers' AUVs



Source: Prehearing Staff Report at Table C-1.

Injury Due to Subject Imports: Impact

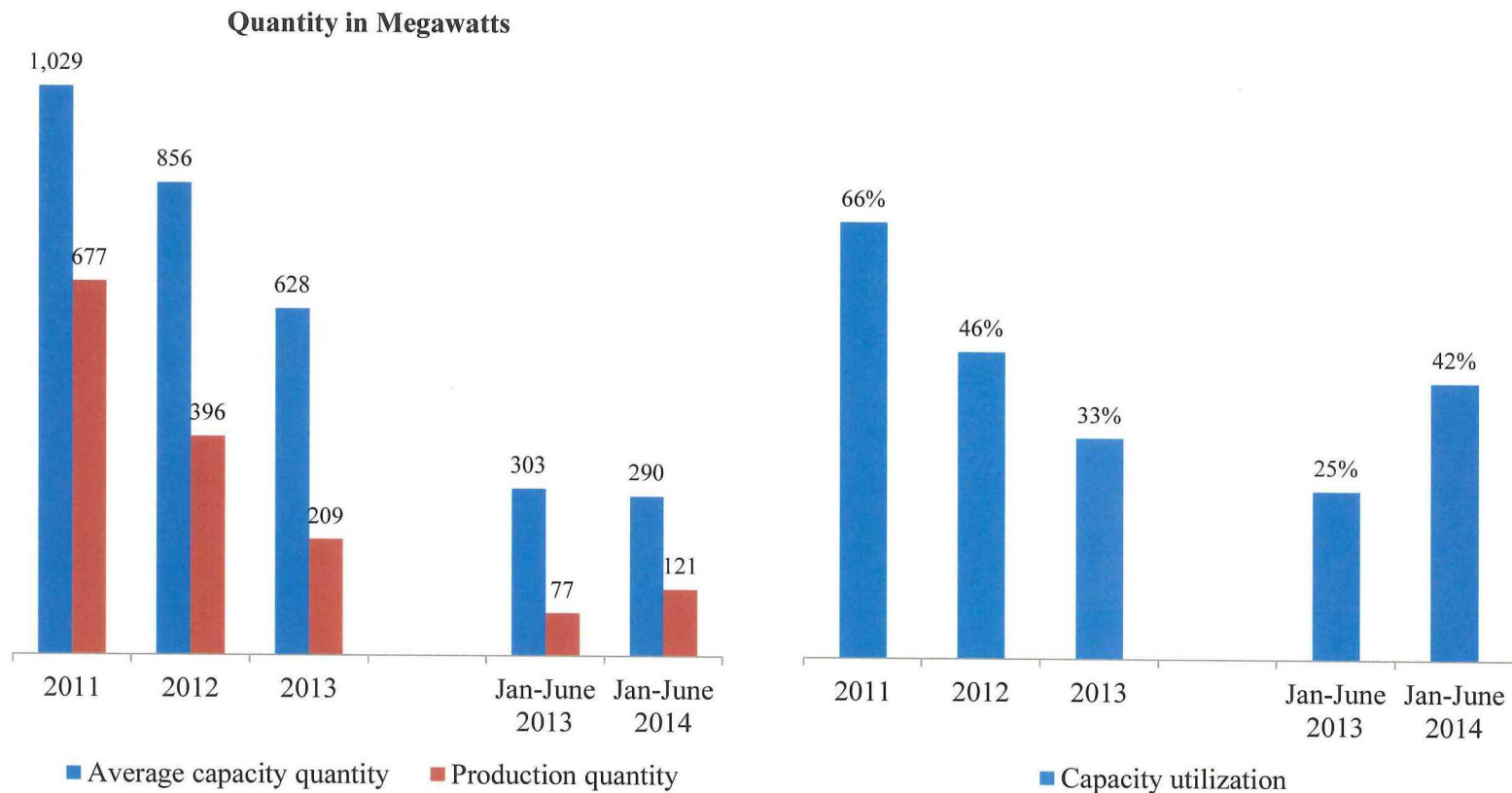
U.S. Firms Were Injured

Type of Producer	U.S. Producers with Plant Shutdowns or Bankruptcies	Jobs Lost
Multicrystalline	Calisolar, Evergreen, Kyocera, MX Solar, Siliken USA, Solar Power Industries, Spectrawatt, Sharp	1,831
Monocrystalline	Helios Solar, Sanyo, Schott Solar, Transform Solar	588
Multi and Mono	BP Solar, Solarworld, Solon	759

Total Jobs Lost: 3,178

Injury Due to Subject Imports: Impact

U.S. Producers' Capacity, Production, and Capacity Utilization Decreased

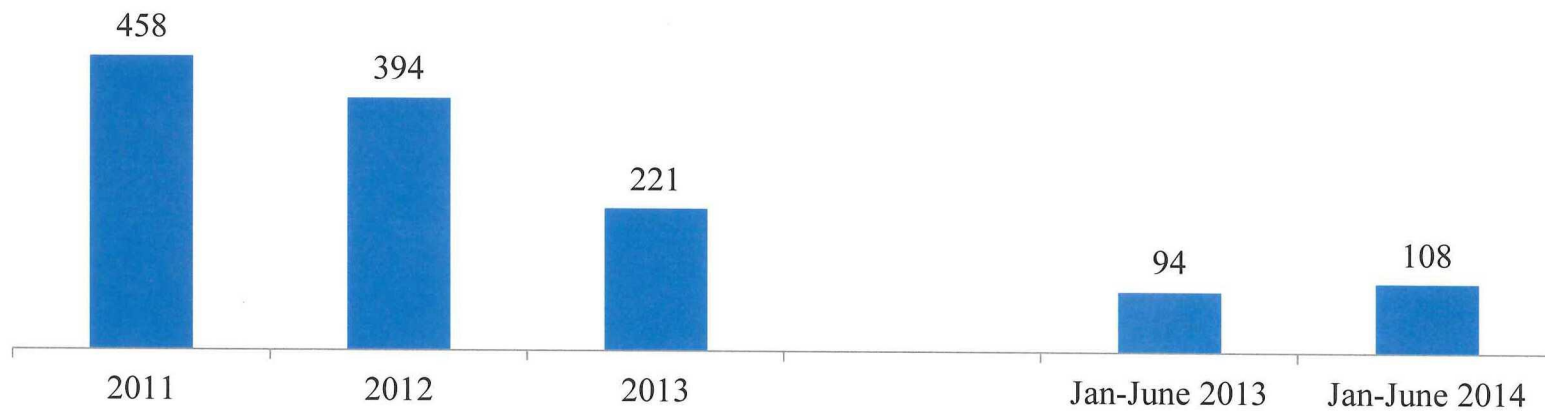


Source: Prehearing Staff Report at Table C-1.

