- x. Minority shareholding of certain state-owned entities does not confer control and cannot be construed as evidence of state ownership or influence.
- xi. Trina's CEO's appointment to NPC is due success as entrepreneur and does not indicate influence by Chinese government.
- xii. While land-use rights are owned by state, such rights are granted after public bids and auctions.
- xiii. In case the Authority does not accept the MET claim by Trina, the normal value should be calculated based on lowest cost of production among cooperating domestic producers, or based on reliable third-country data such as from Vietnam or Malaysia.
- xiv. The Authority should determine individual duty rates for all cooperating exporters and sampling is not required in the present case.
- xv. Rule 17(3) requires determination of individual margins for each known producer, unless it becomes impractical to examine each producer. Further, adoption of sampling methodology will be prejudicial towards non-sampled producers who have cooperated and provided information in the investigation.
- xvi. Sampling violates Article 6.10.2 of the Agreement, which provides that the Authority must encourage individual participation. The same was also observed by Panel in US Shrimp (Vietnam). Further, the failure to consider voluntary response violates principles of transparency and fairness.
- xvii. Consideration of individual responses would not be unduly burdensome to the Authority, particularly since the process is simplified after adopting PCN methodology and the Authority has ample time till September 2025 to issue its findings.
- xviii. In the past, Authority has determined individual margins for each producer where even upto 17 group of companies were participating, such as in the case of Printed Circuit Boards and Resin Bonded Thin Wheels.
- xix. The number of sampled producers is too small as only 3 out of 15 groups have been selected. The Authority has sampled 18 out of 58 exporters, and 19 out of 51 exporters in the past.
- xx. While the Manual requires that the sampling should be done within 80 days, the present sampling was completed in 92 days.
- xxi. Instead of considering a cross-section of participating producers, in terms of export volumes, only the three largest exporters were selected. The Authority failed to consider volume bands, export channels and product categories during sampling, as was required as per the Manual, as considered in the case of Jute products.

G.2. Submissions by the domestic industry

- 68. The following submissions have been made by the domestic industry, with reference to determination of normal value, export price and dumping margin.
 - i. Market economy treatment claimed by the Trina Group should be rejected and normal value for the group should be determined as per provisions of Para 7 of Annexure I.

- ii. Each producer of Trina group has procured raw materials domestically in China through affiliated and unaffiliated suppliers. It is a known fact that raw materials are provided by the Chinese Government and often at subsidized rates.
- iii. The European Commission and U.S. Department of Commerce have separately determined that solar glass and aluminium extrusions were subsidized by the Chinese government.
- iv. The Authority, in various past anti-subsidy investigations, has found that utilities such as electricity and water are provided at subsidized rates by the Chinese government.
- v. As per the annual report of Trina Solar Group, two of the top 10 shareholders, are state owned entities and account for 13% of the shareholding in the company. Further, one other shareholder namely China Merchant Bank also has significant state-owned investment. This indicates that the operation of the Trina Group are likely influenced by the Chinese Government.
- vi. The Chairman and CEO of Trina Group is affiliated with China's National People's Congress indicating indirect control by the government.
- vii. The Government of China under the Chinse Property Laws grants land use rights to companies allowing them to use land at below market rate. The state tightly controls land supply using quota which is against fair competition, as determined by the Authority in past anti-subsidy investigations.
- viii. China PR should be treated as a non-market economy in accordance with Article 15(a)(i) of China's accession protocol, and the normal value should be determined in accordance with Para 7 of Annexure I to the Rules.
- ix. Normal value for all sampled producers should be determined based on weighted average cost of the domestic industry with reasonable profits.
- x. The normal value should not be based on lowest cost of production amongst domestic producers, as per the current practice of the Authority, since it should not be assumed that the producers in China are operating their plants at highly efficient cost of production.
- xi. Determining individual margins for all participating producers / exporters would be unduly burdensome on the Authority, since it would require detailed review and verification of data. Finalization of PCN methodology makes the process even more complex.
- xii. No prejudice will be caused to the non-sampled cooperative producers, as they will still benefit from lower duties based on weighted average duties of sampled producers.
- xiii. While the other interested parties took three months to submit their questionnaire response, they expect the Authority to verify data for all exporters, determine individual margins and issue final findings in just two months.
- xiv. With a sharp increase in the total number of investigations, from 21 in 2004 to 81 in 2024, reliance on approach adopted for individual margin determination in the past is misplaced.

- xv. The investigating authorities in all major jurisdictions such as USA, China, GCC and EU undertake sampling of only 2-3 producers due to the burden of determining individual margins for a large number of producers.
- xvi. While authorities in USA, Brazil, EU and Canada initiate fewer cases than India, such authorities have undertaken mandatory sampling of producers.
- xvii. Article 6.10.2 of the WTO Anti-dumping Agreement clarifies that voluntary responses may be considered, unless the number of responses is too large to make individual examination unduly burdensome.
- xviii. In US Shrimp (Vietnam), the Panel noted that there were no voluntary responses filed to be considered by the investigating authority, and did not address a situation where such voluntary responses were disregarded.
- xix. Article 6.10 of the WTO Anti-dumping Agreement and the Anti dumping Rules do not prescribe volume bands, channels, or product categories to be considered for sampling. On the contrary, Article 6.10 and the Manual of Operating Procedures provide for consideration of export volume and a cross-section data for sampling.
- xx. The Manual of SOP does not prescribe deadlines for any activity to be undertaken and is merely guidance to the Authority.
- xxi. Even though the Manual states that sampling should be done when three or more producers participate, the Authority in several cases has opted not to sample the producers despite their participation.
- xxii. The Authority has already noted in the Initiation Notification that Malaysia is not considered as a surrogate to determine normal value.

G.3. Examination by the Authority

- 69. Under section 9A(1)(c), the normal value in relation to an article means:
 - "i) The comparable price, in the ordinary course of trade, for the like article, when meant for consumption in the exporting country or territory as determined in accordance with the rules made under sub-section (6), or
 - ii) when there are no sales of the like article in the ordinary course of trade in the domestic market of the exporting country or territory, or when because of the particular market situation or low volume of the sales in the domestic market of the exporting country or territory, such sales do not permit a proper comparison, the normal value shall be either:
 - (a) comparable representative price of the like article when exported from the exporting country or territory or an appropriate third country as determined in accordance with the rules made under sub-section (6); or
 - the cost of production of the said article in the country of origin along with reasonable addition for administrative, selling and general costs, and for profits, as determined in accordance with the rules made under sub-section (6);

(b) Provided that in the case of import of the article from a country other than the country of origin and where the article has been merely transshipped through the country of export or such article is not produced in the country of export or there is no comparable price in the country of export, the normal value shall be determined with reference to its price in the country of origin."

