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[...](2017) **XXX** draft

COMMISSION IMPLEMENTING REGULATION (EU) .../...

of XXX

amending Commission Implementing Regulation (EU) 2017/366 and Commission Implementing Regulation (EU) 2017/367 imposing definitive countervailing and anti-dumping duties on imports of crystalline silicon photovoltaic modules and key components (i.e. cells) originating in or consigned from the People's Republic of China and repealing Commission Implementing Decision 2013/707/EU confirming the acceptance of an undertaking offered in connection with the anti-dumping and anti-subsidy proceedings concerning imports of crystalline silicon photovoltaic modules and key components (i.e. cells) originating in or consigned from the People's Republic of China for the period of application of definitive measures

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amending Commission Implementing Regulation (EU) 2017/366 and Commission Implementing Regulation (EU) 2017/367 imposing definitive countervailing and anti-dumping duties on imports of crystalline silicon photovoltaic modules and key components (i.e. cells) originating in or consigned from the People's Republic of China and repealing Commission Implementing Decision 2013/707/EU confirming the acceptance of an undertaking offered in connection with the anti-dumping and anti-subsidy proceedings concerning imports of crystalline silicon photovoltaic modules and key components (i.e. cells) originating in or consigned from the People's Republic of China for the period of application of definitive measures

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) 2016/1036 of the European Parliament and of the Council of 8 June 2016 on protection against dumped imports from countries not members of the European Union¹, and in particular Article 11(3) and Article 8(9) thereof,

Having regard to Regulation (EU) 2016/1037 of the European Parliament and of the Council of 8 June 2016 on protection against subsidised imports from countries not members of the European Union², and in particular Article 19 and Article 13(9) thereof,

Whereas:

1. PROCEDURE

1.1. Measures in force

- (1) By Regulation (EU) No 1238/2013³ the Council imposed a definitive anti-dumping duty on imports of crystalline silicon photovoltaic modules and key components (i.e. cells) originating in or consigned from the People's Republic of China ('PRC') ('the original anti-dumping investigation'). The measures took the form of an ad valorem duty ranging between 27,3 % and 64,9 %.
- (2) By Regulation (EU) No 1239/2013⁴, the Council imposed definitive countervailing duties up to 11,5 % on imports of crystalline silicon photovoltaic modules or panels and cells of the type used in crystalline silicon photovoltaic modules or panels from the People's Republic of China ('the original anti-subsidy investigation').
- (3) The China Chamber of Commerce for Import and Export of Machinery and Electronic Products ('CCCME') submitted, on behalf of a group of exporting producers, a price

¹ OJ L 176, 30.6.2016, p. 21.

² OJ L 176, 30.6.2016, p. 55.

³ Council Implementing Regulation (EU) No 1238/2013 of 2 December 2013 imposing a definitive anti-dumping duty and collecting definitively the provisional duty imposed on imports of crystalline silicon photovoltaic modules and key components (i.e. cells) originating in or consigned from the People's Republic of China (OJ L 325, 5.12.2013, p. 1).

⁴ Council Implementing Regulation (EU) No 1239/2013 of 2 December 2013 imposing a definitive countervailing duty on imports of crystalline silicon photovoltaic modules and key components (i.e. cells) originating in or consigned from the People's Republic of China (OJ L 325, 5.12.2013, p. 66).

undertaking to the Commission. By Decision 2013/423/EU⁵, the Commission accepted that price undertaking with regard to the provisional anti-dumping duty. Following the notification of an amended version of the price undertaking by a group of exporting producers together with the CCCME, the Commission confirmed by Implementing Decision 2013/707/EU⁶ the acceptance of the price undertaking as amended for the period of application of anti-dumping and countervailing definitive measures. The Commission also adopted a Decision clarifying the implementation of the undertaking⁷ and eleven Regulations withdrawing the acceptance of the undertaking for several exporting producers⁸.

- (4) By Implementing Regulation (EU) 2016/12⁹, following a partial interim review limited in scope to the benchmark used as a reference for the price adaption mechanism set out in the above undertaking, the Commission terminated the partial interim review without amending the measures.
- (5) By Implementing Regulations (EU) 2016/185¹⁰ and (EU) 2016/184¹¹, the Commission extended the definitive anti-dumping and countervailing duties on imports of crystalline silicon photovoltaic modules and key components (i.e. cells) originating in or consigned from the People's Republic of China ('PRC') to imports of crystalline silicon photovoltaic modules and key components (i.e. cells) consigned from Malaysia and Taiwan with the exception of a number of genuine producers.

⁵ Commission Decision 2013/423/EU of 2 August 2013 accepting an undertaking offered in connection with the anti-dumping proceeding concerning imports of crystalline silicon photovoltaic modules and key components (i.e. cells and wafers) originating in or consigned from the People's Republic of China (OJ L 209, 3.8.2013, p. 26).

⁶ Commission Implementing Decision 2013/707/EU of 4 December 2013 confirming the acceptance of an undertaking offered in connection with the anti-dumping and anti-subsidy proceedings concerning imports of crystalline silicon photovoltaic modules and key components (i.e. cells) originating in or consigned from the People's Republic of China for the period of application of definitive measures (OJ L 325, 5.12.2013, p. 214).

⁷ Commission Implementing Decision of 10 September 2014 accepting a proposal by a group of exporting producers together with the China Chamber of Commerce for Import and Export of Machinery and Electronic Products for clarifications concerning the implementation of the undertaking referred to in Implementing Decision 2013/707/EU; (OJ L 270 11.9.2014, p. 6).

⁸ Commission Implementing Regulations (EU) 2015/866 (OJ L 139, 5.6.2015, p.30), (EU) 2015/1403 (OJ L 218, 19.8.2015, p. 1), (EU) 2015/2018 (OJ L 295, 12.11.2015, p. 23), (EU) 2016/115 (OJ L 23, 29.1.2016, p. 47), (EU) 2016/1045 (OJ L 170, 29.6.2016, p. 5), (EU) 2016/1382 (OJ L 222, 17.8.2016, p.10), (EU) 2016/1402 (OJ L 228, 23.8.2016, p.16), (EU) 2016/1998 (OJ L 308, 16.11.2016, p. 8), (EU) 2016/2146 (OJ L 333, 8.12.2016, p. 4.), (EU) 2017/454 (OJ L 71, 16.3.2017, p. 5), (EU) 2017/941 (OJ L 142, 2.6.2017, p. 43) withdrawing the acceptance of the undertaking for several exporting producers.

⁹ Commission Implementing Regulation (EU) 2016/12 of 6 January 2016 terminating the partial interim review of the anti-dumping and countervailing measures applicable to imports of crystalline silicon photovoltaic modules and key components (i.e. cells) originating in or consigned from the People's Republic of China, (OJ L 4, 7.1.2016, p. 1).

