

**DRAFT**  
**RECOMMENDATION TO GOVERNMENTS FOR THE**  
**ESTABLISHMENT OF A U.S.-CHINA SOLAR AGREEMENT**

**Conflict:** Existing solar-related trade remedy orders and investigations between the United States and China are causing significant adverse and unintended effects across the global solar supply chain, without sufficiently addressing the underlying causes of unfair trade competition.

For example, to avoid the U.S. AD/CVD orders on imports of solar cells and modules from China, Chinese manufacturers are assembling third-country cells into modules in China and then importing these modules into the United States free of the AD/CVD orders.

In contrast, while U.S. solar cell and module producers have experienced some increase in U.S. module prices, as a result of the AD/CVD orders, given the premium Chinese producers pay for third-country cells, the price is still below levels needed to ensure a competitive U.S. module market. Thus, the U.S. AD/CVD orders are effectively serving as a tax on U.S. consumers which largely benefits third-country cell producers.

In addition, in a related case, U.S. polysilicon exports to China are currently subject to provisional AD duties in excess of 50%, while European polysilicon exports to China are currently subject to no AD duties, and exports from Korea are subject to AD duties of less than 3%.

**Solution:** The Governments of the United States and China and industry representatives should negotiate a U.S.-China Solar Agreement (Agreement), based on common goals and a win-win scenario, which would have a duration of at least five years from the date of execution and which would:

- (1) Affirm that a negotiated solution to the U.S.-China solar trade conflict is in the best interests of both countries, including the interest of promoting solar energy;
- (2) Establish a U.S. Solar Manufacturing Settlement Fund and a U.S. Solar Development Institute;
- (3) Revoke the U.S. AD/CVD orders on imports of solar cells and modules from China and the Chinese provisional AD duties on imports of polysilicon from the United States;
- (4) Terminate all existing regulatory and judicial proceedings related to the U.S. and China AD/CVD proceedings, including, but not limited to, pending appeals of the final determinations of the Commerce Department and the U.S. International Trade Commission in the U.S. case on solar cells and modules before the U.S. Court of International Trade, the U.S. Customs and Border Protection investigations into alleged

circumvention, and the Chinese AD/CVD investigations on polysilicon from the United States;

- (5) Bar the initiation of any new trade remedy investigations or other actions affecting imports of polysilicon, crystalline silicon solar wafers, cells, cell assemblies, and/or modules between the U.S. and China for the duration of the Agreement and 12 months thereafter.

## **I. Background**

The U.S. and Chinese solar industries have traditionally operated across an interdependent, mutually-satisfactory supply chain with imports and exports in relative balance. Unfortunately, recent trade conflict within the industry threatens to permanently damage both the U.S. and Chinese solar industries, with casualties growing by the day. It is also increasingly clear that (1) current trade remedy proceedings are proving ineffective at addressing the complex competitiveness challenges that exist between the U.S. and Chinese solar industries, and (2) negotiations and collaboration are urgently needed to restore balance and harmony to the U.S.-China solar trade relationship.

As noted above, reliance on litigation alone to address U.S.-China solar competitiveness issues has resulted in two primary consequences. First, in response to the imposition of U.S. antidumping and countervailing duty orders on solar cells from China, Chinese module manufacturers began sourcing third-country solar cells for assembly into modules in China. The module manufacturers then exported these products to the United States free of antidumping and countervailing duties. As a result, there has been a sharp decline in the volume of imports of Chinese-origin cells into the United States, whether imported individually or into modules, and a commensurate increase in the volume of third-country solar cells, which are mostly imported as finished modules.

Given the ability of Chinese module producers to utilize third-country cells, the U.S. AD/CVD orders have had only a limited impact on U.S. solar module prices. Thus, U.S. solar cell producers are receiving little to no benefit from the U.S. AD/CVD orders. In contrast, third-country solar cell producers have experienced a surge in orders and the ability to raise prices. Third-country cell producers, therefore, have been the primary beneficiaries of the U.S. AD/CVD orders.

Second, in a related investigation, the Chinese government, in response to the U.S. solar cell AD/CVD investigations, initiated AD/CVD investigations against imports of polysilicon from the

United States. Prior to the initiation of these investigations, most U.S. solar polysilicon production was sold into China. Polysilicon is the primary feedstock in solar modules and U.S. polysilicon has played an important role in the development of China's solar industry given its high quality, low cost, and the fact that Chinese polysilicon demand significantly exceeds domestic production.

As a result of China's polysilicon AD/CVD investigations, U.S. polysilicon manufacturers have experienced a sharp decline in orders from Chinese customers that has already led to substantial U.S. job losses. U.S. polysilicon producers are also at a significant competitive disadvantage to their European and Korean competitors.

Any resolution of the U.S.-China solar trade conflict must, therefore, address both solar cell and polysilicon trade. Fortunately, there are several positive steps the U.S. and Chinese governments could take to achieve a mutually-satisfactory resolution of this conflict, with both short-term and long-term benefits.