- 70. The Authority notes that the following producers / exporters of the subject goods have filed submitted their response to the exporter's questionnaire:
 - i. Anhui Schutten Solar Energy Co. Ltd.
 - ii. Astronergy New Energy Technology (Singapore) Co.
 - iii. Canadia Solar International Ltd.
 - iv. Canadian Solar Manufacturing (Changshu) Inc.
 - v. Canadian Solar Sunenergy (Jiaxing) Co., Ltd.
 - vi. CECEP Solar Energy Technology (ZhenJiang) Co., Ltd.
 - vii. Chinaland Solar Energy Co., Ltd.
 - viii. Chint New Energy Technology (Yangcheng) Co., Ltd.
 - ix. Chint New Energy Technology Co., Ltd.
 - x. Chuzhou Jietai New Energy Technology Co. Ltd.
 - xi. Econess Energy Co., Ltd.
 - xii. Guangdong Aiko Solar Technology Co., Ltd.
 - xiii. Hefei JA Solar Technology Co., Ltd.
 - xiv. Hengdian Group DMEGC Magnetics Co., Ltd.
 - xv. Huaian Jietai New Energy Technology Co. Ltd.
 - xvi. JA Solar International Ltd.
- xvii. Jiangsu DMEGC New Energy Technology Co. Ltd.
- xviii. Jiangsu Huaheng New Energy Co., Ltd.
- xix. Jiangsu Longheng New Energy Co., Ltd.
- xx. Jinko Solar (Chuxiong) Co., Ltd.
- xxi. Jinko Solar (Chuzhou) Co, Ltd.
- xxii. Jinko Solar (Feidong) Co., Ltd.
- xxiii. Jinko Solar (Haining) Ltd.
- xxiv. Jinko Solar (Shangrao) Co., Ltd.
- xxv. Jinko Solar (Yiwu) Co., Ltd.
- xxvi. Jinko Solar Co., Ltd. (Jiangxi)
- xxvii. Jinko Solar Middle East DMCC.
- xxviii. Jinko Solar Trading Private Ltd.
 - xxix. Jolywood (Shanxi) Solar Technology Co., Ltd.
 - xxx. Jolywood (Taizhou) Solar Technology Co., Ltd.
- xxxi. Lianyungang DMEGC New Energy Technology Co. Ltd.
- xxxii. LONGi Solar Technology (Chuzhou) Co., Ltd.
- xxxiii. LONGi Solar Technology (Jiaxing) Co., Ltd.
- xxxiv. LONGi Solar Technology Co., Ltd
- xxxv. Risen Energy (Ningbo) Co., Ltd.

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xxxvi. Risen Energy Co., Ltd.
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xxxvii. Ronma Solar Technology (Jinjua) Co., Ltd.

xxxviii. Shandong Ronma Solar Co. Ltd.

xxxix. Shangrao Guangxin Jinko Photovoltaic Manufacturing Co., Ltd.

xl. Shangrao Jietai New Energy Technology Co. Ltd.

xli. Shangrao Jinko Photovoltaic Manufacturing Co., Ltd.

xlii. Solar N Plus New Energy Technology Co., Ltd.

xliii. Solarspace New Energy (Chuzhou) Co., Ltd.

xliv. Solarspace New Energy (Xuzhou) Co., Ltd.

xlv. Solarspace Technology (Suqian) Co., Ltd.

xlvi. Solarspace Technology Co., Ltd.

xlvii. Suzhou Ronma International Trade Co. Ltd.

xlviii. Tianjin Aiko Solar Technology Co., Ltd.

xlix. Tonghe New Energy (Jintang) Co., Ltd.

l. Tongwei Solar (Chengdu) Co., Ltd.

li. Tongwei Solar (HEFEI) Co., Ltd.

lii. Tongwei Solar (Jintang) Co., Ltd.

liii. Tongwei Solar (Meishan) Co., Ltd.

liv. Tongwei Solar (Pengshan) Co., Ltd.

lv. Tongwei Solar (Yangcheng) Co., Ltd.

lvi. Tongwei Solar Co., Ltd.

lvii. Trina Solar (Huai'an) Technology Co. Ltd.

lviii. Trina Solar (Suqian) Science & Technology Co. Ltd.

lix. Trina Solar (Yangcheng) New Energy Co. Ltd.

lx. Trina Solar Co. Ltd.

lxi. Trina Solar Energy Development Pte. Ltd.

lxii. Xuzhou Zhonghui Photovoltaic Technology Co., Ltd.

lxiii. Yangcheng Trina Guoneng Solar Energy Technology Co. Ltd.

lxiv. Yiwu JA Solar Technology Co., Ltd.

lxv. Yuhuan Jinko Solar Co., Ltd.

lxvi. Zhejiang Aiko Solar Technology Co., Ltd.

lxvii. Zhejiang Jinko Solar Co., Ltd.

lxviii. Zhejiang Ronma Solar Group Co. Ltd.

lxix. Zhengxin Photoelectric Technology (Suqian) Co., Ltd.

lxx. Znshine Powertek Changzhou Co., Ltd.

lxxi. Znshine PV-Tech Co., Ltd.

lxxii. Wuhu GCL System Integration New Energy Technology Co., Ltd.,

lxxiii. Hefei GCL System Integration New Energy Technology Co., Ltd.

71. As per the provisions of Rule 17, while the Authority is required to determine individual dumping margin in respect of all those producers/exporters who have filed questionnaire responses, in a situation where a large number of producers/ exporters have filed questionnaire responses, the Authority may resort to sampling by limiting the response to a limited number of producers. The Rules provides as follows in this regard.

"17(3) The designated authority shall determine an individual margin of dumping for each known exporter or producer concerned of the article under investigation:

Provided that in cases where the number of exporters, producers, importers or types of articles involved are so large as to make such determination impracticable, it may limit its findings either to a reasonable number of interested parties or articles by using statistically valid samples based on information available at the time of selection, or to the largest percentage of the volume of the exports from the country in question which can reasonably be investigated, and any selection, of exporters, producers, or types of articles, made under this proviso shall preferably be made in consultation with and with the consent of the exporters, producers or importers concerned:

Provided further that the designated authority shall, determine an individual margin of dumping for any exporter or producer, though not selected initially, who submit necessary information in time, except where the number of exporters or producers are so large that individual examination would be unduly burdensome and prevent the timely completion of the investigation."

72. In view of the large number of responses, the Authority considered sampling of foreign producers for determination of individual dumping margins. The same was proposed vide notice dated 13th March 2025 and an opportunity was given to all interested parties to provide comments on the same. Thereafter, and after considering the submissions made by the interested parties, the Authority decided the sampled producers who shall be individually investigated and the same were notified vide notice dated 28th March 2025. The sample considered was based on the volume of exports to India, with the producers having the largest volume of exports, being considered as a part of the sample. The Jinko Solar Group, Trina Group and Aiko Group, comprising of the following producers were considered as a part of the sample.

Group	Producer Name	Exporter/Trader
Trina	Trina Solar (Huai'an)	Trina Solar Energy Development
Group	Technology Co., Ltd.	Pte. Ltd. (TED)
	Trina Solar (Suqian)	
	Technology Co., Ltd.	
	Trina Solar (Yancheng) New	
	Energy Co., Ltd.	
	Trina Solar Co., Ltd.	
	Yancheng Trina Solar Guoneng	
	PV Science & Technology Co.,	
	Ltd.	
Jinko Solar	Jinko Solar (Haining) Co., Ltd.	Zhejiang Jinko Solar Co., Ltd.
Group	Jinko Solar (Yiwu) Co., Ltd.	Zhejiang Jinko Solar Co., Ltd.

