

***1033 WILL THE OMINOUS CLOUDS LOOMING ON THE HORIZON CAST A RESTRICTIVE SHADOW OVER THE GROWTH OF SOLAR POWER IN THE UNITED STATES?**

In the last three years, the world has experienced a boom in the popularity of solar power.¹ New photovoltaic installations in the United States have skyrocketed to all-time highs.² This exponential growth has been fueled by environmental awareness coupled with an increased affordability of photovoltaic solar equipment.³ The surge in the number of solar installations has the potential to evoke a substantial effect on clean energy production.⁴ On the other hand, the increase in the availability and affordability of photovoltaic cells bring substantial challenges in maintaining their sustainability.

THE RECENT SOLAR ENERGY ENVIRONMENT

Solar energy has recently become more appealing to individuals, companies, and utilities. It has been estimated that in 2000 there were about 1.4 gigawatts worth of solar power being produced globally, while today that number has radically increased to over 100 gigawatts worth of power.⁵ This amount of energy is estimated to be able to provide for the ***1034** needs of over 30 million households globally, with an annual reduction of about 53 million tons of carbon dioxide emissions.⁶

The United States has seen a large growth in photovoltaic popularity with an estimated record of 5000 megawatts of solar power being brought online in 2013.⁷ The Solar Energy Industries Association (SEIA) reports that there are about 10250 megawatts of solar power currently installed in the United States, providing enough output to supply power to approximately 1.7 million average-sized homes.⁸ The top five states for solar power production are California, Arizona, New Jersey, Nevada, and North Carolina.⁹ The SEIA also estimates that Americans installed 27 percent more photovoltaic in 2013 than they did in the previous year.¹⁰ This increase has been the result of heightened interest across the board by residential users, as well as nonresidential, and utility companies.¹¹ The American solar business is booming.

The increased use and popularity of solar power has been partially driven by lowered prices and associated incentives, all of which have made this energy option more cost effective for users.¹² In the last two years, photovoltaic prices in the United States have dropped by an average of 60 percent.¹³ The price reduction has translated into a record number of installations across the board by residential, nonresidential, and utility users.¹⁴ This continued growth of the photovoltaic industry is threatened by allegations of unfair trading practices on behalf of China and the tariff disputes that have ensued.¹⁵

I. TARIFFS AND THE LOOMING STORM

There have been increased trade tensions over the past several years between the United States and China. This escalation started prior to the United States levying tariffs ***1035** against China in 2012.¹⁶ SolarWorld filed a petition and the U.S. Department of Commerce launched an investigation based on the claim that China was dumping or selling photovoltaic cells

in the U.S. below cost.¹⁷ This complaint was brought to the United States International Trade Commission under section 733, of the amended Tariff Act of 1930.¹⁸ After a formal investigation, the Department of Commerce found it likely that photovoltaic cells were being imported from China and sold for less than the fair market value in the United States.¹⁹ Similar accusations were brought against China by the European Union in 2013.²⁰ The Commission concluded that the Chinese Government's subsidies and favorable treatment of Chinese photovoltaic cell manufacturers constituted dumping and warranted tariffs when those cells were sold abroad so that domestic manufacturers could compete with the prices.²¹ In 2012, the United States imposed tariffs of about 36 percent on photovoltaic solar cells coming from China.²²

The United States has not been the only party to accuse China of dumping photovoltaic cells.²³ The European Union separately levied tariffs against China in 2013 for dumping and unfair trade practices relating to solar cells.²⁴ These provisional punishments included a 47 percent increase on customs tariffs on solar panels.²⁵ In order to protect its local markets, the EU opened negotiations with China only after it levied the tariffs on the Chinese-produced solar cells.²⁶ As a result of these negotiations, in July of 2013, Chinese companies that agree to a minimum price for the solar panels that are sold in Europe are not penalized with additional tariffs on those products.²⁷