Injury Due to Subject Imports: Impact

U.S. Producers' U.S. Shipments Decreased

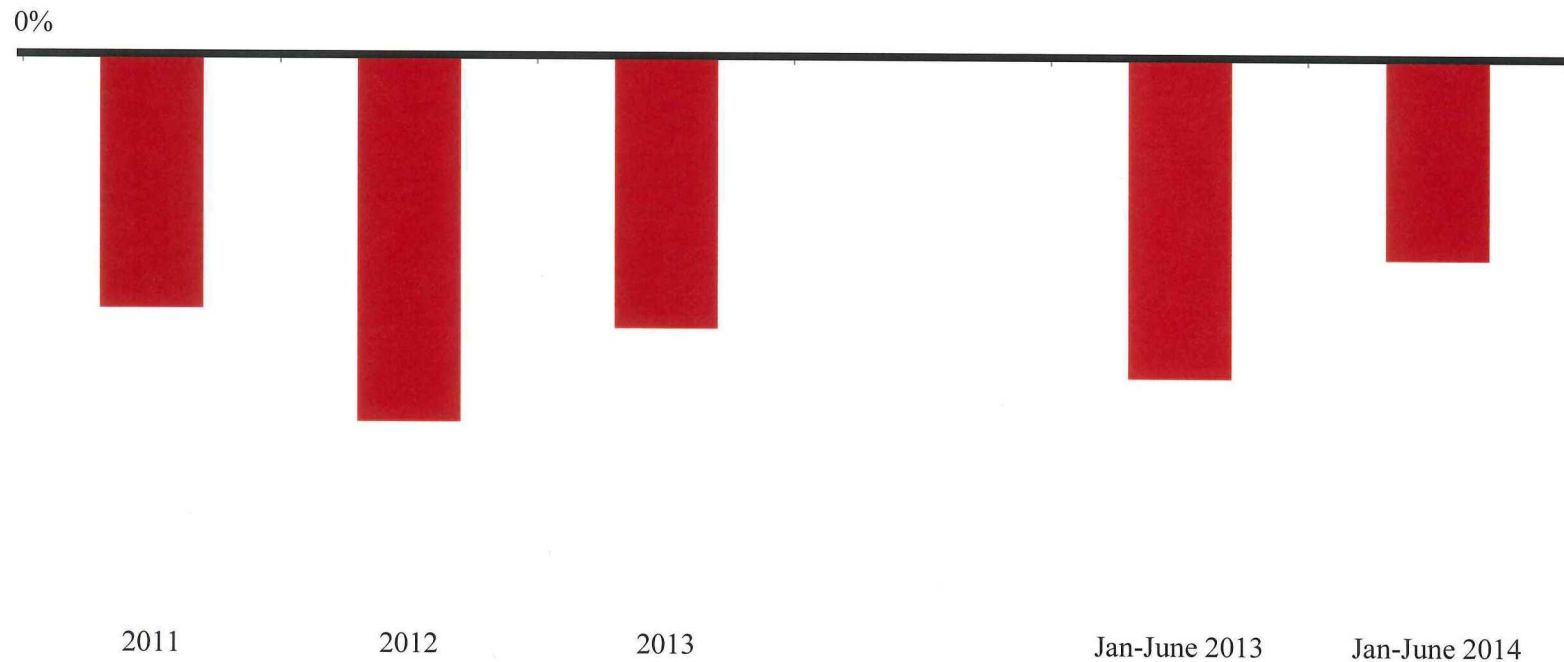
Quantity in Megawatts



Source: Prehearing Staff Report at Table C-1.

Injury Due to Subject Imports: Impact

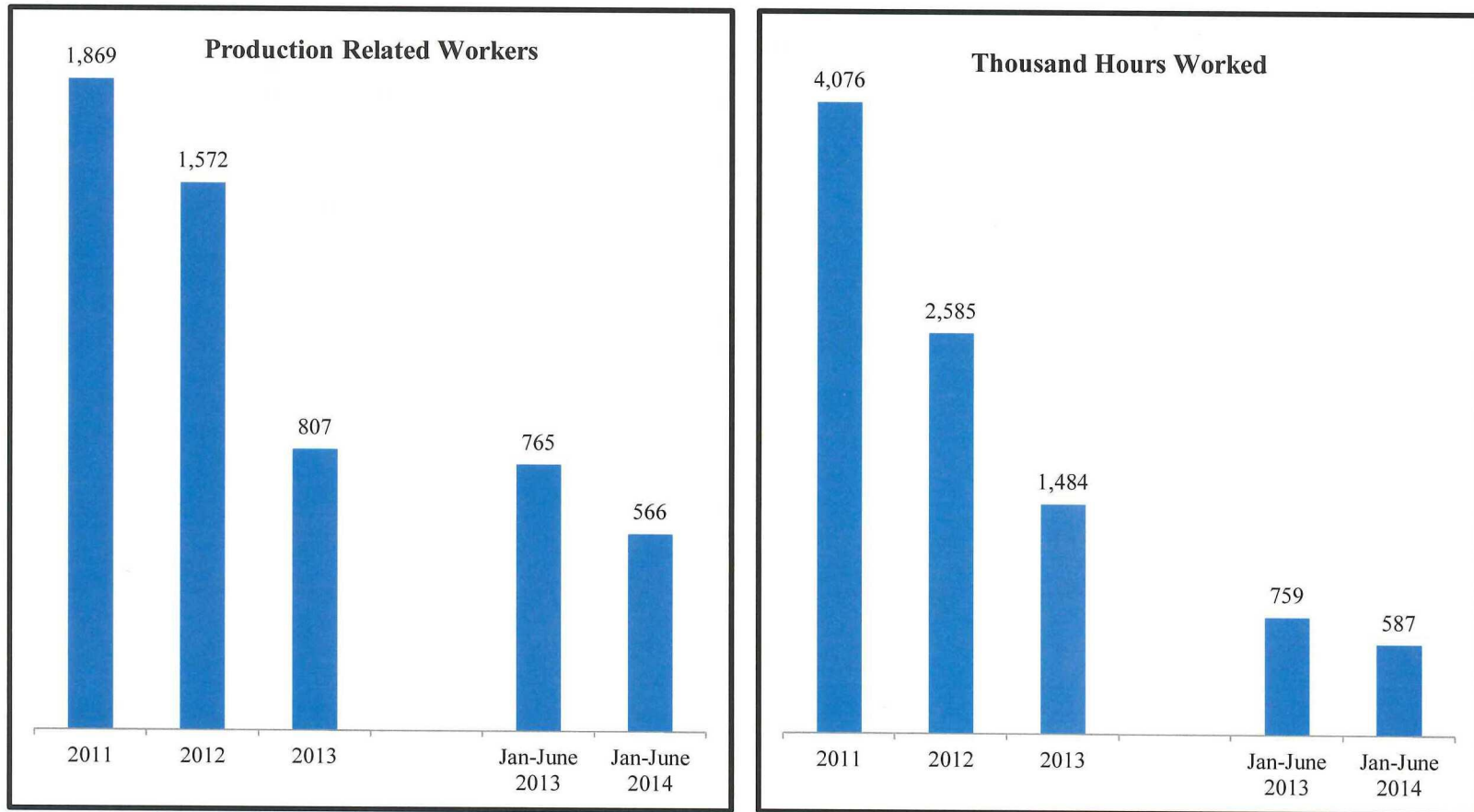
U.S. Producers' Operating Margins Remained Negative Throughout POI



Source: Prehearing Staff Report at Table C-1.

Injury Due to Subject Imports: Impact

PRWs and Hours Decreased Throughout POI



Source: Prehearing Staff Report at Table C-1.

Injury Due to Subject Imports: Impact

Negative Effects on Statutory Indicia

Trade Indicia	Output	☑
	Sales	☑
	Market Share	☑
Financial Indicia	Negative Profits	☑
	Return on Investments	☑
	Cash Flow	☑
	Ability to Raise Capital	☑
	Investments	☑
Employment Indicia	Production Related Workers	☑
	Total Hours Worked	☑
Other Indicia	Capacity Utilization	☑
	Underselling	☑
	Lost Sales / Revenue	☑
	Productivity	☑
	Research and Development	☑
	Growth	☑
	Margin of Dumping	☑
	Factors Affecting Domestic Prices	☑
	Export Subsidies	☑

Changes Since Prior Investigation

Injury from Subject Imports

Conditions of Competition

Threat Considerations

Conditions of Competition

Conditions of Competition Are Consistent With Previous Investigation

- ✓ Decisions are made based on price.
- ✓ Highly substitutable domestic and subject import modules.
- ✓ Demand has fallen in third markets.
- ✓ Grid parity and input costs fail to explain price movements.
- ✓ Domestic and subject imports compete in all market segments.