		Jinko Solar (Shangrao) Co., Ltd.
		Jinko Solar (Haining) Co., Ltd.
		Jinkosolar (Chuzhou) Co., Ltd. and
		Jinkosolar Middle East DMCC
		Jinko Solar (Feidong) Co., Ltd.
		Jinkosolar Middle East DMCC
	Jinkosolar (Chuzhou) Co., Ltd.	Zhejiang Jinko Solar Co., Ltd.
	timiceciai (chazhea) cei, ziai	Jinko Solar (Haining) Co., Ltd.
	Jinko Solar (Shangrao) Co.,	Zhejiang Jinko Solar Co., Ltd.
	Ltd.	Jinko Solar (Feidong) Co., Ltd. and
	Etc.	Jinkosolar Middle East DMCC
		Yuhuan Jinko Solar Co., Ltd and
		Jinkosolar Middle East DMCC
		Jinko Solar (Yiwu) Co., Ltd. and
		Jinkosolar Middle East DMCC
		Jinkosolar (Chuzhou) Co., Ltd. and
		Jinkosolar Middle East DMCC
		Jinko Solar (Haining) Co., Ltd.
		Jinko Solar Co. Ltd.
		Jinkosolar Middle East DMCC
	Jinko Solar (Chuxiong) Co.,	Jinko Solar Co. Ltd.
	Ltd.	
	Jinko Solar (Feidong) Co., Ltd.	Jinko Solar (Yiwu) Co., Ltd. and
		Jinkosolar Middle East DMCC
		Jinko Solar (Haining) Co., Ltd.
		Zhejiang Jinko Solar Co., Ltd.
		Jinkosolar Middle East DMCC
	Shangrao Guangxin Jinko	Zhejiang Jinko Solar Co., Ltd.
	Photovoltaic Manufacturing	
	Co., Ltd	
	Shangrao Jinko Photovoltaic	Zhejiang Jinko Solar Co., Ltd.
	Manufacturing Co., Ltd	
Aiko	Zhejiang Aiko Solar	Zhejiang Aiko Solar Technology
Group	Technology Co., Ltd.	Co., Ltd.
	m: .: A.i. G.1 m. 1 1	Targray International Inc.
	Tianjin Aiko Solar Technology	Tianjin Aiko Solar Technology Co.,
	Co., Ltd.	Ltd. HI A Sumply Chain Solutions Inc.
		HLA Supply Chain Solutions Inc.
		Swelect Energy Systems PTE LIMITED
		Targray International Inc.
		Targray International Inc.

Guangdong Aiko Solar	Guangdong Aiko Solar Technology
Technology Co., Ltd.	Co., Ltd.

- 73. The Authority notes that even though only 3 Groups are selected within sample, the number of producers/exporters is much higher, with 16 producers and their exporters being selected for individual examination. Further, after considering exports made by these producers either directly, or through related or unrelated producers / traders, exports made by the sampled groups collectively account for ***% of the imports into India.
- 74. The Authority does not find merit in the contention of the interested parties that the Authority has a mandatory obligation to determine individual dumping margin for any voluntary responses filed. Rule 17(3) and its provisos make it amply clear that the Authority may limit examination to certain exporters, where necessary, in the interest of timely completion of the investigation.
- 75. Certain interested parties have contended that the Authority has undertaken individual determination of dumping margin for much larger number of producers or exporters in the other past investigations. However, the fact that a large number of producers were investigated in the past does not imply that the Authority is barred from resorting to sampling in the present case. The Authority considers that it is necessary and appropriate to resort to sampling in the present case.
- 76. With regard to the submissions that sampling has been undertaken later than the prescribed time limit, the Authority notes that Rule 17(3) of the Anti-Dumping Rules allows sampling of producers / exporters. There is no deadline in the Rules for undertaking sampling of producers/exporters in an anti-dumping investigation. In fact, sampling is not provided under Rule 6 and is instead provided under Rule 17, which further shows that the Authority may decide need for sampling after receipt of questionnaire response from interested parties under Rule 6.
- 77. With regard to the submissions that the sampling methodology does not take into account different product categories, volume bands or export channels, the Authority notes that there is no provision in law which mandatorily requires the Authority to exercise any particular criterion at the time of sampling. The Anti-dumping Rules allow the Authority to resort to sampling of a reasonable number of interested parties or articles by using statistically valid samples, or to the largest percentage of the volume of the exports from the country in question which can reasonably be investigated. This has been done in the present case. Further, all interested parties were given sufficient opportunity to comment on the proposed sampling methodology. However, none of the interested parties objected to use of such methodology at the appropriate time.

G.3.1. Determination of normal value for China PR

78. Article 15 of the China's Accession Protocol to the WTO provides as follows:

"Article VI of the GATT 1994, the Agreement on Implementation of Article VI of the General Agreement on Tariffs and Trade 1994 ("Anti-Dumping Agreement") and the SCM Agreement shall apply in proceedings involving imports of Chinese origin into a WTO Member consistent with the following:

In determining price comparability under Article VI of the GATT 1994 and the Anti-Dumping Agreement, the importing WTO Member shall use either Chinese prices or costs for the industry under investigation or a methodology that is not based on a strict comparison with domestic prices or costs in China based on the following rules:

- (i) If the producers under investigation can clearly show that market economy conditions prevail in the industry producing the like product with regard to the manufacture, production and sale of that product, the importing WTO Member shall use Chinese prices or costs for the industry under investigation in determining price comparability;
- (ii) The importing WTO Member may use a methodology that is not based on a strict comparison with domestic prices or costs in China if the producers under investigation cannot clearly show that market economy conditions prevail in the industry producing the like product with regard to manufacture, production and sale of that product.

In proceedings under Parts II, III and V of the SCM Agreement, when addressing subsidies described in Articles 14(a), 14(b), 14(c) and 14(d), relevant provisions of the SCM Agreement shall apply; however, if there are special difficulties in that application, the importing WTO Member may then use methodologies for identifying and measuring the subsidy benefit which take into account the possibility that prevailing terms and conditions in China may not always be available as appropriate benchmarks. In applying such methodologies, where practicable, the importing WTO Member should adjust such prevailing terms and conditions before considering the use of terms and conditions prevailing outside China.

The importing WTO Member shall notify methodologies used in accordance with subparagraph (a) to the Committee on Anti-Dumping Practices and shall notify methodologies used in accordance with subparagraph (b) to the Committee on Subsidies and Countervailing Measures.

Once China has established, under the national law of the importing WTO Member, that it is a market economy, the provisions of subparagraph (a) shall be terminated provided that the importing Member's national law contains market economy criteria as of the date of accession. In any event, the provisions of subparagraph (a)(ii) shall expire 15 years after the date of accession. In addition, should China establish, pursuant to the national law of the importing WTO Member, that market economy conditions prevail in a particular industry or sector, the non-market economy provisions of subparagraph (a) shall no longer apply to that industry or sector."

- 79. The applicants have cited and relied upon Article 15(a)(i) of China's Accession Protocol. The applicants have claimed that producers in China PR must be asked to demonstrate that market economy conditions prevail in their industry producing the like product with regard to the manufacturing, the production and the sale of the product under consideration. It has been stated by the applicants that in case the responding Chinese producers are not able to demonstrate that their costs and price information are market-driven, the normal value should be calculated in terms of provisions of Para 7 of Annexure-I to the Rules.
- 80. Other than the Trina Group, none of the sampled producers have claimed market economy treatment in the present case. Accordingly, the normal value for the sampled producers / exporters, barring the Trina Group, have been determined in accordance with paragraph 7 of Annexure I of the Rules which state as follows.