***1036** Meanwhile, the United States has implemented the tariffs it announced in 2012.²⁸ In response to those penalties, China has enacted a retaliatory tariff of about 50 percent on solar-grade polysilicon that is imported from the United States.²⁹ This is the main material that is used to make solar panels, and the United States is a major producer of this product.³⁰ China has also filed a complaint with the World Trade Organization against the United States over the anti-dumping tariffs that have been imposed on photovoltaic cells that are being imported into the United States.³¹ Both the United States and China are parties to the General Agreements on Tariffs and Trade of 1994 (GATT).³² As Signers of this trade agreement, the tariffs that one member is allowed to levy against another member's imports are restricted, and China alleges that the U.S. has breached this agreement.³³

On December 31, 2013, SolarWorld, a U.S. photovoltaic panel producer, filed additional anti-dumping and anti-subsidy petitions against China with the U.S. International Trade Commission, and the U.S. Department of Commerce.³⁴ SolarWorld alleges that Chinese companies are circumventing the current tariffs by having components for the photovoltaic cells sent to a country that is not affected by the tariffs, and then importing them from there into the United States.³⁵ The support for this new round of investigations has yet to be determined.³⁶ As a result of the current market situation the price for solar modules rose by 11 percent in the United States, between the first and third quarters of ***1037** 2013.³⁷ This escalation of accusations and tariffs from both sides has the potential to harm both the solar industry as well as the solar market with a drawn out trade war.

II. FOCUS ON THE FUTURE

Despite the potential conflict, both the United States and China have environmental and economic incentives to reach an agreement for the importation and exportation of solar technology. Both countries are installing record amounts of photovoltaic energy-creating capacity.³⁸ China has had severe pollution problems, and the coal used in the nation's power plants is not helping reverse this trend.³⁹ China's motivation for the large photovoltaic solar installation in 2013 of an approximately 10 Gigawatts can be partially attributed to ongoing environmental concerns.⁴⁰ As the production of photovoltaic cells in China increases due to the internal as well as global demand, they will need to import more solar-grade polysilicon. Given that the United States is a major supplier of solar-grade polysilicon, an escalated trade war could spread into other areas of trade and could have a broad negative effect on both countries.

A trade war could make it more difficult for both countries to meet current environmental law obligations and objectives. For example, China's 1996 Electricity Law states that renewable and clean energy resources are encouraged and supported by the state and that the production of power shall be done in a way to protect the environment by adopting new technology according to law.⁴¹ The United States also has an energy policy that requires the use and cost evaluation of clean energy along with incentives to qualified renewable energy providers.⁴² Not only are there national laws and policies, but also individual states have their own controls and incentives in place that necessitate the use of clean energy.⁴³ An increase in the price of solar energy could have a negative impact on the entities that operate under these constraints.

On the other hand, negotiations could potentially prove beneficial to both parties. One possible solution would be to create a similar type of agreement to the one that was ***1038** recently reached between China and the EU, where a minimum price was

set to avoid tariffs.⁴⁴ With an agreement of a price floor, there could be some protection to the photovoltaic producers here in the U.S., and the Chinese companies could benefit from the large and expanding U.S. solar market made available at a more competitive price without the added tariffs. This type of agreement could also lead the way to removing the tariffs on the solar-grade polysilicon.⁴⁵ With smart diplomacy, both countries would be able to benefit from these possible outcomes.

CONCLUSION

In order for photovoltaic cells to remain a viable and attractive power-producing option, the United States and China should reach an agreement. Current tariffs from both the United States and China could ultimately hurt the solar industries in both countries, as well as negatively affect the global market for solar cells. A downturn in global solar manufacturing and sales could also have a negative effect by making it more difficult to meet environmental objectives by decreasing the amount of new clean energy capacity created. Without international action, the price of photovoltaic cells could rise to a point where new customers would be dissuaded from installing them. An obvious option that should be attempted is bilateral negotiations. Tariffs can be continued if negotiations fail, but a continued tariff war appears to have the potential to hurt the photovoltaic industry as well as to make it more difficult to comply with environment standards.