Conditions of Competition

Subject Imports Compete Primarily on Price

Table II-16

Product: Ranking of factors used in purchasing decisions as reported by U.S. purchasers, by number of reporting firms

Factor	First	Second	Third	Total
Price	23	13	13	49
Quality	14	9	3	26
Availability	1	9	17	27
Bankability	5	5	4	14
Other ¹	9	16	15	40

Table II-17

CSPV products: Importance of purchase factors, as reported by U.S. purchasers, by number of responding firms

Factor	Number of firms reporting		
	Very important	Somewhat important	Not important
Availability	50	3	0
Cell count (60, 72, 90 cell modules)	25	16	10
Delivery terms	31	19	2
Delivery time	38	15	0
Discounts offered	26	23	3
Extension of credit	28	14	10
Minimum quantity requirements	14	13	25
Module racking system	7	21	23
Packaging	11	23	18
Price	51	2	0
Product consistency	45	6	1
Product range	12	26	14
Quality exceeds industry standards	23	28	1
Quality meets industry standards	40	12	0
Reliability of supply	50	3	0
Technical support/service	24	23	5
Warranty	45	7	1
Wattage efficiency	31	22	0
U.S. transportation costs	18	24	10

Source: Compiled from data submitted in response to Commission questionnaires.

Conditions of Competition

The Commission Determined Subject Imports Compete Primarily on Price

- “Consequently, given the high substitutability between the domestic like product and subject imports, we find that competition in the U.S. CSPV market primarily depends on price.” – 2012 Final Commission Opinion
- “Evidence obtained in the prior investigations indicates that price and quality are the most important factors in purchasing decisions. Nothing in the record of the preliminary phase of these investigations indicates otherwise.” – 2014 Prelim. Commission Opinion

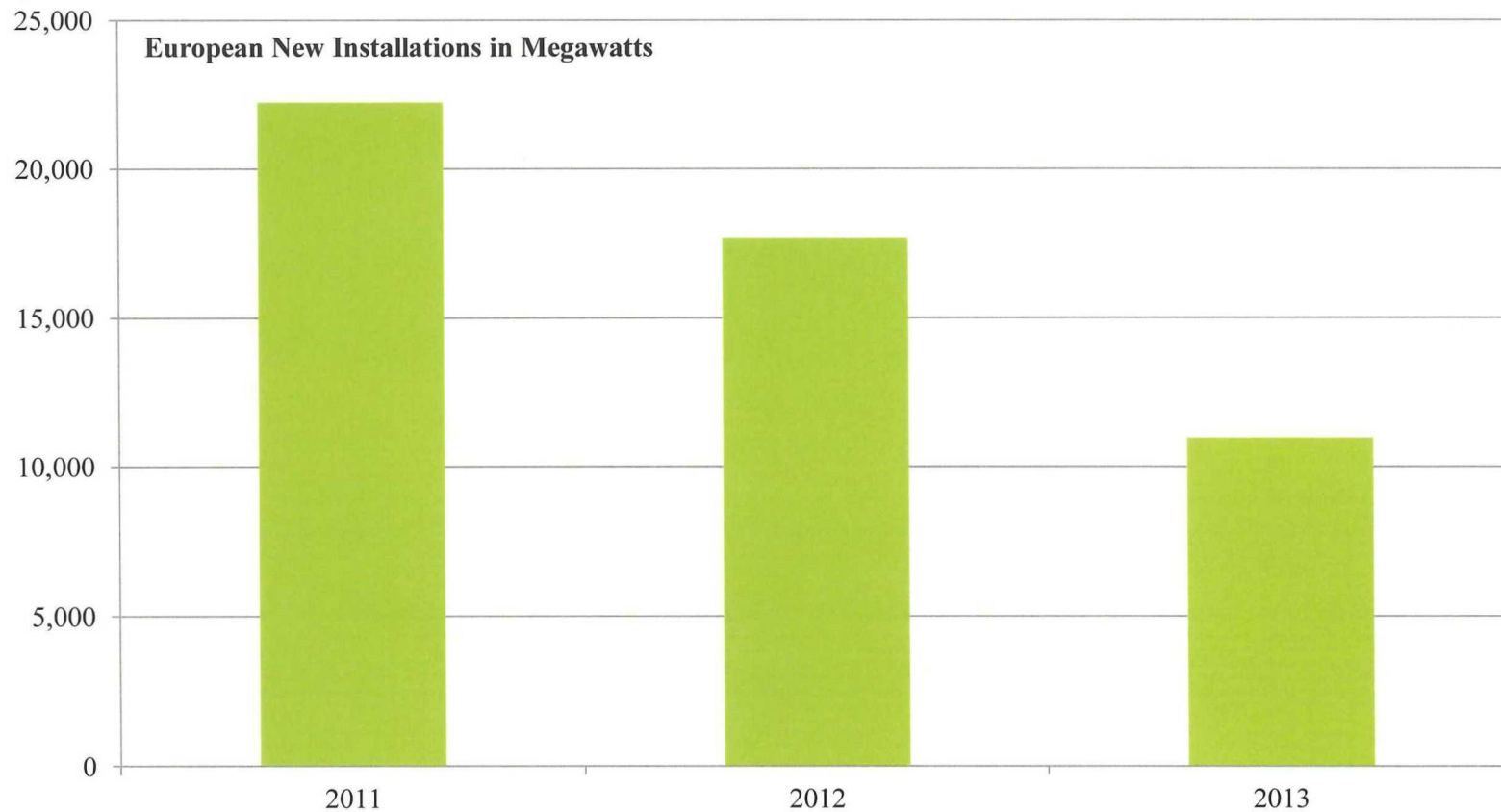
Conditions of Competition

The Commission Determined Subject Imports and Domestic Products are Highly Substitutable

- “Consequently, based on this record, we find a high degree of substitutability between CSPV products made in the United States and imported from China.”– 2012 Final Commission Opinion
- “The record shows that there is a high degree of substitutability between the domestic like product and subject imports...Most market participants reported that the domestic like product and the subject imports are ‘always’ or ‘frequently’ interchangeable.” – 2014 Prelim. Commission Opinion

Conditions of Competition

Demand in the Largest Export Market Rapidly Decreased



Source: *Global Market for Photovoltaics*, 2014-2018. European Photovoltaic Industry Association;