"In case of imports from non-market economy countries, normal value shall be determined on the basis of the price or constructed value in the market economy third country, or the price from such a third country to other countries, including India or where it is not possible, or on any other reasonable basis, including the price actually paid or payable in India for the like product, duly adjusted if necessary, to include a reasonable profit margin. An appropriate market economy third country shall be selected by the designated authority in a reasonable manner, keeping in view the level of development of the country concerned and the product in question, and due account shall be taken of any reliable information made available at the time of selection. Accounts shall be taken within time limits, where appropriate, of the investigation made in any similar matter in respect of any other market economy third country. The parties to the investigation shall be informed without any unreasonable delay the aforesaid selection of the market economy third country and shall be given a reasonable period of time to offer their comments."

81. The Authority has examined the market economy treatment claimed by the producers of the Trina Group. The producers have claimed that they are operating under market economy conditions and have procured raw materials and utilities from affiliated and unaffiliated parties at market rates. The Authority notes that while the producer has claimed that it has sourced raw materials locally from affiliated and unaffiliated parties at market prices, it is evident that the company has not established that the prices of major inputs substantially reflect market values. The Authority notes in this regard that since China is a non market economy country, the Chinese producers should establish that the prices of inputs reflect market values considering prices in the international market. Since raw material suppliers are located within China and are operating under non-market economy conditions, the Chinese producers must establish market economy situation on the basis of prices prevailing in the international market. Further, the fact that suppliers of solar glass and aluminium extrusions, the raw materials used for production of the subject goods, have received countervailable subsidies, has been determined by the investigating authorities in the EU and USA. While the producers have submitted that they have procured utilities from unaffiliated entities at market rates, the Authority has in various past anti-subsidy investigations found that utilities such as electricity and water in China are supplied by the government or local authorities at subsidized rates. Thus, the price at which the utilities have been procured by the producers cannot be said to be reflective of market values. Lastly, the domestic industry has provided evidence to show that the Chairman of the Trina Group is associated with the National People's Congress of China, which can lead to indirect influence by the government. In such a case, the Authority concludes that the Trina Group is not operating under market economy conditions and as such, the normal value for the producer has been determined as per the provisions of Para 7 of Annexure I to the Rules.

82. The applicants have claimed that the normal value should be determined on the basis of price of imports of the subject goods from Malaysia. However, the applicants have not demonstrated that Malaysia can be considered as an appropriate market economy country. Alternatively, the applicants have also claimed normal value based on the price payable in India, which is based on its cost of production, duly adjusted. The other interested parties have not adduced any other basis, amongst that listed under paragraph 7 of Annexure I of the Rules, which may form basis of determination of normal value. The Authority has therefore, determined normal value as per the price payable in India, based on cost of production of the applicant, duly adjusted for selling, general and administrative expenses and reasonable profits.

G.3.2. Export price for China PR

Export price for Guangdong Aiko Solar Technology Co., Ltd. (Guangdong Aiko), Tianjin Aiko Solar Technology Co., Ltd. (Tianjin Aiko), and Zhejiang Aiko Solar Technology Co., Ltd. (Zhejiang Aiko) (Aiko Group)

- 83. Guangdong Aiko, Tianjin Aiko and Zhejiang Aiko (collectively referred to as the "Aiko Group") exported *** MW to India during the period of investigation directly to the customers in India or through unrelated traders. Out of the total exports of the Aiko Group, the producers have exported *** MW of subject goods to India directly and have exported *** MW through unrelated traders.
 - Guangdong Aiko → Customers in India
 - Tianjin Aiko → Customers in India
 - Tianjin Aiko → Unrelated Traders in China → Customers in India
 - Zhejiang Aiko → Customers in India
 - Zhejiang Aiko → Unrelated Traders → Customers in India
- 84. The Authority notes that the unrelated traders through which exports have been made to India have not cooperated in the present investigation by filing questionnaire response. However, the exports made through such unrelated traders accounts for only ***% of the

- total exports. Accordingly, in view of small share of exports, the information submitted by the Aiko in their questionnaire response has been accepted.
- 85. The Authority has determined the net export price based on the price charged from the first unrelated customer. With respect to exports through unrelated traders, in absence of information relating to re-sale price charged by such trader, the Authority has determined the price of exports through such traders based on the price of direct exports by Tianjin Aiko and Zhejiang Aiko. Adjustments on account of ocean freight, insurance, inland transportation, port and other related charges, bank charges and credit cost have been allowed after due verification. The net export price so determined is mentioned in the table below.

Jinko Solar (Haining) Co., Ltd., Jinko Solar (Yiwu) Co., Ltd., Jinko Solar (Chuzhou) Co., Ltd., Jinko Solar (Shangrao) Co., Ltd., Jinko Solar (Chuxiong) Co., Ltd., Jinko Solar (Feidong) Co., Ltd., Shangrao Guangxin Jinko Photovoltaic Manufacturing Co., Ltd., Shangrao Jinko Photovoltaic Manufacturing Co., Ltd., Jinko Solar Co. Ltd., Zhejiang Jinko Solar Co., Ltd., Yuhuan Jinko Solar Co., Ltd., Jinko Solar Middle East DMCC, Jinko Solar Trading Private Limited (Jinko Solar Group)

- 86. Jinko Solar (Haining) Co., Ltd., Jinko Solar (Yiwu) Co., Ltd., Jinko Solar (Chuzhou) Co., Ltd., Jinko Solar (Shangrao) Co., Ltd., Jinko Solar (Chuxiong) Co., Ltd., Jinko Solar (Feidong) Co., Ltd., Shangrao Guangxin Jinko Photovoltaic Manufacturing Co., Ltd. and Shangrao Jinko Photovoltaic Manufacturing Co., Ltd. are related companies engaged in the manufacturing of subject goods in the subject country. Jinko Solar Co., Ltd., Zhejiang Jinko Solar Co., Ltd., Yuhuan Jinko Solar Co., Ltd., and Jinko Solar Middle East DMCC are involved in the export of the subject goods to India. The producers in the Jinko Solar Group have produced and exported the subject goods to unrelated customers in India through related exporters within Jinko Solar Group. Additionally, the producers in the Jinko Solar Group have also been exported to a related Indian trader, Jinko Solar Trading Private Limited, who has resold the subject goods to unrelated customers in India. All the aforementioned companies have submitted the relevant information in the prescribed questionnaire format.
 - Haining → Zhejiang Jinko → Unrelated Customers in India
 - Yiwu→Zhejiang Jinko →Unrelated Customers in India
 - Yiwu→ Zhejiang Jinko → Jinko India → Unrelated Customers in India
 - Yiwu→ Shangrao Jinko → Unrelated Customers in India
 - Yiwu→ Haining → Unrelated Customers in India
 - Yiwu→Jinko DMCC →Unrelated Customers in India
 - Yiwu→Chuzhou →Jinko DMCC →Unrelated Customers in India
 - Yiwu→ Feidong → Jinko DMCC → Unrelated Customers in India
 - Chuzhou → Zhejiang Jinko → Unrelated Customers in India
 - Chuzhou → Haining → Unrelated Customers in India
 - Shangrao→Zhejiang Jinko →Unrelated Customers in India