## **II. Solar Manufacturing Settlement Fund**

As discussed above, under the current U.S. solar cell AD/CVD framework, Chinese manufacturers are avoiding the imposition of U.S. AD/CVD duties by purchasing third-country solar cells that are then assembled into modules in China and exported to the United States. Importantly, the cost to Chinese module manufacturers for utilizing third-country solar cells is measurably higher, i.e., several cents per watt, than the cost of utilizing Chinese-origin solar cells. Thus, Chinese companies are currently paying a premium to utilize third-country cells for module exports to the United States. The U.S. AD/CVD orders, however, are intended to benefit U.S. solar manufacturers and not third-country producers.

To correct these unintended consequences and provide a win-win solution going forward, it is proposed that the United States revoke the AD/CVD orders on solar cells and modules in exchange for the Chinese solar manufacturers making monetary contributions to a U.S.-based Solar Manufacturing Settlement Fund that is established pursuant to the government-to-government agreement to settle the trade disputes.

To determine the total monetary contribution to the Solar Manufacturing Settlement Fund, the U.S. and Chinese Governments would need to jointly estimate:

- (1) The average price premium Chinese manufacturers pay to utilize third-country cells for export to the United States, based on a market economy analysis, on a per watt basis;

(2) Total U.S. consumption, measured in watts, during the term of the Agreement; and

(3) China's share of total U.S. consumption and China's expected shipments to the United States, measured in watts, during the term of the Agreement.

The total monetary contribution to the Solar Manufacturing Settlement Fund would then be calculated by:

First, multiplying the "price premium" by an agreed upon "percentage of the price premium" to obtain a per watt "settlement fee factor;" and

Second, multiplying the per watt "settlement fee factor" by China's estimated shipments to the United States, measured in watts, during the term of the Agreement.

Importantly, the above calculations assume that Chinese companies' total monetary contribution to the Solar Manufacturing Settlement Fund would be less than the premium Chinese manufacturers would pay to utilize third-country cells for solar panel exports to the United States.

The U.S. and Chinese Governments would also establish:

(1) A safeguard mechanism by which additional monies would be owed if, during the term of the Agreement, Chinese manufacturers' share of total U.S. consumption exceeded an agreed upon threshold (to prevent potential market domination); and

(2) The amount of additional monies owed under the safeguard mechanism.

In addition, the U.S. and Chinese Governments would agree to:

(1) Revoke the U.S. AD/CVD orders on imports of solar cells and modules from China;

(2) Revoke the Chinese provisional AD duties and terminate the Chinese AD/CVD investigations on imports of polysilicon from the United States;

(3) Terminate all existing regulatory and judicial proceedings related to the U.S. AD/CVD proceedings on solar cells and modules, including, but not limited to, pending appeals of the final determinations of the Commerce Department and the U.S. International Trade Commission before the U.S. Court of International Trade and the U.S. Customs and Border Protection investigations into alleged circumvention; and

- (4) Bar the initiation of any new trade remedy investigations or other actions affecting imports and exports of polysilicon, crystalline silicon solar wafers, cells, cell assemblies, and/or modules between the U.S. and China for the duration of the Agreement and 12 months thereafter.

The Government of the United States would ensure that monies in the Solar Manufacturing Settlement Fund would be used only for qualified expenditures related to the production of solar wafers, cells, and modules in the United States, such as investments in capital equipment and facilities, research and development, worker training, production inputs, and working capital.

#### A Win-Win Scenario

Chinese manufacturers' primary benefits under the Agreement:

- (1) Lower costs for exports of solar cells and modules to the United States;
- (2) Reopen U.S. market access for Chinese-origin/technology solar cells and thus facilitate the growth of China's solar cell production; and
- (3) Eliminate current and future litigation risks and costs.

U.S. solar manufacturers' primary benefits under the Agreement:

- (1) Significant monetary contribution (based on imports of all solar modules, including those made with non-Chinese cells) in place of relatively ineffective trade remedies (which exclude solar modules made from non-Chinese cells);
- (2) Ability to compete on an even playing field;
- (3) Elimination of current and future litigation risks and costs.

The Agreement would also correct the unintended consequence of U.S. polysilicon producers being impacted by the U.S.-China solar cell dispute and provide Chinese cell producers access to high quality U.S. polysilicon to support their continued growth.

### **III. Solar Development Institute**

To ensure the long-term success of U.S. solar manufacturing and help grow the U.S. solar market, a portion of the monetary contribution under the Agreement, for example 1 cent U.S. per watt, would be used to establish a self-sustaining Solar Development Institute (Institute). The Institute would focus its resources on expanding the U.S. solar market for all participants and growing the U.S. solar manufacturing base. The Institute would also serve as the primary vehicle for effecting long-term collaboration between the U.S. and Chinese solar industries, including, for example, joint research and development and collaboration on environment, health, and safety and codes and standards initiatives.