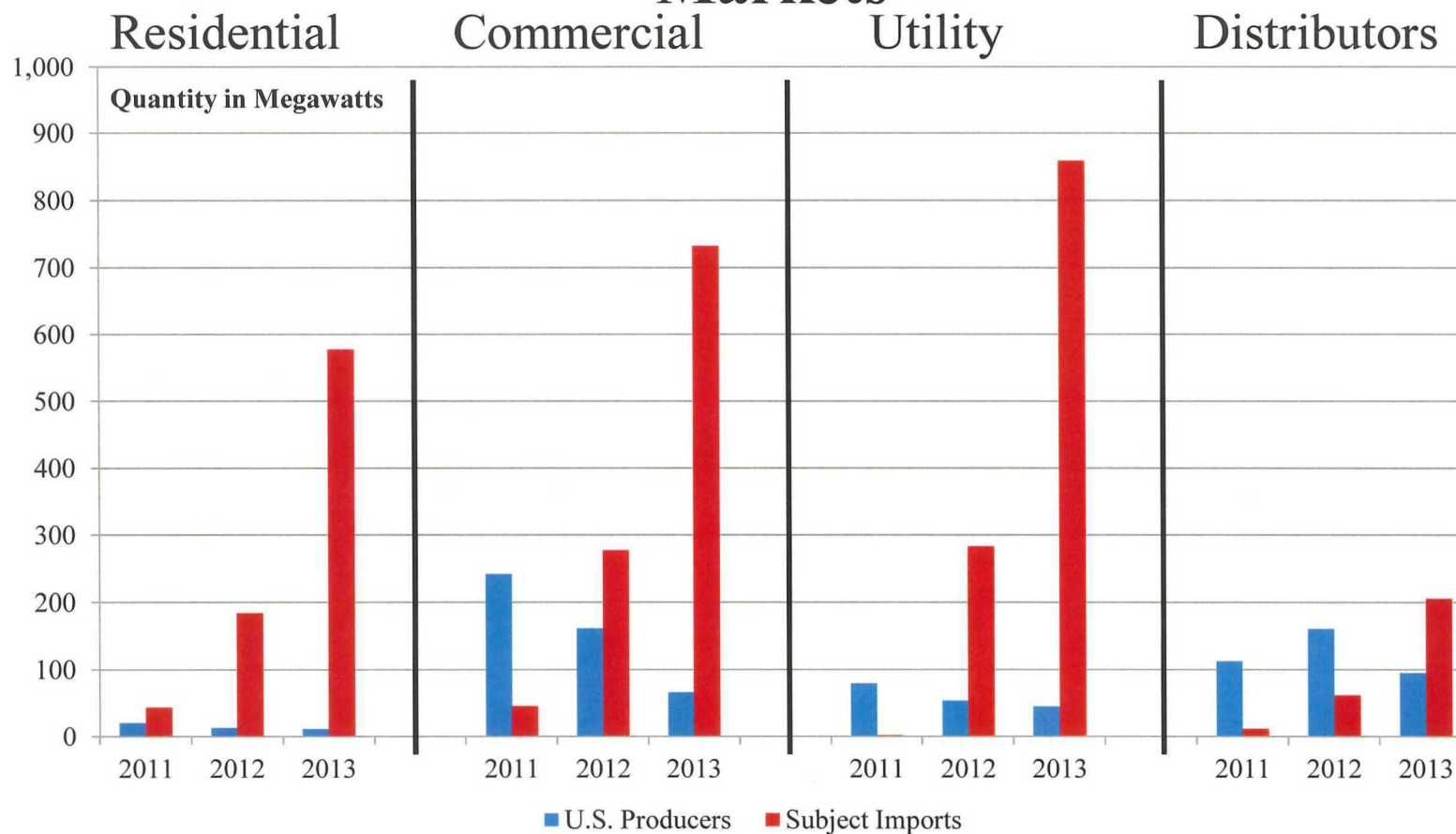
Conditions of Competition

Decreasing Demand in SI Main Export Markets

- European solar installations declined from 22GW in 2011 to less than 11 GW in 2013. Demand in Germany fell by 57 percent last year, demand in Italy fell by 61 percent.
- Japanese demand is expected to decrease and there is significant oversupply of the Japanese market.
 - “Half of Japan’s electric utilities have blocked additional solar for fear of destabilizing the grid.”

Conditions of Competition

U.S. Producers and Subject Imports Compete in All Markets



Source: Sectoral share from Prehearing Staff Report, Table II-1. Shares were multiplied by shipment quantities from Prehearing Staff Report at Table C-1.

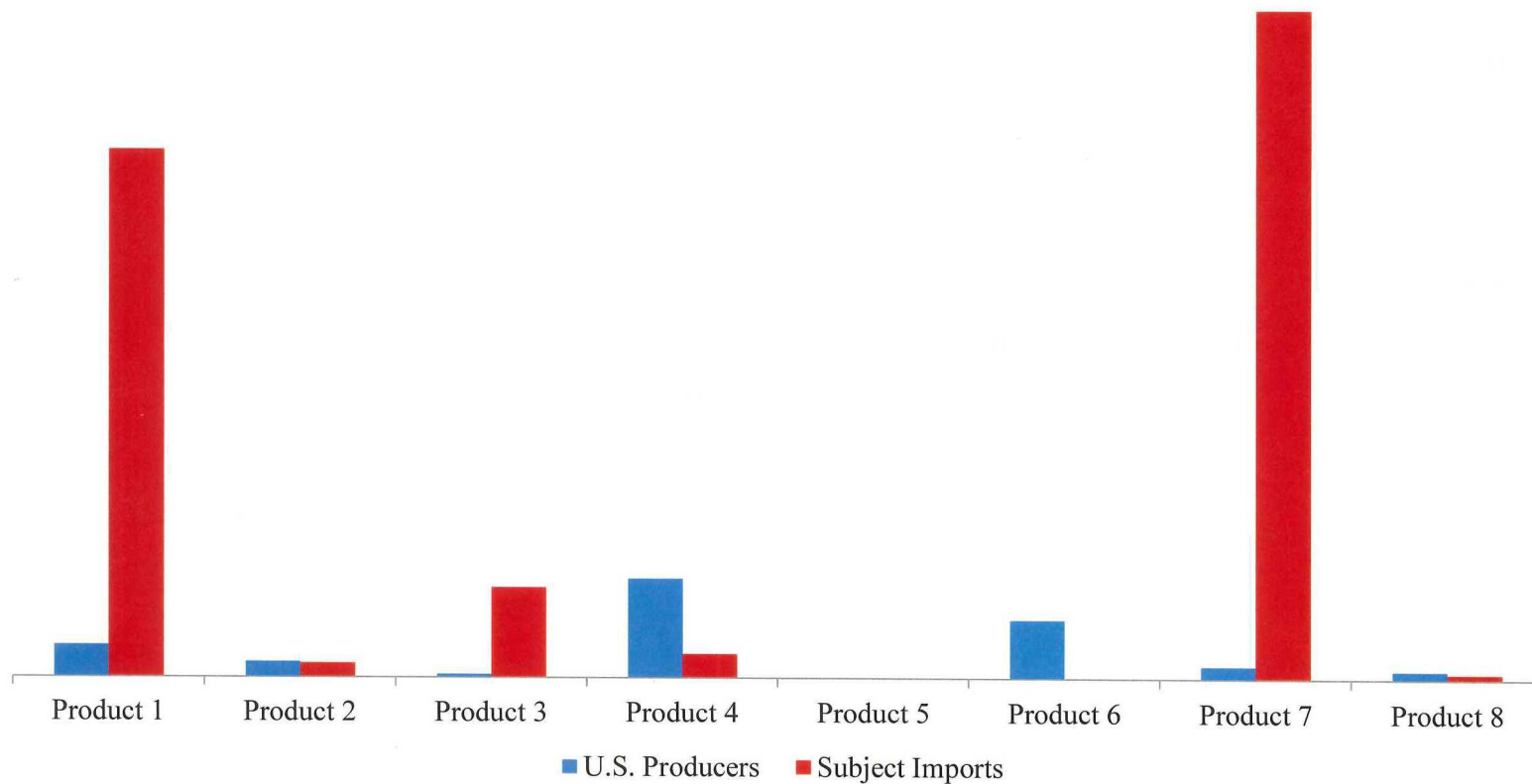
Conditions of Competition

The Commission Has Determined Domestic and Subject Imports Compete in All Markets

- “...The domestic industry participated in all segments of the U.S. market (including the residential, non-residential, and utilities segments), as did imports from subject and non-subject sources.” – 2012 Final Commission Opinion
- “U.S. producers sold CSPV modules in all channels of distribution, i.e., to distributors, residential and commercial installers, and utilities/developers... Imports of CSPV modules from China were also sold in all channels of distribution... imports of CSPV modules from Taiwan were sold primarily to commercial installers and utilities/developers in 2010, but then shifted to primarily residential installers and utilities/developers in 2010” – 2014 Prelim. Commission Opinion.