¹⁰ Commission Implementing Regulation (EU) 2016/185 of 11 February 2016 extending the definitive anti-dumping duty imposed by Council Regulation (EU) No 1238/2013 on imports of crystalline silicon photovoltaic modules and key components (i.e. cells) originating in or consigned from the People's Republic of China to imports of crystalline silicon photovoltaic modules and key components (i.e. cells) consigned from Malaysia and Taiwan, whether declared as originating in Malaysia and in Taiwan or not, (OJ L 37, 12.2.2016, p. 76).

¹¹ Commission Implementing Regulation (EU) 2016/184 of 11 February 2016 extending the definitive countervailing duty imposed by Council Implementing Regulation (EU) No 1239/2013 on imports of crystalline silicon photovoltaic modules and key components (i.e. cells) originating in or consigned from the People's Republic of China to imports of crystalline silicon photovoltaic modules and key components (i.e. cells) consigned from Malaysia and Taiwan, whether declared as originating in Malaysia and in Taiwan or not (OJ L 37, 12.2.2016, p. 56).

- (6) By Implementing Regulation (EU) 2017/367¹² the Commission extended the definitive anti-dumping duty on imports of crystalline silicon photovoltaic modules and key components (i.e. cells) originating in or consigned from the People's Republic of China following an expiry review pursuant to Article 11(2) of Regulation (EU) 2016/1036 ('the basic anti-dumping regulation') and terminated the partial interim review investigation pursuant to Article 11(3) of the basic anti-dumping regulation ('expiry review anti-dumping investigation').
- (7) By Implementing Regulation (EU) 2017/366¹³ the Commission extended a definitive countervailing duty on imports of crystalline silicon photovoltaic modules and key components (i.e. cells) originating in or consigned from the People's Republic of China following an expiry review pursuant to Article 18(2) of Regulation (EU) 2016/1037 and terminated the partial interim review investigation pursuant to Article 19(3) of the basic anti-subsidy regulation ('expiry review anti-subsidy investigation') (the expiry review anti-dumping investigation and the expiry review anti-subsidy investigation are hereinafter commonly referred as 'expiry review investigations').
- (8) By Implementing Decision (EU) 2017/615¹⁴, the Commission accepted the proposal from the exporting producers to maintain the minimum import price ('MIP') at the level applicable in March 2017.

1.2. Initiation of a partial interim review

- (9) On 3 March 2017 the Commission initiated ex officio this partial interim review limited to the form of the measures pursuant to Article 11(3) of the basic anti-dumping Regulation and Article 19 of the basic anti-subsidy Regulation¹⁵ ('the Notice of Initiation'). The Commission's intention to initiate this review was announced in the Union Interest chapter of the two expiry review regulations as a means to strike the right balance between the diverging interests that the expiry review investigations had found to exist on the solar market for the remaining period of the measures' duration¹⁶.

1.3. Interested parties

- (10) In the Notice of Initiation, the Commission invited interested parties to contact it in order to participate in the investigations. In addition, the Commission informed the applicants, other known Union producers, known exporting producers in the PRC and the PRC authorities, the known importers, suppliers and users, traders, as well as

¹² Commission Implementing Regulation (EU) 2017/367 of 1 March 2017 imposing a definitive anti-dumping duty on imports of crystalline silicon photovoltaic modules and key components (i.e. cells) originating in or consigned from the People's Republic of China following an expiry review pursuant to Article 11(2) of Regulation (EU) 2016/1036 of the European Parliament and of the Council and terminating the partial interim review investigation pursuant to Article 11(3) of Regulation (EU) 2016/1036 (OJ L 56, 3.3.2017, p. 131).

¹³ Commission Implementing Regulation (EU) 2017/366 of 1 March 2017 imposing definitive countervailing duties on imports of crystalline silicon photovoltaic modules and key components (i.e. cells) originating in or consigned from the People's Republic of China following an expiry review pursuant to Article 18(2) of Regulation (EU) 2016/1037 of the European Parliament and of the Council and terminating the partial interim review investigation pursuant to Article 19(3) of Regulation (EU) 2016/1037 (OJ L 56, 3.3.2017, p. 1).

¹⁴ Commission Implementing Decision (EU) 2017/615 of 30 March 2017 accepting a proposal by a group of exporting producers together with the China Chamber of Commerce for Import and Export of Machinery and Electronic Products concerning the implementation of the undertaking referred to in Implementing Decision 2013/707/EU (OJ L 86, 31.3.2017, p. 14).

¹⁵ Notice of Initiation of a partial interim review of the anti-dumping and countervailing measures applicable to imports of crystalline silicon photovoltaic modules and key components (i.e. cells) originating in or consigned from the People's Republic of China; (OJ C 67, 3.3.2017, p. 16).

¹⁶ See recitals (256), (364), (336) and (369) of Regulation (EU) 2017/367.

associations known to be concerned with the initiation of the investigations and invited them to participate.

- (11) Interested parties had an opportunity to comment on the initiations of the investigations and to request a hearing with the Commission and/or the Hearing Officer in trade proceedings.

1.4. Disclosure

- (12) On 19 July 2017, the Commission disclosed to all interested parties the essential facts and considerations of the investigation and invited them to comment within 14 days.

2. Findings of the investigation

- (13) The Commission sent a request for information on 21 March 2017 to more than 100 interested parties. It received replies from 26 interested parties: two Union producers; five European upstream and downstream companies as well as three associations. It also received replies from the CCCME, the government of China, 13 exporting producers and one Malaysian exporting producer.

2.1. Variable duty under the form of a minimum import price

- (14) The current form of the measures is an ad valorem anti-dumping duty set out in Article 1 of Implementing Regulation (EU) 2017/367 and ad valorem countervailing duty set out in Article 1 of Implementing Regulation (EU) 2017/366. A price undertaking was offered by a group of cooperating exporting producers together with the CCCME and accepted by the Commission. One of the core elements of the undertaking is the minimum import price ('MIP') which is subject to a quarterly adjustment mechanism. Under the price undertaking accepted by the Commission, the MIP for the modules and cells is adjusted quarterly by reference to international spot prices of modules including Chinese prices as reported by the Bloomberg database. The undertaking was initially accepted from more than 120 companies/company groups. In the meantime, the Commission withdrew its acceptance of the undertaking for 14 companies. Twelve of these were found to have breached the undertaking while the remaining two companies had business models that made it impracticable to monitor their compliance with the undertaking. In addition, 15 other Chinese companies voluntarily withdrew from the undertaking¹⁷.
- (15) When reviewing the interests of unrelated importers and non-vertically integrated Union module manufactures in the expiry review investigations, the Commission received complaints about the heavy administrative burden put on them, while the Union producers complained about ongoing circumvention¹⁸. For instance, both the CCCME and the exporting producers have to submit monthly and quarterly reports to the Commission for the monitoring of the undertaking. These reports have been essential to verify that the annual level is not exceeded and to carry out a first analysis whether the reported sales transactions comply with the MIP.
- (16) All the interested parties who replied to the request for information considered that a variable duty in the form of a minimum import price MIP ('variable duty MIP') is a more appropriate form of measures than the previous ad valorem duty coupled with the price undertaking ('undertaking MIP'). In particular the interested parties considered that that a variable duty MIP will be more transparent, predictable and enforceable. The interested parties considered that a variable duty MIP would reduce the administrative burden and costs for the importers. Some of the interested parties encouraged the Commission to ensure that the new form of the measures does not

¹⁷ See footnote 8.