- Shangrao → Haining → Unrelated Customers in India
- Shangrao → Jinko DMCC → Unrelated Customers in India
- Shangrao → Chuzhou → Jinko DMCC → Unrelated Customers in India
- Shangrao → Feidong → Jinko DMCC → Unrelated Customers in India
- Shangrao → Yuhuan → Jinko DMCC → Unrelated Customers in India
- Shangrao → Yiwu → Jinko DMCC → Unrelated Customers in India
- Shangrao → Jiangxin Jinko → Jinko India → Unrelated Customers in India
- Chuxiong → Jiangxi Jinko → Jinko India → Unrelated Customers in India
- Feidong → Zhejiang Jinko → Unrelated Customers in India
- Feidong → Haining → Unrelated Customers in India
- Feidong→Jinko DMCC →Unrelated Customers in India
- Feidong→ Yiwu → Jinko DMCC → Unrelated Customers in India
- Guangxin → Zhejiang Jinko → Unrelated Customers in India
- Shangrao Jinko Photovoltaic →Zhejiang Jinko →Unrelated Customers in India
- 87. Out of the total exports of the Jinko Group, the producers have exported *** MW of subject goods to unaffiliated customers in India and have exported *** MW to the related Indian trader, which has resold the goods to unaffiliated customers in India. The Authority has verified the information submitted by the producers, exporters and related Indian importer in the Jinko Solar Group. The Authority notes that for calculation of export price for the producers, the price charged by the last exporting entity to the unaffiliated customers in India was considered as the starting point. Deductions claimed by producers and traders forming part of the channel have been adjusted to arrive at the export price. The Authority noted the affiliated Indian importer earned losses on sales of the product under consideration in India. Accordingly, such loss of the importer was adjusted. Adjustments on account of ocean freight, inland transportation, port and handling expenses, insurance, credit cost and bank charges have been allowed by the Authority after due verification. The net export price so determined is mentioned in the table below.

Trina Solar Co., Ltd (TCZ), Yancheng Trina Solar Guoneng PV Science & Technology Co., Ltd. (TYC), Trina Solar (Yancheng) New Energy Co., Ltd. (TNE(YC)), Trina Solar (Huai'an) Technology Co., Ltd. (THAT), Trina Solar (Suqian) Technology Co. (TSQT), Ltd. and Trina Solar Energy Development Pte. Ltd, Singapore (TED) (Trina Solar Group)

88. Trina Solar Co., Ltd (TCZ), Yancheng Trina Solar Guoneng PV Science & Technology Co., Ltd. (TYC), Trina Solar (Yancheng) New Energy Co., Ltd. (TNE(YC)), Trina Solar (Huai'an) Technology Co., Ltd. (THAT) and Trina Solar (Suqian) Technology Co. (TSQT), Ltd. are related companies engaged in the manufacturing of subject goods in the subject country, and have exported the goods to India through their affiliated trader and Trina Solar Energy Development Pte. Ltd, Singapore (TED), who has sold to unaffiliated

customers in India. All the aforementioned companies have submitted the relevant information in the prescribed questionnaire format.

- TCZ \rightarrow TED \rightarrow Customers in India
- TYC → TED → Customers in India
- TNEYC → TED → Customers in India
- THAT \rightarrow TED \rightarrow Customers in India
- TSOT →TED →Customers in India
- 89. The Trina Solar Group has exported *** MW of subject goods to unaffiliated customers in India through related trader. The Authority has verified the information submitted by the producers and the exporter. The Authority notes that for calculation of export price for the producers, the price charged by the last exporting entity to the unaffiliated customers in India was considered as the starting point. Deductions claimed by producers and trader forming part of the channel have been adjusted to arrive at the export price. Adjustments on account of ocean freight, inland transportation, port and handling expenses, insurance, credit cost and packing cost have been allowed by the Authority after due verification. The net export price so determined is mentioned in the table below.

Export price for other producers/exporters in China PR

90. The export price and dumping for all other cooperative non-sampled producers has been determined based on the weighted average margin determined for the cooperative sampled producers. The export price for all other producers and exporters, that have not participated in the present investigation, has been determined as per facts available. The same has been mentioned in the dumping margin table.

G.3.3. Dumping margin

91. Considering the normal value constructed as provided above, and export price as determined, the dumping margin determined for the subject country is as follows:

Dumping Margin Table

SN	Name of Producer		Volume	Normal Value	Export Price	Dumpin g Margin	Dumpin g Margin	Dumping Margin
			MW	(USD/	(USD/	(USD/	(0/.)	(Panga)
			IVI VV	MW)	MW)	MW)	(%)	(Range)
1	Jinko Solar (Haining) Co.,	Mono-	***	***	***	***	***	35-45%
	Ltd.	Module						
2	Jinko Solar (Yiwu) Co., Ltd.	Mono-	***	***	***	***	***	35-45%
		Module						
3	Jinko Solar (Chuzhou) Co.,	Mono-	***	***	***	***	***	35-45%
	Ltd.	Module						

4		Mono-	***	***	***	***	***	105-
4	Jinko Solar (Shangrao) Co.,	Cell						115%
5	Ltd	Mono-	***	***	***	***	***	10-20%
		Module						
6	Jinko Solar (Chuxiong) Co.,	Mono-	***	***	***	***	***	90-100%
	Ltd.	Cell						
7	Jinko Solar (Feidong) Co.,	Mono-	***	***	***	***	***	35-45%
	Ltd.	Module						
8	Shangrao Guangxin Jinko	Mono-	***	***	***	***	***	55-65%
	Photovoltaic Manufacturing	Module						
	Co., Ltd.							
9	Shangrao Jinko Photovoltaic	Mono-	***	***	***	***	***	55-65%
	Manufacturing Co., Ltd.	Module						
10		Mono-	***	***	***	***	***	100-
	Weighted Average – Jinko	Cell						110%
11	Group	Mono-	***	***	***	***	***	30-40%
		Module						
	Jinko Group	Weighted	***	***	***	***	***	30-40%
12	Guangdong Aiko Solar	Mono-	***	***	***	***	***	40-50%
	Technology Co., Ltd.	Cell						
13	Tianjin Aiko Solar	Mono-	***	***	***	***	***	65-75%
	Technology Co., Ltd.	Cell	di di di	ata ata ata	ata da da	districts	di di di	77.670/
14	Zhejiang Aiko Solar	Mono-	***	***	***	***	***	55-65%
1.5	Technology Co., Ltd.	Cell	***	***	***	***	***	55 (50/
15	Weighted Average – Aiko	Mono-	***	***	***	***	***	55-65%
1.6	Group	Cell	***	***	***	***	***	55 C50/
16	Trina Solar Co., Ltd.	Mono-	***	***	***	***	***	55-65%
17	Variations Tribe Cales	Module	***	***	***	***	***	20.400/
17	Yancheng Trina Solar Guoneng PV Science &	Mono-	4.4.4	4, 4, 4,	4.4.4.4	4. 4. 4.	4.4.4	30-40%
		Module						
18	Technology Co., Ltd. Trina Solar (Yancheng) New	Mono-	***	***	***	***	***	40-50%
10	Energy Co., Ltd.	Module						40-3070
19	Trina Solar (Huai'an)	Mono-	***	***	***	***	***	25-35%
	Technology Co., Ltd.	Module						23-3370
20	Trina Solar (Suqian)	Mono-	***	***	***	***	***	25-35%
	Technology Co., Ltd.	Module						25 55 70
21	Weighted Average – Trina	Mono-	***	***	***	***	***	30-40%
	Group	Module						50 10 / 0
22	Other sampled co-operating			***	***	***	***	
	producers							60-70%
23	Non-cooperating producers			***	***	***	***	85-95%
L	1 01			1		I	I	I