Conditions of Competition

U.S. Producers and SI Compete in All Products



Source: Prehearing Staff Report at Tables V-3 to V-10.

Conditions of Competition

The Commission Has Determined Domestic and Subject Imports Compete in All Products

- “...the domestic industry supplied a variety of modules to purchasers in the market, including mono- and multi-crystalline modules, lower- and higher-wattage CSPV modules, as well as 60-, 72-, and even 96 cell CSPV modules.”
– 2012 Final Commission Opinion

Conditions of Competition

Mono- and Multi- Producers

- Purchasers do not generally specify mono- versus multi- in RFPs.
- Domestic industry and individual producers manufacture and sell both mono- and multi-crystalline products.
- Imports have affected both mono- and multi- producers, revenues, prices, shipments, and profits.
- Mono-crystalline products are used in the same applications and end uses as multi-crystalline.

Conditions of Competition

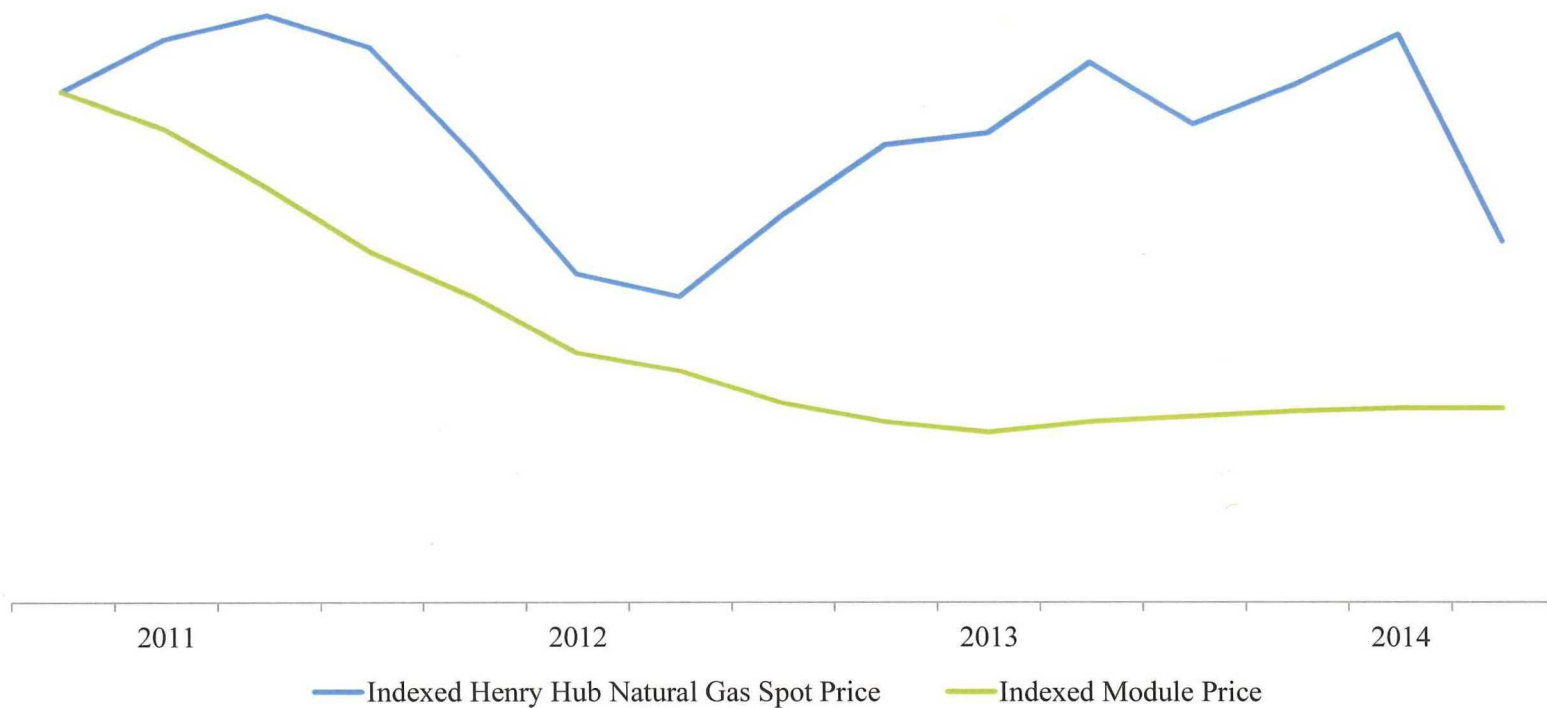
The Commission Has Found Head-to-Head Competition in Mono- and Multi-Crystalline CSPV

- “The record demonstrates that the domestic industry (including Petitioner SolarWorld), like importers of subject merchandise from China, sold mono- and multi-crystalline CSPV products in the U.S. market, so the substantial underselling margins do not merely reflect price differentials between mono- and multicrystalline modules.” – 2012 Final Commission Opinion
- Solarworld has been producing multicrystalline modules in Hillsboro, Oregon, since 2010.

Conditions of Competition

Current Demand is Not Driven by Natural Gas Prices

Indexed Prices of Natural Gas and Modules



Source: Module prices from SEIA Solar Market Insight Reports (2011, 2012, and 2013 full reports; 2014 Q2 report). Henry Hub Natural Gas Spot prices from U.S. Energy Information Administration.

Conditions of Competition

The Commission Determined Grid Parity Did Not Explain Underselling

- “Nevertheless, the impetus toward grid parity fails to explain the significant underselling by subject imports demonstrated on this record.”

Conditions of Competition

Demand for Solar Panels is Not Perfectly Elastic

Share of Renewables in Electricity Sales				Share of Renewables in Electricity Sales			
State	Target	Current	Target Year	State	Target	Current	Target Year
Arizona	15.0%	6.1%	2025	Montana	15.0%	39.0%	2015
California	33.0%	26.1%	2020	Nevada	25.0%	11.3%	2025
Colorado	30.0%	10.1%	2020	New Hampshire	24.8%	14.3%	2025
Connecticut	27.0%	4.1%	2020	New Jersey	20.4%	1.6%	2021
Delaware	25.0%	2.6%	2026	New Mexico	20.0%	4.7%	2020
Hawaii	40.0%	7.4%	2030	New York	29.0%	24.1%	2015
Illinois	25.0%	1.9%	2026	North Carolina	12.5%	6.0%	2021
Iowa	105 MW	3511 MW	2000	Ohio	12.5%	12.0%	2026
Kansas	20.0%	6.2%	2020	Oregon	25.0%	65.8%	2025
Maine	40.0%	49.8%	2017	Pennsylvania	18.0%	2.7%	2021
Maryland	20.0%	5.6%	2022	Rhode Island	16.0%	1.9%	2019
Michigan	10.0%	3.9%	2015	Texas	5,880 MW	10354 MW	2015
Minnesota	26.5%	14.3%	2025	Washington	15.0%	74.7%	2020
Missouri	15.0%	3.3%	2021	Wisconsin	10.0%	6.2%	2015

Source: Database of State Incentives for Renewables & Efficiency, September 2014. Current Renewable Share from www.climatecentral.org.
 Note: Nine states with voluntary Renewable Portfolio programs not shown.