¹⁸ See recitals (253), (336) and (369) of Regulation (EU) 2017/367.

impose significant restrictions on the Union companies in terms of their business deals with manufacturers worldwide. In their view, these restrictions resulted in significant risks, liabilities, expensive due diligence and delays for the Union importers. The same parties also claimed that the existing cap on volumes of imports contained in the undertaking should be removed as it added further administrative burden and did not serve any purpose as the imports were anyway significantly below it.

- (17) The Commission accepted these points. It considered that the measures should take the form of a variable duty MIP for all imports of the product under review. The variable duty MIP means that all imports with a declared value at, or above, the MIP would not be subject to duties and customs authorities will levy duties immediately if the product is imported at a price below the MIP. The variable duty MIP will alleviate the administrative burden on the exporting producers, the importers and the Commission as the monthly reporting by the CCCME and the quarterly reporting to the Commission by all the exporting producers will no longer be necessary. In addition, the level of the variable duty MIP will be published. This will provide transparency and enable a better enforcement of the measures.
- (18) The Commission also agreed with the interested parties that the variable duty MIP should not be accompanied by a list of additional restrictions and caps. Indeed, the exports have always been well below the annual level. It will be up to the Union customs authorities to verify if the companies involved did not enter into any cross compensation agreements and other arrangements circumventing the MIP.

2.2. Distinction between mono-crystalline and multi-crystalline products

- (19) Several interested parties companies, including the Union producers, considered that there should be separate variable duty MIP for different product types. Most of the interested parties also considered that the best differentiation is based on technology i.e. mono-crystalline vs multi-crystalline (sometimes also called poly-crystalline) products. Mono-crystalline and multi-crystalline products are priced differently and the main price indexes such as *PV Insights* and *Energy Trend PV* quote separate prices for mono and multi-crystalline cells and modules. Mono-crystalline products are consistently more expensive as they have higher output per area of space. According to the price quotes by *PV Insights*¹⁹ between 1 January 2014 and 31 March 2017 the average price difference between mono-crystalline and multi-crystalline modules was EUR 0.047/W and between multi-crystalline and mono-crystalline cells was EUR 0.040/W.
- (20) The distinction between mono-crystalline and multi-crystalline products also fits into the reasoning brought forward in the expiry review investigations to strike an appropriate balance between competing interests. On the one hand, it will better protect the Union industry, which is increasingly focusing on manufacturing high-end mono-crystalline products for the rooftop sector. On the other hand, such a distinction will serve better the interests of unrelated importers and Engineering, Procurement and Construction companies ('EPCs') active in the utility-scale sector, which need access to cheap, commodity type multi-crystalline modules to be able to compete with other renewable energy sources in technology neutral tenders.
- (21) Mono-crystalline and multi-crystalline cells can be easily distinguished by customs authorities. Multi-crystalline cells are made of multi-crystalline silicon (multi-Si) consisting of small crystals. Mono-crystalline cells are made of mono-crystalline silicon (mono-Si), a continuous crystal. Mono- and multi-crystalline cells are never combined in one device, therefore there are no modules that are made with both mono-

¹⁹ Converted at the ECB's average monthly exchange rate from USD into EUR.

and multi-crystalline cells, i.e. multi modules are made exclusively of multi-crystalline cells and mono-crystalline modules are made exclusively of mono-crystalline cells. Mono-crystalline products have higher efficiency of converting sunlight into electrical current, which results in a higher output per area of space. Mono-crystalline products can be identified from multi-crystalline products by physical inspection. The multi-crystalline cell is perfectly rectangular. A mono-crystalline cell, by contrast, has its four corners cut off.

- (22) Therefore, the Commission considered that there should be separate MIPs for mono-crystalline and multi-crystalline cells and modules and each of the four product types should have its own TARIC code.

2.3. Gradual decrease of the variable duty MIP

- (23) Under the current price undertaking accepted by the Commission, the MIP for modules and cells is adjusted quarterly by reference to international spot prices of modules, including Chinese prices, as reported by the Bloomberg database (also called Bloomberg or BNEF spot prices index). When accepting the undertaking, the Commission considered that this price reflected the non-injurious price and ensured sufficient supply of the Union with the product under consideration²⁰.
- (24) In the expiry review investigations the Commission became aware that throughout most of 2016 the undertaking MIP adjustment mechanism did not follow global price decreases, and hence no longer reflected the non-injurious price, as established in the original investigation.
- (25) In addition the previous adjustment system had cut European cell users (i.e. non-vertically integrated module makers) and module users (i.e. individuals and companies purchasing solar systems) off global efficiency gains²¹.
- (26) Indeed, the evidence provided by the interested parties confirmed that the undertaking MIP stopped following the decreasing global price trend during 2016. Even if at the beginning of 2017 the MIP got significantly decreased, there was still a significant gap between the MIP and the global prices²².
- (27) Therefore the Commission investigated whether there was another benchmark, which would better reflect the non-injurious price level as established in the original investigation and global cost and price decreases.
- (28) One interested party claimed that the new MIP adaptation mechanism should be based on the solar industry learning rate. The evidence provided by all interested parties confirmed that the cost of production in the solar industry has been continuously falling, which is reflected in the learning rates of the solar industry. However, several other interested parties commented extensively why the solar industry learning rates are not suitable as a benchmark for a MIP adaptation mechanism. First the parties claimed that the studies which report learning rates estimate these rates over long periods of time. Therefore they do not reflect short term dynamics in the market. In addition, the

²⁰ See recitals (3) to (9) of Commission Decision of 2 August 2013 accepting an undertaking offered in connection with the anti-dumping proceeding concerning imports of crystalline silicon photovoltaic modules and key components (i.e. cells and wafers) originating in or consigned from the People's Republic of China (OJ L 209, 3.8.2013, p. 26).