H. ASSESSMENT OF INJURY AND CAUSAL LINK

H.1. Submissions by other interested parties

- 92. The following submissions have been made by the other interested parties with regard to injury and causal link:
 - i. While the domestic industry has claimed different forms of injury, the WTO Panel in the case of Korea Polyacetal Resins held that a single finding on all three forms of injury is internally contradictory. Further, claiming different forms of injury cannot be permissible when one of the producers is well established and is claiming material injury.
 - ii. The domestic industry should have submitted Proforma IVA containing economic parameters for Jupiter and First Solar separately as the nature of injury is different for both companies. Further, quarter-wise information during the period of investigation for First Solar and comparison of projections with actual performance should be provided as the producer has claimed material retardation.
 - iii. Examination of material injury caused by subject imports, which includes both cells and modules, would not be fair since Jupiter only produces and sells cells and imports of modules cannot cause injury to the producer.
 - iv. Assessment of material injury caused by subject imports should be done based on parameters of producers of both cells and modules.
 - v. Cumulation of injury data for both petitioners is misleading and presents skewed results in favour of the domestic industry as First Solar did not exist in the first three years of the injury period. Many solar cell producers in India have integrated operation lines and they captively consume a large share of cells produced, forcing module producers to import cells.
 - vi. Imports by importing domestic producers should be excluded from determination of volume and price effect of imports.
 - vii. Comparison of increase in volume of imports from 2020-21 is inaccurate since the base year affected by the Covid-19 pandemic whereby imports were limited.
 - viii. While the volume of imports increased over the injury period, the demand and domestic sales of the domestic industry also increased steadily. Further, market share of domestic industry has increased, while market share of imports declined by 4%.
 - ix. Volume of imports have declined in relation to production and demand.
 - x. While the volume and price of imports increased in 2021-22, the profits of the domestic industry declined by half. As the volume of imports declined and the price remained stable, the domestic industry faced huge losses in 2022-23.
 - xi. The domestic industry has provided price undercutting only for the period of investigation instead of the injury period.
 - xii. The trend of cost of sales reported in the petition is inconsistent with Proforma IV-A.

- xiii. There is no price injury to the domestic industry as the domestic selling price continued to increase over the period. Further, while the selling price of the domestic industry has increased at a faster pace than the cost of sales, the profit before tax of the domestic industry has declined.
- xiv. Trends of post-POI period are not relevant in an original anti-dumping investigation. Further, in case post-POI import prices are considered, then post-POI performance of the domestic industry must also be examined. In any case, the volume of imports has declined in the post-POI period.
- xv. Fall in the prices of cell is not on account of dumping and rather, reflects the ideal situation wherein the producers from China have been able to lower their cost and such reduction has been passed on in price which has helped the Indian solar power projects to produce electricity at affordable prices ultimately.
- xvi. The price reductions mirror global cost trends and are not indicative of any predatory pricing.
- xvii. The overall performance of the domestic industry has improved significantly, and imposition of anti-dumping duty is unwarranted.
- xviii. All economic parameters of the domestic industry, such as capacity, production, sales volume, wages, employees and capital employed have shown a positive trend over the injury period.
- xix. Increased in installed capacity has outpaced growth in actual production and resulted in a decline in capacity utilization.
- xx. Jupiter International earned significant losses in 2022-23 and earned high profits in the period of investigation, which contradicts the claim of injury before the Authority. Further, Jupiter has admitted that it has earned profits.
- xxi. The PBDIT of the domestic industry increased by 18% as compared to the previous year, which demolishes any claims of injury.
- xxii. The domestic industry has not provided information regarding injury in open market versus DCR market separately, and the other parties have not gotten any opportunity to comment on the same.
- xxiii. Since the dumping margin and injury margin for imports from Malaysia and Vietnam is also positive, imposition of duty only in imports from China would be discriminatory.
- xxiv. While the domestic industry is claiming injury, such claim is misleading since the other solar cell producers, who have not submitted their information, are minting exorbitant margins.
- xxv. Import of solar cells from China PR by other module producers cannot cause threat of injury to Jupiter, when the producer is itself in the process of setting up production capacity for module and in view of limited supply of cells, will itself undertake imports.
- xxvi. There is no basis for consideration of a high return of 22% on the capital employed for computation of non-injurious price as Annexure III requires consideration of a reasonable return and 22% return is very high for the solar industry.

- xxvii. Consideration of 22% return on capital employed was only referred to as a guideline for the Authority when the Anti-Dumping Rules were notified and were made in relation to price control orders of 1976-77.
- xxviii. The CESTAT in the case of Bridge Stone Tyre Manufacturing held that adoption of 22% return was incorrect as it gives an inflated picture of the injury margins.
- xxix. The European Court of Justice in the case of EFMA vs Council held that the European Commission should calculate the non-injurious price considering profit margin which the industry would earn under normal market conditions.
- xxx. The royalty paid by FS India to their parent is their internal matter and such cost is not any essential product cost as per the NIP law as we read the claims of the applicants. Attempt to include such royalty is an attempt to inflate NIP.
- xxxi. There is no causal link between injury caused to domestic industry and subject imports.
- xxxii. The Authority is required to examine all factors other than subject imports which might have caused injury to the domestic industry as per Annexure II of Anti-Dumping Rules and Article 3.5 of Anti-Dumping Agreement. The same was also upheld by Appellate Body in US Hot Rolled Steel.
- xxxiii. Sharp decline in profitability of domestic industry is due to increased interest costs and depreciation costs as a result of huge capital investment and financing undertaken by First Solar who is a new producer and will take some time to stabilize its operations.
- xxxiv. The domestic industry is facing injury due to usage of outdated technology, dependency on imported or low-quality raw material, shortage of skilled labor, increased logistics and transportation costs due to geographical disadvantages and increased interest and depreciation costs on huge investments.
- xxxv. Injury to the domestic industry might have been caused by changing market dynamics such as technological disruption, fluctuating currency rates, and evolving consumer preferences.
- xxxvi. The import price increased in 2021-22 due to high freight costs on account of Russia-Ukraine conflict. The import price declined thereafter as freight costs declined, and such decline was not due to dumping.
- xxxvii. Injury to the domestic industry is likely on due to reliance on imports of raw materials as there is limited production of polysilicon wafers in India. Since new plants for production of silicon wafers are being set up, the domestic industry would become competitive in the future.
- xxxviii. Losses suffered by the domestic industry are likely due to high cost of production, since the prices of subject goods declined globally during the period of investigation. The domestic industry operates at low economy of scale, compared to global counterparts.