Conditions of Competition

Respondents' Current Arguments Are Similar to Prior Investigation, which Commission Rejected

- “The CCCME Respondents argue that technological improvements in CSPV product manufacturing, declining prices for the raw material polysilicon, the need to attain grid parity in the face of declining natural gas prices and competition from thin-film products, and the decline of Federal, state, and local incentives explain the observed price declines, whereas subject imports do not.”
- “Although we acknowledge that there may have been additional factors exerting downward pricing pressure on CSPV products, we find that subject imports were a significant cause of the decline in the prices of CSPV products during the POI.”

Changes Since Prior Investigation

Injury due to Subject Imports

Conditions of Competition

Threat Considerations

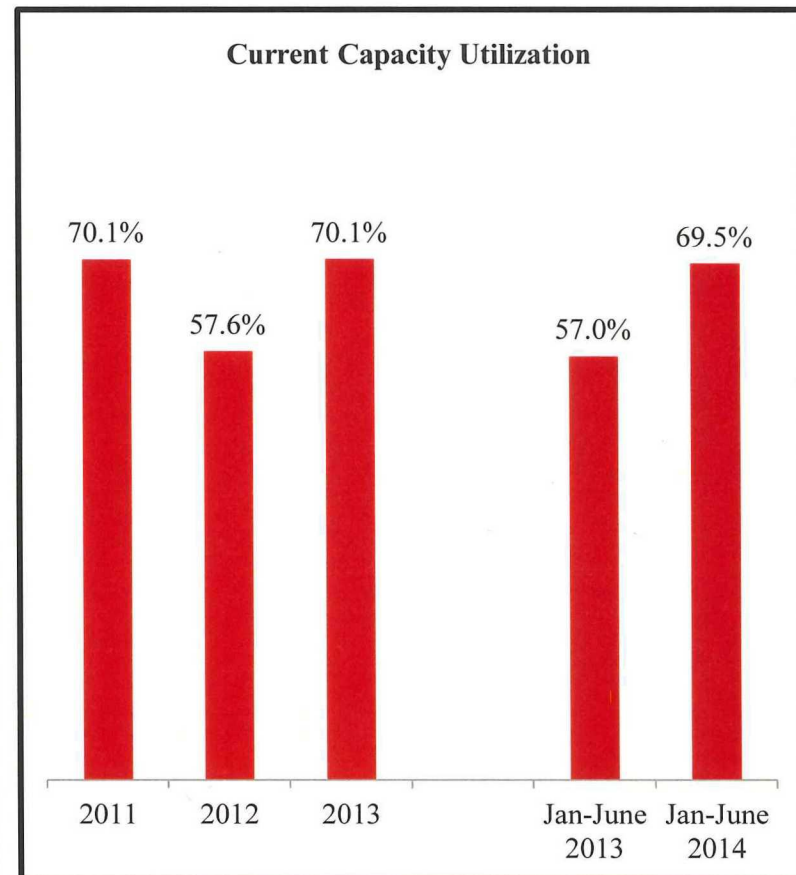
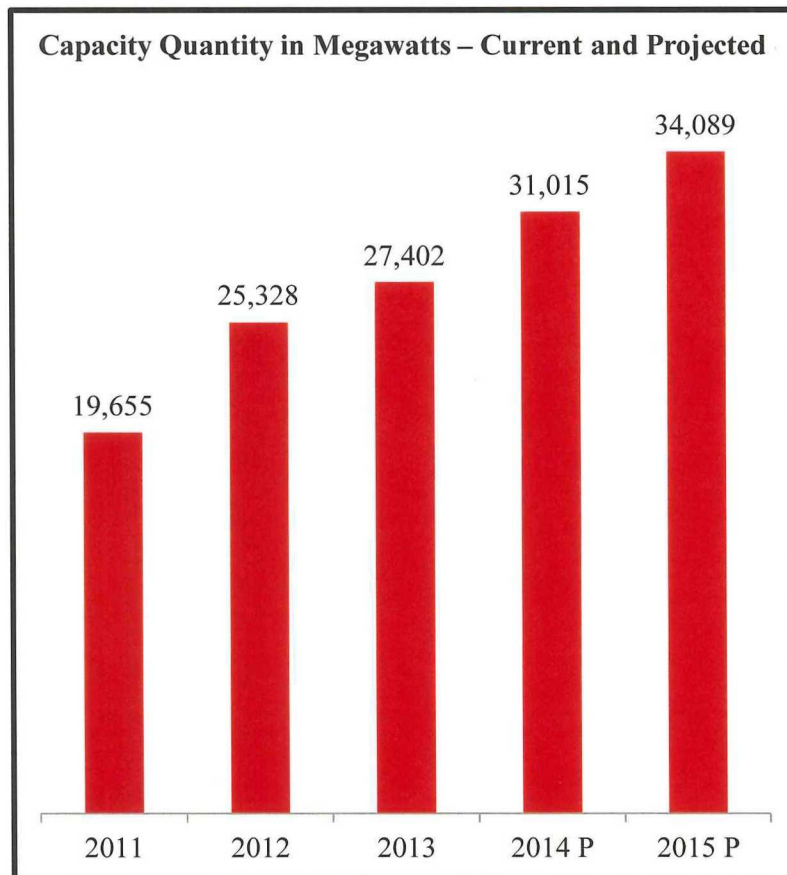
Threat Considerations

Statutory Factors

- ✓ Increases in production capacity, or existing unused capacity, in the exporting country likely to result in increases in imports to the U.S.
- ✓ Rate of increase of the volume or market penetration and likelihood of further increases in subject imports.
- ✓ Whether prices are likely to cause significant price depression or suppression and increased demand for further imports.
- ✓ Inventories of the subject merchandise.
- ✓ Potential for product-shifting
- ✓ Information regarding the countervailable subsidy and whether imports are likely to increase.
- ✓ Any other demonstrable adverse trends indicating the probability that there is likely to be material injury by reason of imports (or sale for importation) of the subject merchandise (whether or not it is actually being imported at the time).

Threat Considerations

Subject Production Capacity is Expected to Increase, High Amount of Unused Capacity