Footnotes

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³ *Id.*

⁴ *Id.*

⁵ Diana Powers, *Solar Power Begins to Shine as Environmental Benefits Pay Off*, THE NEW YORK TIMES, November 11, 2011, http://www.nytimes.com/2013/11/11/business/energyenvironment/solar-power-begins-to-shine-as-environmental-benefits-pay-off.html?_r=0. See also EUROPEAN PHOTOVOLTAIC INDUSTRY ASSOCIATION, THE EUROPEAN PHOTOVOLTAIC INDUSTRY ASSOCIATION'S GLOBAL MARKET OUTLOOK FOR PHOTOVOLTAICS 2013-2017 REPORT, at 5, http://www.epia.org/index.php?eID=tx_nawsecuredl&u=0&file=/uploads/tx_epiapublications/GMO_2013_Final_PDF_01.pdf&t=1391326441&hash=3f42a520387f7193631db07550cd0fd5862085fb.

⁶ *Id.*

⁷ SOLAR ENERGY INDUSTRIES ASSOCIATION, Solar Industry Data, <http://www.seia.org/research-resources/solar-industry-data>.

⁸ *Id.*

⁹ *Id.*

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11 *Id.*

12 *Id.* See also European Photovoltaic Industry Association, The European Photovoltaic Industry Association's Global Market Outlook For Photovoltaics 2013-2017 Report, at 33, http://www.epia.org/index.php?eID=tx_nawsecuredl&u=0&file=/uploads/tx_epiapublications/GMO_2013_-_Final_PDF_01.pdf&t=1391475893&hash=8fd39fa756be57aa6feaabb953bb2049b05355a3.

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18 *Id.*

19 *Id.*

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22 *Id.*

23 Mark Thompson, *supra* note 20.

24 *Id.*

25 *Id.*

26 Brussels Bureau, EU strikes solar deal with China on tariffs, EUORNEWS, July 29, 2013, <http://www.euronews.com/2013/07/29/eu-strikes-solar-deal-with-china-on-tariffs/>.

27 *Id.*

28 Diane Cardwell, *supra* note 21.

29 Diane Cardwell, China's Feud With West On Solar Leads To Tax, *The New York Times*, July 18, 2013, <http://www.nytimes.com/2013/07/19/business/energy-environment/chinas-feud-with-west-on-solar-leads-to-tax.html>. See also Charles Lane, Et al., U.S. Tariffs On Chinese Solar Panels Boomerang, *The Washington Post*, August, 12, 2013, http://www.washingtonpost.com/opinions/us-tariffs-on-chinese-solar-panels-boomerang/2013/08/12/fef555e6-f577-11e2-a2f1-a7acf9bd5d3a_story.html.

30 *Id.*

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33 *Id.*

34 William Pentland, U.S. Solar Manufacturer Says Chinese Companies Evading Import Tariffs, *FORBES*, January 2, 2014, <http://www.forbes.com/sites/williampentland/2014/01/02/u-s-solar-manufacturer-says-chinese-companies-evading-import-tariffs/>. See also Eric Wesoff, With New Filing Will SolarWorld Get The Loophole Closed Or Will A Deal Be Reached?, *GREENTECH MEDIA*, January 6, 2014, <http://www.greentechmedia.com/articles/read/Breaking-Solarworld-Aims-to-Close-Loophole-in-New-Chinese-PV-Trade-Filing>.

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37 Eric Wesoff, *supra* note 34.

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42 42 U.S.C.A. § 13382, see also 42 U.S.C.A. § 13317.

⁴³ See, e.g., Ariz. Rev. Stat. Ann. § 41-1510.01; R.I. Code R. 16 1 17; Vt. Stat. Ann. tit. 30, § 8015 (West); Haw. Rev. Stat. § 235-12.5 (West); Utah Code Ann. § 63M-4-301 (West); Md. Code Regs. 01.01.2001.02; Haw. Rev. Stat. § 269-96 (West); Conn. Gen. Stat. Ann. § 16-245ff (West); Ga. Code Ann. § 48-7-29.14 (West); Conn. Gen. Stat. Ann. § 16-245n (West).

⁴⁴ Brussels Bureau, *supra* note 26.

⁴⁵ Charles Lane, *supra* note 29.