²¹ See recitals (256), (336) and (370) of Regulation (EU) 2017/367.

²² For instance average spot price reported by PV Insights in 1st quarter 2017 were EUR 0.330/W for multi modules and EUR 0.380/W for mono modules; EUR 0.195/W for multi cells and EUR 0.218/W for mono cells. All prices were converted from USD into EUR at the ECB's average exchange rate for January, February and March. This compares to the current non-injurious minimum price established under the price undertaking for cells (EUR 0.23/W) and modules (EUR 0.46/W).

time period under consideration has a significant impact on the results. For example, the latest International Technology Roadmap for Photovoltaic (ITRPV) reports the rate of 22.5% over 40 years²³ and a rate of 39% over the last 10 years²⁴. The interested parties also claimed that the primary aim of the learning rates is not to forecast the development of prices in the near future. For instance, the ITRPV's learning rate is part of the project whose aim it is to inform suppliers and customers about anticipated technology trends and to stimulate discussion on required improvements and standards.

- (29) Finally, the learning curve rate indicates the decrease in prices for each doubling of global cumulative module shipments²⁵. Forecasting the demand is by its very nature characterised by significant uncertainty. As one of the interested parties pointed out: *'It is important to note that forecasts of future demand and growth are only educated guesses and highly dependent on factors such as the trade policies in place in different markets, changes to support schemes and changes to the regulatory framework governing solar PV in each market'*. For these reasons there are several forecasts of the evolution of the global demand, which are produced by several organisation.
- (30) The Commission accepted these arguments and noted the following. If the Commission had decided to use the learning rate for the MIP adaptation mechanism, it would have needed to assess which of these two rates would be more suitable to forecast the evolution of the cost decline in the solar sector over the next 18 months. Making such an assessment would have introduced a significant element of complexity. Furthermore, the learning curve rate indicates the decrease in prices for each doubling of global cumulative module shipments²⁶. Most of the forecast made available to the Commission predict that the cumulative solar module shipments could double in about 2020 or 2021. Therefore, as the precise prediction is impossible, the Commission would be obliged to make an educated guess and choose a precise date when the cumulative shipments will double between 1st January 2020 and 31st December 2021, which entails a high degree of uncertainty. Finally, the Commission noted that none of the downstream and upstream companies who replied to the request for information uses the solar industry learning rates to forecast the evolution of prices.
- (31) Therefore, the Commission concluded that using the solar industry learning rates to adapt the MIP would introduce considerable uncertainties, which would render any precise predictions on price developments impossible. Therefore, the Commission decided to rely on another benchmark, which is based on more recent, transparent and reliable data.
- (32) Most of the interested parties claimed that the new adjustment mechanism should be based on the price quotes by a Taiwanese market intelligence agency *PV Insights*. Only Solar World, the largest European producer considered *PV Insights* unreliable. *PV Insights* was also considered to be the most widely used by the interested parties. Several parties pointed out that the prices quoted by *PV Insights* and its price development trends were in line with the prices and trends quoted by another index

²³ International Technology Roadmap for Photovoltaic (ITRPV): Results 2017, Eighth Edition, March 2017, p.6.

²⁴ Idem p.44.

²⁵ Global cumulative shipments are broadly equivalent to global cumulative demand. The former measures the amount of modules sold by manufactures, the latter measures the amount of modules that were installed by users and started generating power. After a certain time lag the one should be equal the other, expect for a small percentage of modules that got broken in transit.

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trusted by the industry i.e. *Energy Trend PV* (run by another market intelligence also based in Taiwan). By contrast, the prices quoted by the index used at present i.e. Bloomberg database were subject to much more volatility and around December 2015 Bloomberg spot prices index started following a different trend from *PV Insights* and *Energy Trend PV*. The Bloomberg database is based on voluntary price quote submissions, which means that it has captured only a very small part of the market.

- (33) The Commission requested the ITRPV to provide more information on the solar prices that they used to calculate the solar industry learning rate. The ITRPV provided the price data and indicated that they currently use two sources - *PV Insights* and *Energy Trend PV*. Before the end of 2016, ITRPV had used a wider basket of prices, including Bloomberg spot prices index. Given that *PV Insights* is one of the two sources used by the ITRPV and that the prices quoted by *PV Insights* and *Energy Trend PV* have been broadly in line with each other, the level and evolution of prices that the ITRPV used to calculate the learning rate have been closely in line with the data reported by *PV Insights*, especially since the end of 2016.
- (34) The Commission devised a decreasing MIP system based on the *PV Insights* data, which was considered the most reliable and the most widely used by the solar industry. The starting point of this decreasing MIP system is based on the current non-injurious minimum price established under the price undertaking for cells (EUR 0.23/W) and modules (EUR 0.46/W). These prices, however, do not distinguish between the multi- and mono- products, which the new mechanism will do. The Commission found a price difference over a 3 year period between mono- and multi- cells and modules²⁷. The average of this price difference was evenly split between mono- and multi- cells and modules to establish the current non-injurious price for each product type i.e. EUR 0.210/W and EUR 0.437/W for multi-crystalline cells and modules, respectively and EUR 0.250/W and EUR 0.483/W for mono-crystalline cells and modules. These price will gradually converge towards the current prices reported by *PV Insights*²⁸ i.e. EUR 0.195/W and EUR 0.330/W for multi-crystalline cells and modules, respectively and EUR 0.218/W and EUR 0.380/W for mono-crystalline cells and modules.
- (35) This adaptation mechanism will result in MIPs, which by September 2018 will be at the level of global prices in the first quarter of 2017 (the latest available global prices for the whole quarter of the year). As the prices have been going aggressively down over the last three years, the margins of the key manufactures shrank considerably²⁹. Therefore, the Commission expected that such an aggressive drop in prices could not be sustained for much longer and the prices in September 2018 would not be significantly lower, and hence still offering some residual protection to the Union Industry.
- (36) Accordingly, the mechanism allows the convergence towards world market prices in a relatively short timeframe. First, this ensures a return to the non-injurious price level as established in the original investigation. Second, this is in line with the findings in the expiry reviews concerning the balance of interests under the Union interest test³⁰. It has furthermore the advantage to reflect better the more recent technological developments and its price saving potential for consumers, which ensures that the users in the Union will no longer be cut off from the global efficiency gains. At the same time this mechanism provides adequate protection for the Union industry to adapt to increased competitive pressure once the measures lapses.

²⁷ See recital 19.

²⁸ The average of prices reported by *PV insights* in the first quarter of 2017 for each product type.

²⁹ Bloomberg New Energy Finance, Q1 2017 Global PV Market Outlook, p14 and Bloomberg New Energy Finance, May 2017 PV Index Supply, Shipments and Prices, p. 12

³⁰ See recitals (256), (336) and (370) of Regulation (EU) 2017/367.