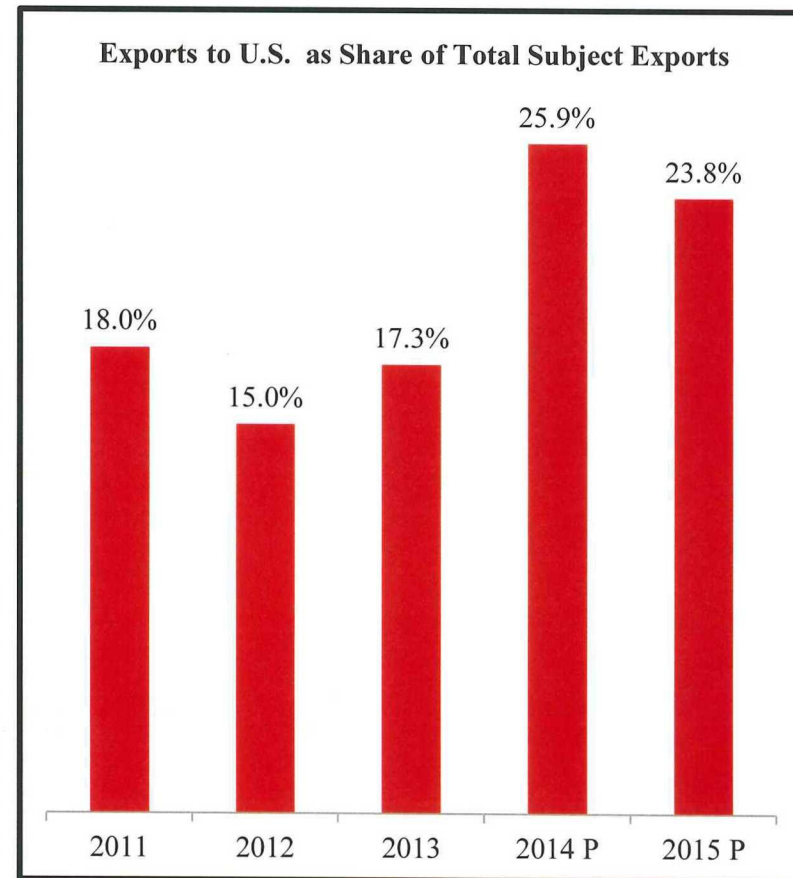
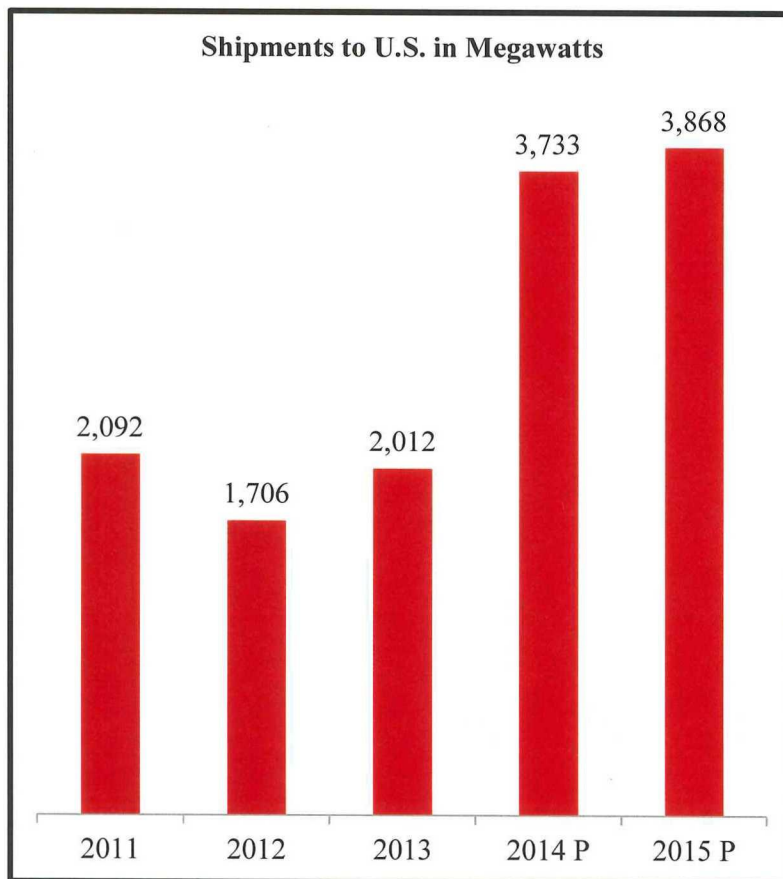


Note: Capacity quantities come from Prehearing Staff Report, but actual overcapacity is estimated to be higher than Staff numbers. Respondents estimate there are 500 solar producers in China, a significant portion did not respond to Commission's questionnaires. Some estimate Chinese capacity at 60 GW.

Source: Prehearing Staff Report at Table VII-10, Conference Tr. at 189, Fraunhofer Institute for Solar Energy Systems ISE, *Annual Report 2013/14* at 1, and Petition for the Imposition of Antidumping and Countervailing Duties, *Certain Crystalline Silicon Photovoltaic Products From China and Taiwan*, vol. I at Exhibit I-1AX (Dec. 31, 2013)

Threat Considerations

Projected Increased Shipments to the U.S., Absolutely and Relative to Total Subject Exports