H.2. Submissions by the domestic industry

93. The following submissions have been made by the domestic industry with regard to the injury and causal link:

- i. The Authority in the case of Styrene Butadiene Rubber from EU, Korea RP and Thailand considered different forms of injury to different producers constituting domestic industry and this view was affirmed by the CESTAT and the Supreme Court.
- ii. Since the other interested parties have contended that FS India cannot be treated as an establishing industry for the examination of material retardation, they cannot be allowed to claim that injury to the domestic industry is on account of FS India being a new a producer and requesting separate analysis for the producer.
- iii. Since FS India and Jupiter both constitute domestic industry, their performance cannot be assessed separately, as injury analysis must be conducted for the domestic industry as a whole has also done by the Authority in the cases of Polyester Spun Yarn and Welded Stainless Steel Pipes.
- iv. As per Annexure II, an analysis must be undertaken for all dumped imports, whether made by users, traders, or domestic producers. Further, imports by domestic producers have not been segregated by the Authority in the past.
- v. The Authority examines injury for the like article as a whole, and not separately for different types of products.
- vi. There is a critical need for imposition of anti-dumping duty considering the sharp decline in prices of the subject imports over the injury period. Further the prices have declined by 55% in the subsequent period.
- vii. The volume of subject imports increased by 271% over the injury period. The volume of imports of solar cells further increased by 63% in the subsequent period.
- viii. As opposed to the claim of other parties, imports increased not just in comparison to Covid affected 2020-21, but in comparison to every year.
- ix. The domestic industry has suffered significant injury due to dumped imports.
- x. The market for subject goods is segregated into three parts. The first market caters to imports for exports, the second is DCR market wherein supplies made to government projects must be produced in India and third market is open market where the Chinese producers are dumping. Since imports from exports do not compete in domestic market and the DCR market is insulated from Chinese imports, the domestic industry has faced significant injury in the open market.
- xi. The volume of subject imports increased sharply during the injury period in absolute and relative terms.
- xii. While the imports declined in 2022-23 as the Basic Customs Duty on the subject goods was enhanced, the imports increased sharply in the period of investigation as the Chinese producers absorbed the impact of duties.
- xiii. During the period of investigation, the subject imports accounted for 79% of the total imports into the country, while imports from around 24 other countries accounted for 21% of total imports.
- xiv. While the subject imports commanded a market share of 96% during the period of investigation, the domestic industry had a market share of less than ***%.

- xv. There is no demand-supply gap as India is expanding and adding new capacities, and the imports are unnecessary which are draining the country of foreign exchange.
- xvi. If the subject imports had increased only in line with demand, the market share and profitability of domestic industry would not have declined.
- xvii. The prices of the subject imports have declined sharply over the injury period and in the subsequent period.
- xviii. The subject imports have significantly undercut the prices of the domestic industry.
- xix. As per Annexure-II, the Authority is required to examine price undercutting only for the period of investigation, and such practice has been adopted in various cases.
- xx. The sharp decline in the prices of the subject imports forced the domestic industry to sell below its costs, and prevented price increases which otherwise would have occurred.
- xxi. The installed capacity of the domestic industry increased over the period as Jupiter enhanced its production capacity and FS India commenced their commercial production during the period of investigation. As a result, the production and sales of the domestic industry increased.
- xxii. Despite having high capacities, the domestic industry was forced to curtail its production due to presence of dumped imports and it had underutilized capacities. Further, while the capacity utilization of Jupiter declined over the injury period, the plant of FS India operated at a low utilization.
- xxiii. The domestic industry faced a significant piling up of inventories, which increased by more than 50 times. Further, the domestic industry held inventories equal to almost *** months of its production and almost *** months of its sales.
- xxiv. While the domestic industry earned profits in 2020-21, its profitability declined thereafter, and it suffered significant losses. The profits of the domestic industry declined by 275% and its cash profits declined by 158%.
- xxv. During the period of investigation, the domestic industry practically earned no returns on its investments.
- xxvi. Due to the dumped imports, the domestic industry lost various contracts. Despite having various confirmed orders, the consumers cancelled or reduced the orders with FS India in favour of cheaper Chinese imports.
- xxvii. Since FS India was able to execute only limited orders despite reducing its prices, the producer faced accumulation of inventories.
- xxviii. While FS India was able to achieve optimal capacities and its targeted production volume in its first year of operations, its sales volumes were significantly lower than its projected sales. Further, while the producer project to sell at 28% above its cost, it was forced to sell 41% lower than its cost due to presence of dumped imports.
- xxix. As opposed to the argument of other interested parties, losses of FS India were not due to high depreciation or interest cost since the company accounted for

- start-up costs in its projections and anticipated losses. However, its actual losses were 69% higher than projected due to dumped imports.
- xxx. Jupiter was able to earn some profits since its sales were largely concentrated in the protected DCR market. However, it Jupiter made significant sales in the open market and was forced to match the price of Chinese imports, it would have earned huge losses.
- xxxi. The domestic industry showed healthy profitability in 2020-21 and 2021-22 when the landed prices were higher, as opposed to the claim of domestic industry operating at low economy of scale.
- xxxii. The subject imports are threatening to cause further injury to the domestic industry.
- xxxiii. The volume of subject imports has increased at significantly high rate.
- xxxiv. The producers in China are exporting to India at prices which lower than price of exports to the rest of the world.
- xxxv. The subject imports are subject to anti-dumping duty in Canada, Türkiye and the USA. Further, the subject goods are facing safeguard duties when imported into USA. Lastly, the USA has increased Basic Customs Duty on imports of solar cells from China which are practically closed all major market.
- xxxvi. The Chinese producers are unable to cell at undumped prices and have resorted to circumvention, resulting anti-circumvention investigation and extension of duties in Türkiye and the USA.
- xxxvii. The producers in China have significant idle capacities, which are much higher than their domestic demand.
- xxxviii. The producers in China are also undertaking capacity expansions, despite excess idle capacities.
- xxxix. The producers in China have a history of engaging in unfair trade practices in India, which caused severe injury to the domestic industry.
- xl. The exporters in China are exporting the subject goods to India at prices below their own cost of sales and at substantial losses in order to dispose of their inventories in light of continuous capacity expansions and limited demand.
- xli. Injury to the domestic industry has been caused by the dumped imports and the same is not account of any other known factors.
- xlii. Imports from Malaysia and Vietnam were priced higher than Chinese imports and domestic selling prices and therefore did not cause injury to the domestic industry.
- xliii. Contrary to the claim that decline in profits of the domestic industry is due to increase interest and depreciation cost, the EBIDTA of the domestic industry has declined by 57% over the injury period.
- xliv. Since the Authority always considers actual costs without adjustments for negligible interest or depreciation cost in cases of old and depreciated plants, the same cannot be adjusted in case of capacity expansions or new plants.
- xlv. Factors such as geographical location, quality of raw material, and labour skills are inherent to domestic injury and remained unchanged during the injury period.

- xlvi. Injury to the domestic industry must be examined as it exists and factors inherent to the industry cannot be considered as causing injury, as held by the Appellate Body in EU Biodiesel (Argentina) and in the case of Nippon Zeon Co. Ltd. vs. DA, and accepted by the Authority in various investigations.
- xlvii. The domestic industry has not claimed injury on account of the number of employees, salaries, overall productivity and productivity per day.
- xlviii. Contrary to claim of other parties, productivity per employee cannot increase proportionally to increase in number of employees as working hours or physical capability remains unchanged even if more employees are hired.
- xlix. The other interested parties have not provided any information to show that technological disruption, currency fluctuation, or change in consumer preference may have caused injury to the domestic industry.
- 1. Even if prices in 2021-22 were inflated by high freight costs due to Russia-Ukraine conflict, it does not explain the high import prices in 2020-21.
- li. Injury analysis cannot be undertaken only with respect to the preceding year or taking into account comparison of only end-points as held by the WTO Panel in Pakistan–BOPP and EC–Malleable Cast Iron Tube or Pipe Fittings (Brazil).
- lii. The other parties have not submitted any evidence in support of their claim that non-participating solar cell producers are minting exorbitant profits.
- liii. Injury must be examined only for the defined domestic industry and information about producers outside the scope of domestic industry is irrelevant as held by WTO Appellate Body in US –Hot-Rolled Steel Products (Japan) and by the WTO Panel in EC –Bed Linen (India).
- liv. A finding of injury does not require that all factors listed under the law should indicate injury. Rather, an industry may be suffering injury even if some factors show improvement as held by the WTO Panel in Pakistan BOPP Film (UAE) and by the CESTAT in Reliance Industries Ltd vs. DA.
- lv. FS India has paid royalty to its parent company in relation to production technology, manufacturing process, setting up and operation of plant and equipment, and manpower skill development, which should be included in the determination of non-injurious price as per Para (vii) (e) of Annexure-III.
- lvi. While the other interested parties have claimed allowing a 22% return for determination of non-injurious price is not reasonable, they have provided the return which should be allowed. Considering the reliance on the practice of European Commission and the decision of CESTAT in case of Bridge Stone Tyre Manufacturing, the Authority should allow return earned by the domestic industry in the past when it was unaffected by dumping, which was *** times higher than presently considered.
- lvii. As held by the Tribunal in Tangshan Sanyou Group Hong Kong International Trade Co. Ltd. vs. Union of India, in absence of evidence showing a different return should be allowed, a 22% return is justified as this rate has been consistently applied by the Authority in numerous cases.
- lviii. While the other interested parties have referred to the practice of the European Commission, they have failed to highlight that the Commission determines fair