3. Scope of application of the variable duty MIP

- (37) The Commission noted that the price undertaking initially covered all companies cooperating in the initial investigation. Given that that the new variable duty MIP will replace this undertaking, the Commission found it appropriate that the new MIP shall only apply to those companies that were still part of the price undertaking or withdrew voluntarily without any previous issues identified by the Commission.
- (38) In return, the Commission considered that other companies should not benefit from the new MIP system and be subject to *ad valorem* duties in order not to undermine the effectiveness of the new form of measures. In particular, this exclusion should apply to companies for whom the Commission had withdrawn its acceptance of the undertaking for either breaches of the undertaking or due to impracticability of monitoring the compliance of conditions in the undertaking. Moreover, companies who had voluntarily withdrawn from the undertaking in order to ease their monitoring commitments or to pre-empt the withdrawal by the Commission should not fall under the new variable duty MIP.
- (39) Furthermore, the Commission is currently conducting investigations concerning the compliance with the price undertaking and may open new such investigations in the future for the goods that were released for free circulation while the price undertaking was still in place. It considered that an exporting producer, which following such an investigation, would be found to have breached the undertaking, even if these findings were made after the termination of the price undertaking, should not benefit from the variable duty MIP. In such hypothesis, the variable duty MIP should be no longer applicable. The Commission should remove their names from Annex VI of this regulation by the same legal act in which the non-compliance is established.
- (40) Accordingly, the variable duty MIP will only apply to the legal entities listed in the new Annex VI to be added to Commission Implementing Regulation (EU) 2017/367 and new Annex 5 to be added to the Commission Implementing Regulation (EU) 2017/366.

4. Operation of the variable duty MIP

- (41) Where goods from the legal entities listed in the new Annex VI to be added to Commission Implementing Regulation (EU) 2017/367 and new Annex 5 to be added to the Commission Implementing Regulation (EU) 2017/366 are imported at a CIF Union border price equal to or above the variable duty MIP established, no duty would be payable. If such imports are made at a price below the variable duty MIP, the definitive duty should be equal to the difference between the applicable variable duty MIP and the net free at Union frontier price, before duty. In no event shall the amount of the duty be higher than the combined *ad valorem* duty rates set in in Article 1(2) of the Commission Implementing Regulation (EU) 2017/367 and Article 1(2) of the Commission Implementing Regulation (EU) 2017/366. Accordingly, if imports are made at a price below the variable duty MIP, the lower of the difference between the applicable variable duty MIP and the net free at Union frontier price, before duty, and the combined *ad valorem* duty rates set in in Article 1(2) of the Commission Implementing Regulation (EU) 2017/367 and Article 1(2) of the Commission Implementing Regulation (EU) 2017/366 would be payable.

- (42) The Commission Implementing Decision 2013/707/EU³¹ confirming the acceptance of the undertaking, as last amended by Implementing Regulation (EU) 2017/615 needs to be repealed, because the variable duty MIP will replace the current undertaking.

HAS ADOPTED THIS REGULATION:

Article 1

Article 1 of Commission Implementing Regulation (EU) 2017/367³² is amended by the following paragraphs:

- (1) The following paragraph (2a) is inserted:

'Article 1(2a)

The amount of the definitive anti-dumping duty applicable to the products described in paragraph 1 and a new paragraph 5 and produced by the named legal entities set out in Annex VI, shall be the difference between the minimum import prices fixed in the next subparagraph and the net free-at-Union-frontier price, before duty, if the latter is lower than the former. No duty shall be collected where the net free-at-Union-frontier price is equal to or higher than the corresponding minimum import price set out in the table below. In no event shall the amount of the duty be higher than the ad valorem duty rate set out in paragraph 2.

For the purpose of the previous subparagraph, the minimum import price set out in the table below shall apply. Where it is found, following post-importation verification, that the net free-at-Union-frontier price actually paid by the first independent customer in the Union (post-importation price) is below the net free-at-Union-frontier price, before duty, as resulting from the customs declaration, and the post-importation price is lower than the minimum import price, an amount of duty equivalent to the difference between the minimum import price set out in the table below and the post-importation price shall apply, unless the application of the ad valorem duties set out in paragraph 2 plus the post-importation price lead to an amount (price actually paid plus ad valorem duty) which remains below the minimum import price set out in the table below. The minimum import price (MIP) will decrease each quarter as set in the table below for each corresponding product type:

Period of application of the MIP	MIP multi-crystalline cells (EUR/Watt)	MIP mono-crystalline cells (EUR/Watt)	MIP multi-crystalline modules (EUR/Watt)	MIP mono-crystalline modules (EUR/Watt)
From the entry into force of this regulation until 30 September 2017	0.207	0.244	0.415	0.463
From 1 October 2017 until 31 December 2017	0.204	0.237	0.394	0.442
From 1 January 2018	0.201	0.231	0.372	0.421

³¹ Commission Implementing Decision 2013/707/EU of 4 December 2013 confirming the acceptance of an undertaking offered in connection with the anti-dumping and anti-subsidy proceedings concerning imports of crystalline silicon photovoltaic modules and key components (i.e. cells) originating in or consigned from the People's Republic of China for the period of application of definitive measures (OJ L 325, 5.12.2013, p. 214).

³² OJ L 56, 3.3.2017, p. 131.

until 31 March 2018				
From 1 April 2018 until 30 June 2018	0.198	0.225	0.351	0.400
As from 1 July 2018	0.195	0.218	0.330	0.380'

The legal entities which are neither listed in paragraph 2 nor in Annex I, Annex II or Annex VI shall be subject to the combined ad valorem duty rates applicable to 'all other companies' set out in paragraph 2.'

(2) Paragraph 4 is replaced by:

'Article 1(4)

Where any new exporting producer in the People's Republic of China provides sufficient evidence to the Commission that:

- it did not export to the Union the product described in paragraph 1 in the period between 1 July 2011 and 30 June 2012 (original investigation period),
- it is not related to any exporter or producer in the People's Republic of China which is subject to the anti-dumping measures imposed by this Regulation,
- it has actually exported to the Union the product concerned after the investigation period on which the measures are based, or it has entered into an irrevocable contractual obligation to export a significant quantity to the Union,

the Commission may amend Annex I and Annex VI by adding the new exporting producer.'

(3) The following paragraph 5 is inserted:

'Article 1(5)

Multi-crystalline (also called poly-crystalline) silicon photovoltaic modules or panels shall fall within TARIC codes 8541 40 90 51, 8541 40 90 52, 8541 40 90 53, and 8541 40 90 59. Multi-crystalline modules are made out of multi-crystalline cells.