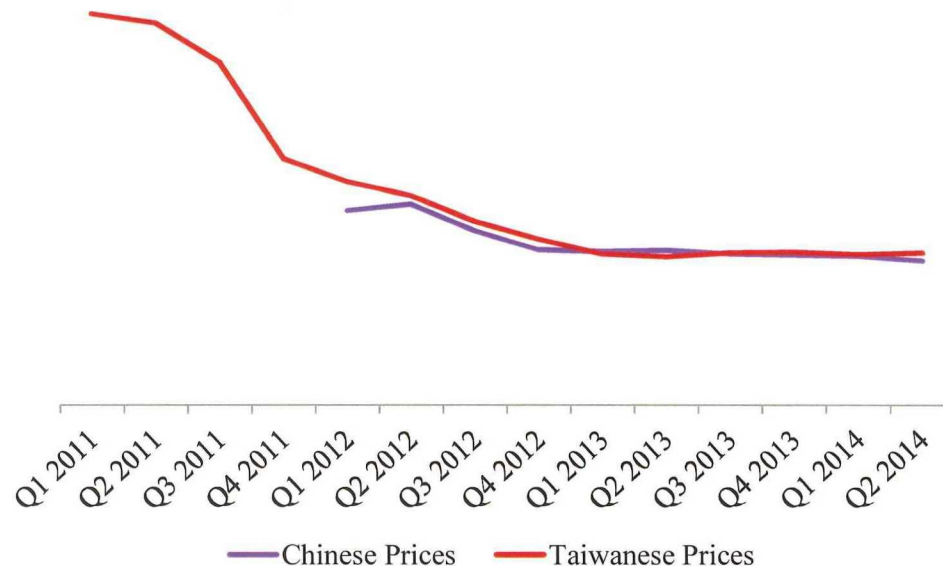


Source: Prehearing Staff Report at Table VII-10

Threat Considerations

Projected Decreases in Prices of Subject Imports

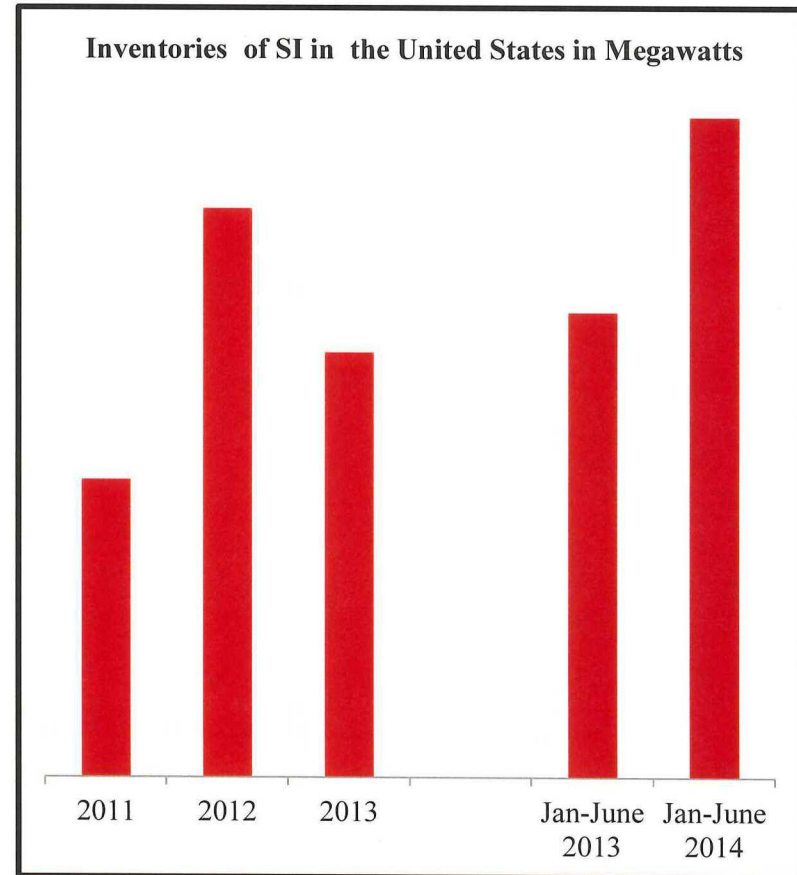
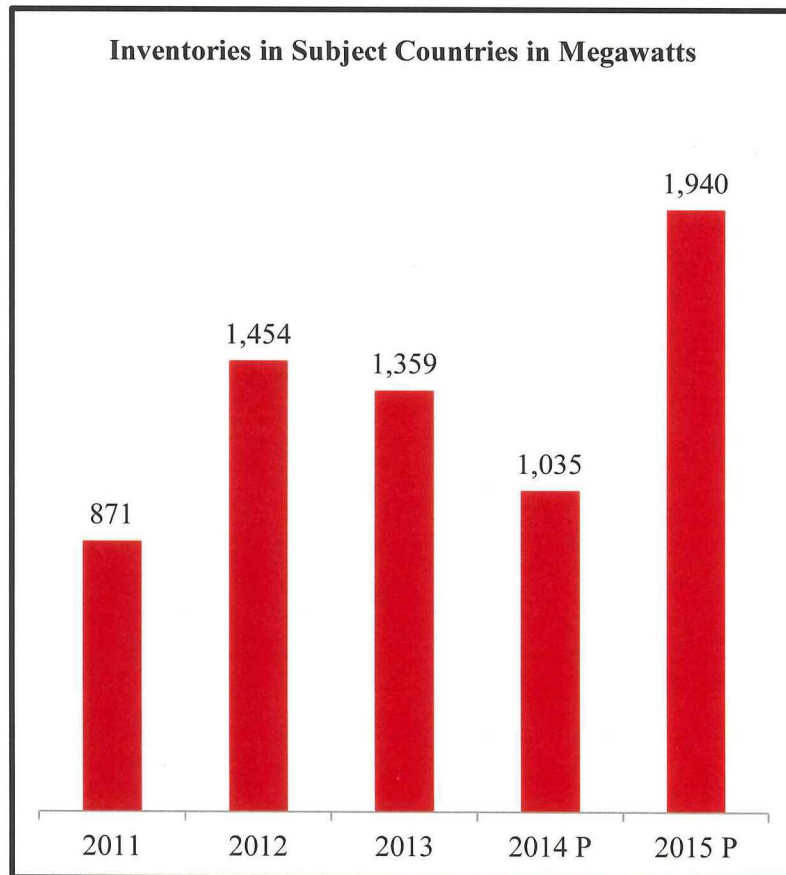
- The extensive competition from Chinese producers and high volume of excess capacity suggest the pattern of decreasing prices will continue.



Source: Prehearing Staff Report at Tables V-3 to V-10 and Solarworld's Prehearing Report at Exhibit 2

Threat Considerations

High Inventories of Subject Products in Subject Countries and in the United States



Source: Prehearing Staff Report at Table VII-10 and Table VII-11

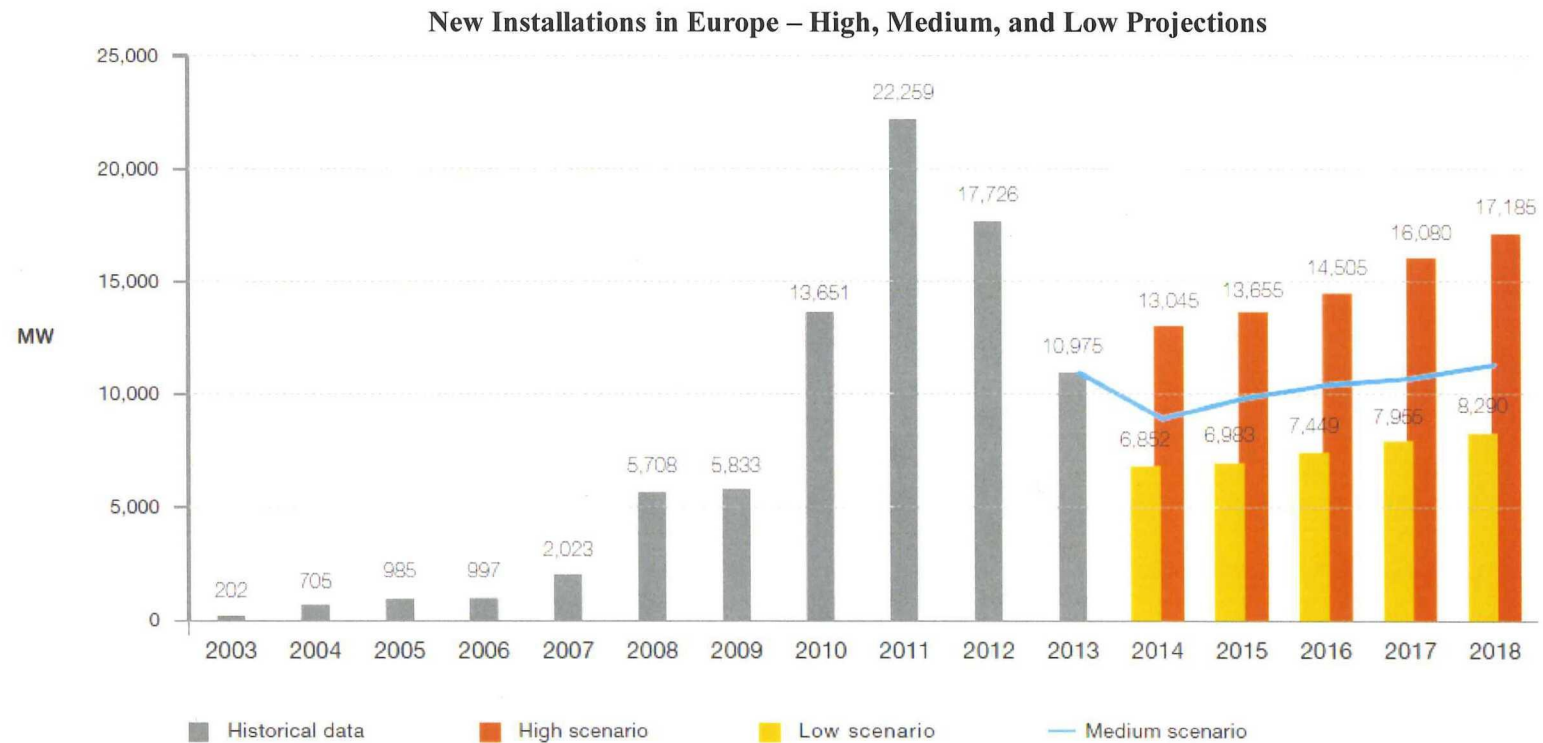
Threat Considerations

Commerce's Prelim Decision Determined Significant Countervailable Subsidies on CSPV from China

Producer / Exporter	Subsidy Rate
Wuxi Suntech Power Co., Ltd26.89	35.21
Changzhou Trina Solar Energy Co., Ltd.	18.56
All others	26.89

Threat Considerations

Projected Demand in The Largest Export Market is Below POI Levels



Source: *Global Market for Photovoltaics*, 2014-2018. European Photovoltaic Industry Association;

Threat Considerations

AD/CVD Orders in Third-Country Markets

- European Union: Quota system and minimum prices in “price undertaking” agreement for some Chinese producers, other Chinese producers subject to AD/CVD duty rates from 48% to 65%.
- Australia: Proposed dumping margins from 22% to 60% on CSPV modules and panels from China; preliminary determination scheduled for March 2015.