Mono crystalline silicon photovoltaic modules or panels shall fall within TARIC codes 8541 40 90 41, 8541 40 90 42, 8541 40 90 43, and 8541 40 90 49. Mono-crystalline modules are made out of mono-crystalline cells.

Multi-crystalline (also called poly-crystalline) cells of the type used in crystalline silicon photovoltaic modules or panels with a thickness of the cells not exceeding 400 µm fall within TARIC codes 8541 40 90 71, 8541 40 90 72, 8541 40 90 73, and 8541 40 90 79. Multi-crystalline cells are made of multi-crystalline silicon (multi-Si) consisting of small crystals and have a perfectly rectangular shape.

Mono-crystalline cells of the type used in crystalline silicon photovoltaic modules or panels with a thickness of the cells not exceeding 400 µm fall within TARIC codes 8541 40 90 61, 8541 40 90 62, 8541 40 90 63, and 8541 40 90 69. Mono-crystalline cells are made of monocrystalline silicon (mono-Si), a continuous crystal and have their four corners cut off.'

(4) Article 2 is replaced by:

(1) 'Imports, which were declared for release into free circulation for products falling within CN code ex 8541 40 90 (TARIC codes 8541 40 90 21, 8541 40 90 29, 8541 40 90 31 and 8541 40 90 39) which were invoiced by companies from which undertakings were accepted by the Commission and whose names were listed in the Annex of Decision 2013/707/EU, as subsequently amended, shall be exempt from the anti-dumping duty imposed by Article 1, on condition that:

- (a) a company was listed in the Annex of Decision 2013/707/EU, as subsequently amended, manufactured, shipped and invoiced directly the products referred to above or via its related company also listed in the Annex of Decision 2013/707/EU either to their related companies in the Union acting as an importer and clearing the goods for free circulation in the Union or to the first independent customer acting as an importer and clearing the goods for free circulation in the Union; and
 - (b) such imports were accompanied by an undertaking invoice which was a commercial invoice containing at least the elements and the declaration stipulated in Annex III of this Regulation
 - (c) such imports were accompanied by an Export Undertaking Certificate according to Annex IV of this Regulation
 - (d) the goods declared and presented to customs corresponded precisely to the description on the undertaking invoice.
- (2) A customs debt shall be incurred at the time of acceptance of the declaration for release into free circulation:
- (a) whenever it is established, in respect of imports described in paragraph 1, that one or more of the conditions listed in that paragraph are not fulfilled; or
 - (b) when the Commission finds that the undertaking was breached in a Regulation or Decision which refers to particular transactions and declares the relevant undertaking invoices as invalid.
- (3) In the Regulation or decision referred to in paragraph (2)(b) the Commission shall also remove the legal entity concerned from Annex VI.'
- (5) Article 3 is repealed.

Article 2

Annex VI is inserted after Annex V to Commission Implementing Regulation (EU) 2017/367.

Article 3

Commission Implementing Regulation (EU) 2017/366 is amended as follows:

- (1) The following paragraph (2a) is inserted:

'Article 1(2a)

The amount of the definitive countervailing duty applicable to the product described in paragraph 1 and a new paragraph 4 and produced by the named legal entities set out in in Annex 5 shall be the difference between the minimum import prices fixed in the next subparagraph and the net free-at-Union-frontier price, before duty, if the latter is lower than the former. No duty shall be collected where the net free-at-Union-frontier price is equal to or higher than the corresponding minimum import price set out in the table below. In no event shall the amount of the duty be higher than the ad valorem duty rate set in paragraph .

For the purpose of the previous subparagraph, the minimum import price set out in the table below shall apply. Where it is found, following post-importation verification, that the net free-at-Union-frontier price actually paid by the first independent customer in the Union (post-importation price) is below the net free-at-Union-frontier price, before duty, as resulting from the customs declaration, and the

post-importation price is lower than the minimum import price, an amount of duty equivalent to the difference between the minimum import price set out in the table below and the post-importation price shall apply, unless the application of the ad valorem duties set out in paragraph 2 plus the post-importation price lead to an amount (price actually paid plus ad valorem duty) which remains below the minimum import price set out in the table below. The minimum import price (MIP) will decrease each quarter for each corresponding product type:

Period of application of the MIP	MIP multi-crystalline cells (EUR/Watt)	MIP mono-crystalline cells (EUR/Watt)	MIP multi-crystalline modules (EUR/Watt)	MIP mono-crystalline modules (EUR/Watt)
From the entry into force of this regulation until 30 September 2017	0.207	0.244	0.415	0.463
From 1 October 2017 until 31 December 2017	0.204	0.237	0.394	0.442
From 1 January 2018 until 31 March 2018	0.201	0.231	0.372	0.421
From 1 April 2018 until 30 June 2018	0.198	0.225	0.351	0.400
As from 1 July 2018	0.195	0.218	0.330	0.380

The legal entities which are neither listed in paragraph 2 nor in Annex 1 or Annex 5 shall be subject to the combined ad valorem duty rates applicable to 'all other companies' set out in paragraph 2.'

(2) The following paragraph 4 is inserted:

Article 1(4)

Multi-crystalline (also called poly-crystalline) silicon photovoltaic modules or panels shall fall within TARIC codes 8541 40 90 51, 8541 40 90 52, 8541 40 90 53, and 8541 40 90 59. Multi-crystalline modules are made out of multi-crystalline cells.

Mono crystalline silicon photovoltaic modules or panels shall fall within TARIC codes 8541 40 90 41, 8541 40 90 42, 8541 40 90 43, and 8541 40 90 49. Mono-crystalline modules are made out of mono-crystalline cells.

Multi-crystalline (also called poly-crystalline) cells of the type used in crystalline silicon photovoltaic modules or panels with a thickness of the cells not exceeding 400 µm fall within TARIC codes 8541 40 90 71, 8541 40 90 72, 8541 40 90 73, and 8541 40 90 79. Multi-crystalline cells are made of multi-crystalline silicon (multi-Si) consisting of small crystals and have a perfectly rectangular shape.

Mono-crystalline cells of the type used in crystalline silicon photovoltaic modules or panels with a thickness of the cells not exceeding 400 µm fall within TARIC codes 8541 40 90 61, 8541 40 90 62, 8541 40 90 63, and 8541 40 90 69. Mono-crystalline cells are made of monocrystalline silicon (mono-Si), a continuous crystal and have their four corners cut off.'

(3) Article 2 is replaced by:

1. Imports, which were declared for release into free circulation for products falling within CN code ex 8541 40 90 (TARIC codes 8541 40 90 21, 8541 40 90 29, 8541 40 90 31 and 8541 40 90 39) which were invoiced by companies from which

undertakings were accepted by the Commission and whose names were listed in the Annex of 2013/707/EU³³, as subsequently amended, shall be exempt from the countervailing duty imposed by Article 1, on condition that:

- (a) a company was listed in the Annex of Decision 2013/707/EU, as subsequently amended, manufactured, shipped and invoiced directly the products referred to above or via its related company also listed in the Annex of Decision 2013/707/EU, as subsequently amended, either to their related companies in the Union acting as an importer and clearing the goods for free circulation in the Union or to the first independent customer acting as an importer and clearing the goods for free circulation in the Union; and
 - (b) such imports were accompanied by an undertaking invoice which was a commercial invoice containing at least the elements and the declaration stipulated in Annex 2 of this Regulation and
 - (c) such imports were accompanied by an Export Undertaking Certificate according to Annex 3 of this Regulation; and
 - (d) the goods declared and presented to customs correspond precisely to the description on the undertaking invoice.
2. A customs debt shall be incurred at the time of acceptance of the declaration for release into free circulation:
- (a) whenever it is established, in respect of imports described in paragraph 1, that one or more of the conditions listed in that paragraph are not fulfilled; or
 - (b) when the Commission finds that the undertaking was breached in a Regulation or Decision which refers to particular transactions and declares the relevant undertaking invoices as invalid.
3. In the Regulation or decision referred to in paragraph (2)(b) the Commission shall also remove the legal entity concerned from Annex 5.'
- (4) Article 3 is repealed.

Article 4

Annex 5 is inserted after Annex 4 to Commission Implementing Regulation (EU) 2017/366.

Article 5

Commission Implementing Decision 2013/707/EU of 4 December 2013 and Commission Implementing Decision (EU) 2017/615 of 30 March 2017 are hereby repealed.

Article 6

This Regulation shall enter into force on the day following its publication in the Official Journal of the European Union.

³³ Commission Implementing Decision 2013/707/EU of 4 December 2013 confirming the acceptance of an undertaking offered in connection with the anti-dumping and anti-subsidy proceedings concerning imports of crystalline silicon photovoltaic modules and key components (i.e. cells) originating in or consigned from the People's Republic of China for the period of application of definitive measures (OJ L 325, 5.12.2013, p. 214).

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels,

For the Commission

The President

[...]

'Annex VI to Commission Implementing Regulation (EU) 2017/367 and Annex 5 to
Commission Implementing Regulation (EU) 2017/366 (The legal entities to which
the variable duty MIP is applicable)

Name of the company	TARIC additional code
Wuxi Suntech Power Co. Ltd Suntech Power Co. Ltd Wuxi Sunshine Power Co. Ltd Luoyang Suntech Power Co. Ltd Zhenjiang Rietech New Energy Science Technology Co. Ltd Zhenjiang Ren De New Energy Science Technology Co. Ltd together with their related companies in the Union	B796
Jiangsu Aide Solar Energy Technology Co. Ltd	B798
Alternative Energy (AE) Solar Co. Ltd	B799
Anhui Chaoqun Power Co. Ltd	B800
Anji DaSol Solar Energy Science & Technology Co. Ltd	B802
Anhui Schutten Solar Energy Co. Ltd Quanjiao Jingkun Trade Co. Ltd	B801
Anhui Titan PV Co. Ltd	B803
Xi'an SunOasis (Prime) Company Limited TBEA SOLAR CO. LTD XINJIANG SANG'O SOLAR EQUIPMENT	B804
Changzhou NESL Solartech Co. Ltd	B806
Changzhou Shangyou Lianyi Electronic Co. Ltd	B807
CHINALAND SOLAR ENERGY CO. LTD	B808
ChangZhou EGing Photovoltaic Technology Co. Ltd	B811
CIXI CITY RIXING ELECTRONICS CO. LTD ANHUI RINENG ZHONGTIAN SEMICONDUCTOR DEVELOPMENT CO. LTD HUOSHAN KEBO ENERGY & TECHNOLOGY CO. LTD	B812
CNPV Dongying Solar Power Co. Ltd	B813
CSG PVtech Co. Ltd	B814
China Sunergy (Nanjing) Co. Ltd CEEG Nanjing Renewable Energy Co. Ltd CEEG (Shanghai) Solar Science Technology Co. Ltd China Sunergy (Yangzhou) Co. Ltd China Sunergy (Shanghai) Co. Ltd	B809
Dongfang Electric (Yixing) MAGI Solar Power Technology Co. Ltd	B816
EOPLLY New Energy Technology Co. Ltd SHANGHAI EBEST SOLAR ENERGY TECHNOLOGY CO. LTD	B817

JIANGSU EOPLY IMPORT & EXPORT CO. LTD	
Zhejiang Era Solar Co. Ltd	B818
GD Solar Co. Ltd	B820
Greenway Solar-Tech (Shanghai) Co. Ltd Greenway Solar-Tech (Huaian) Co. Ltd	B821
Guodian Jintech Solar Energy Co. Ltd	B822
Hangzhou Bluesun New Material Co. Ltd	B824
Hanwha SolarOne (Qidong) Co. Ltd	B826
Hengdian Group DMEGC Magnetics Co. Ltd	B827
HENGJI PV-TECH ENERGY CO. LTD	B828
Himin Clean Energy Holdings Co. Ltd	B829
Jetion Solar (China) Co. Ltd Junfeng Solar (Jiangsu) Co. Ltd Jetion Solar (Jiangyin) Co. Ltd together with their related company in the Union	B830
Jiangsu Green Power PV Co. Ltd	B831
Jiangsu Hosun Solar Power Co. Ltd	B832
Jiangsu Jiasheng Photovoltaic Technology Co. Ltd	B833
Jiangsu Runda PV Co. Ltd	B834
Jiangsu Sainty Photovoltaic Systems Co. Ltd Jiangsu Sainty Machinery Imp. And Exp. Corp. Ltd	B835
Jiangsu Shunfeng Photovoltaic Technology Co. Ltd Changzhou Shunfeng Photovoltaic Materials Co. Ltd Jiangsu Shunfeng Photovoltaic Electronic Power Co. Ltd	B837
Jiangsu Sinski PV Co. Ltd	B838
Jiangsu Sunlink PV Technology Co. Ltd	B839
Jiangsu Zhongchao Solar Technology Co. Ltd	B840
Jiangxi Risun Solar Energy Co. Ltd	B841
Jiangyin Hareon Power Co. Ltd Hareon Solar Technology Co. Ltd Taicang Hareon Solar Co. Ltd Hefei Hareon Solar Technology Co. Ltd Jiangyin Xinhui Solar Energy Co. Ltd Altusvia Energy (Taicang) Co. Ltd together with their related company in the Union	B842
Jiangxi LDK Solar Hi-Tech Co. Ltd LDK Solar Hi-Tech (Nanchang) Co. Ltd LDK Solar Hi-Tech (Suzhou) Co. Ltd	B793

Jiangyin Shine Science and Technology Co. Ltd	B843
Jinzhou Yangguang Energy Co. Ltd Jinzhou Huachang Photovoltaic Technology Co. Ltd Jinzhou Jinmao Photovoltaic Technology Co. Ltd Jinzhou Rixin Silicon Materials Co. Ltd Jinzhou Youhua Silicon Materials Co. Ltd	B795
Jinko Solar Co. Ltd Jinko Solar Import and Export Co. Ltd ZHEJIANG JINKO SOLAR CO. LTD ZHEJIANG JINKO SOLAR TRADING CO. LTD together with their related companies in the Union	B845
Juli New Energy Co. Ltd	B846
Jumao Photonic (Xiamen) Co. Ltd	B847
King-PV Technology Co. Ltd	B848
Kinve Solar Power Co. Ltd (Maanshan)	B849
GCL System Integration Technology Co. Ltd Konca Solar Cell Co. Ltd Suzhou GCL Photovoltaic Technology Co. Ltd Jiangsu GCL Silicon Material Technology Development Co. Ltd Jiangsu Zhongneng Polysilicon Technology Development Co. Ltd GCL-Poly (Suzhou) Energy Limited GCL-Poly Solar Power System Integration (Taicang) Co. Ltd GCL SOLAR POWER (SUZHOU) LIMITED GCL Solar System (Shuzhou) Limited	B850
Lightway Green New Energy Co. Ltd Lightway Green New Energy(Zhuozhou) Co. Ltd	B851
Nanjing Daqo New Energy Co. Ltd	B853
NICE SUN PV CO. LTD LEVO SOLAR TECHNOLOGY CO. LTD	B854
Ningbo Jinshi Solar Electrical Science & Technology Co. Ltd	B857
Ningbo Komaes Solar Technology Co. Ltd	B858
Ningbo South New Energy Technology Co. Ltd	B861
Ningbo Sunbe Electric Ind Co. Ltd	B862

Ningbo Ulica Solar Science & Technology Co. Ltd	B863
Perfectenergy (Shanghai) Co. Ltd	B864
Perlight Solar Co. Ltd	B865
Sumec Hardware & Tools Co. Ltd Phono Solar Technology Co. Ltd	B866
Risen Energy Co., Ltd together with its related company in the Union	B868
SHANGHAI ALEX SOLAR ENERGY SCIENCE & TECHNOLOGY CO. LTD SHANGHAI ALEX NEW ENERGY CO. LTD	B870
Shanghai BYD Co. Ltd BYD (Shangluo) Industrial Co. Ltd	B871
Shanghai Chaori Solar Energy Science & Technology Co. Ltd	B872
Propsolar (Zhejiang) New Energy Technology Co. Ltd Shanghai Propsolar New Energy Co. Ltd	B873
SHANGHAI SHANGHONG ENERGY TECHNOLOGY CO. LTD	B874
SHANGHAI SOLAR ENERGY S&T CO. LTD Shanghai Shenzhou New Energy Development Co. Ltd Lianyungang Shenzhou New Energy Co. Ltd	B875
Shanghai ST Solar Co. Ltd Jiangsu ST Solar Co. Ltd	B876
Shenzhen Sacred Industry Co. Ltd	B878
Sopray Energy Co. Ltd Shanghai Sopray New Energy Co. Ltd	B881
SUN EARTH SOLAR POWER CO. LTD NINGBO SUN EARTH SOLAR POWER CO. LTD Ningbo Sun Earth Solar Energy Co. Ltd	B882
SUZHOU SHENGLONG PV-TECH CO. LTD	B883
TDG Holding Co. Ltd	B884
Tianwei New Energy Holdings Co. Ltd Tianwei New Energy (Chengdu) PV Module Co. Ltd Tianwei New Energy (Yangzhou) Co. Ltd	B885
Wenzhou Jingri Electrical and Mechanical Co. Ltd	B886
Shanghai Topsolar Green Energy Co. Ltd	B877
Shenzhen Sungold Solar Co. Ltd	B879
Wuhu Zhongfu PV Co. Ltd	B889
Wuxi Saijing Solar Co. Ltd	B890
Wuxi Shangpin Solar Energy Science and Technology Co. Ltd	B891

Wuxi Solar Innova PV Co. Ltd	B892
Wuxi Taichang Electronic Co. Ltd China Machinery Engineering Wuxi Co.Ltd Wuxi Taichen Machinery & Equipment Co. Ltd	B893
Xi'an Huanghe Photovoltaic Technology Co. Ltd State-run Huanghe Machine-Building Factory Import and Export Corporation Shanghai Huanghe Fengjia Photovoltaic Technology Co. Ltd	B896
Xi'an LONGi Silicon Materials Corp. Wuxi LONGi Silicon Materials Co. Ltd	B897
LERRI Solar Technology (Zhejiang) Co. Ltd together with its related company in the Union	B898
Yuhuan Sinosola Science & Technology Co. Ltd	B900
Zhangjiagang City SEG PV Co. Ltd	B902
Zhejiang Fengsheng Electrical Co. Ltd	B903
Zhejiang Global Photovoltaic Technology Co. Ltd	B904
Zhejiang Heda Solar Technology Co. Ltd	B905
Zhejiang Jiutai New Energy Co. Ltd Zhejiang Topoint Photovoltaic Co. Ltd	B906
Zhejiang Kingdom Solar Energy Technic Co. Ltd	B907
Zhejiang Koly Energy Co. Ltd	B908
Zhejiang Mega Solar Energy Co. Ltd Zhejiang Fortune Photovoltaic Co. Ltd	B910
Zhejiang Shuqimeng Photovoltaic Technology Co. Ltd	B911
Zhejiang Shinew Photoelectronic Technology Co. Ltd	B912
Zhejiang Sunflower Light Energy Science & Technology Limited Liability Company Zhejiang Yauchong Light Energy Science & Technology Co. Ltd	B914
Zhejiang Sunrupu New Energy Co. Ltd	B915
Zhejiang Tianming Solar Technology Co. Ltd	B916
Zhejiang Trunsun Solar Co. Ltd Zhejiang Beyondsun PV Co. Ltd	B917
Zhejiang Wanxiang Solar Co. Ltd WANXIANG IMPORT & EXPORT CO LTD	B918
ZHEJIANG YUANZHONG SOLAR CO. LTD	B920
Zhongli Talesun Solar Co. Ltd together with its related company in the Union	B922'