selling price based on total cost of production without any adjustments as opposed to the practice of the Authority.

H.3. Examination by the Authority

- 94. The Authority has examined the arguments and counterarguments of the interested parties with regard to injury to the domestic industry. The analysis made by the Authority hereunder addresses the various submissions made by the interested parties.
- 95. In its application, the domestic industry has claimed that the subject imports have caused material retardation to the establishment of FS India Solar Ventures Private Ltd. as well as such imports have caused material injury to the domestic industry as a whole. In this regard, the domestic industry has submitted the injury information for domestic industry as a whole, including FS India and have separately submitted information injury information of FS India as compared to its projections. The other interested parties have objected to an analysis of different forms of injury to the constituents of the domestic industry. The Authority notes while FS India may be in the process of being established, the industry for manufacturing solar products has been in operation since a long time in India and therefore, the solar industry is considered to be an established industry. It is noted that the data pertaining to FS India has been included by the domestic industry in their claims for material injury. Accordingly, the Authority has examined whether the dumped imports have caused material injury to the domestic industry, including FS India. However, since the injury parameters listed under the rules are only not exhaustive and the Authority can examine any other parameters of injury that have been identified by the domestic industry and for which relevant information has been provided, the Authority has examined such other parameters of injury.
- 96. Certain interested parties have argued that the Authority must examine injury to Jupiter International and FS India separately. It has been argued that injury to the domestic industry, if any, is only on account of FS India which has faced losses and had no production during first 3 years of the injury period, while Jupiter has earned significant profits. It is noted that the Authority is required to undertake injury examination for domestic industry as a whole and not for individual constituents of the domestic industry.
- 97. Some of the interested parties have contended that the Authority must conduct separate examination for solar cells and solar modules or panels. The Authority notes that in the investigations where different product types are included within the scope of the product under consideration, the Authority undertakes separate PCN wise analysis in order to evaluate price undercutting, dumping margin and injury margin. The same has been conducted in the present investigation. In so far as injury to the domestic industry is concerned, the same is required to be undertaken for the product under consideration and not for individual types of the product under consideration.

- 98. With regard to the submissions that 2020-21 should not be considered as the base year as the same was impacted due to COVID-19, the Authority notes that the performance of the domestic industry has deteriorated in comparison with 2020-21, 2021-22 as well as 2022-23. Consideration of different base year would not have made any difference in the eventual conclusion in so far as injury to the domestic industry is concerned. As far as dumping margin, injury margin and price undercutting is concerned, the same have, in any case, been determined based on the period of investigation
- 99. With regards to the argument that imports made by domestic producers must be excluded from the injury analysis, it is noted that as per Rule 11(2) and provisions of Annexure II to the Anti-dumping Rules, the Authority is required to examine injury caused to the domestic industry due to dumped imports, having regards to the volume of dumped imports, the effect on domestic prices of such dumped imports and the consequent impact of the same on the domestic industry. The Rules require consideration of dumped imports, irrespective of the fact whether such imports have been made by a user, importer or a domestic producer.
- 100. With regard to the submissions that other domestic producers have earned exorbitant profits and have not claimed injury, the Authority notes that the injury analysis is conducted for the domestic industry. Since the applicant's accounts for a major proportion of the total domestic production, only injury to the domestic industry is relevant in the present investigation. It is also noted that no verifiable information has been provided with regard to profits of such other domestic producers, and the imports are not permitted for all applications in the Country. Thus, if other domestic producers are not suffering injury because of sales in non-competing market (where imports are not permitted) and if the domestic industry has suffered injury in the market where imports are permitted, the same at the least establishes that injury to the domestic industry in these markets are due to dumped imports, while "no injury" to other domestic producers is due to "no dumping" in that market.
- 101. As regard the argument that certain economic parameters of the domestic industry have shown positive movement which demonstrates absence of injury, the Authority notes that while all the factors as listed under Article 3.4 of the WTO Agreement are required to be examined, there is no requirement that each of the factors listed must show injury, or a positive movement in any or some factors indicates absence of injury to the domestic industry. The Authority notes that it is well established legal position that all economic parameters need not show deterioration or injury, and improvement in some parameters does not mean no injury to the domestic industry. In the present case, while the volume parameters of the domestic industry have witnessed improvement due to expansion and addition of capacities, its price parameters have shown significant deterioration. Further, even when the volume parameters have shown improvement, the domestic industry has claimed volume injury, as analysed in detail in relevant paragraph hereinbelow.

H.3.1. Volume effect of the dumped imports

a) Assessment of demand / apparent consumption

102. The Authority, for the purpose of the present investigation, has defined demand or apparent consumption of the product in India as the sum of domestic sales of the Indian producers and imports from all sources. The domestic industry has claimed that there have been imports into the country one form of the product which are ultimately reexported in a different form and such imports did not compete in the Indian market. Since these imports were in one form of the product under consideration and exports were in other form of the product, the domestic industry contended that these should not be included in quantification of demand. Such imports have been separately identified. The demand so assessed is given in the table below.

Particulars	Unit	2020-21	2021-22	2022-23	POI		
Sales of domestic industry	Indexed	100	83	107	213		
Sales of other Indian producers (excluding sales out of imports of cells by these producers)	Indexed	100	122	142	175		
Subject imports	MW	9,061	32,120	6,492	30,723		
Other imports	MW	649	804	3,254	9,346		
Re-export	MW	(431)	(1,583)	(53)	(3,135)		
Total demand							
Excluding re-exports	Indexed	100	297	110	358		
Including re-exports	Indexed	100	300	107	372		

103. The Authority notes that the demand for the subject goods in India has increased over the injury period.

b) Import Volumes from the subject countries

104. With regard to the volume of the imports, the Authority is required to consider whether there has been a significant increase in imports, either in absolute terms or relative to production or consumption in India. The import volumes from subject countries during the injury period are as per table below.

Particulars	Unit	2020-21	2021-22	2022-23	POI		
Subject imports	MW	9,061	32,120	6,492	30,723		
Other imports	MW	649	804	3,254	9,346		
Re-export	MW	(431)	(1,583)	(53)	(3,135)		
Total imports (excluding re- export)	MW	9,280	31,341	9,693	36,933		
Total imports (including re- export)	MW	9,710	32,924	9,746	40,069		
Subject imports in relation to:							

Total imports	%	93%	98%	67%	77%
Production	%	***	***	***	***
Trend	Indexed	100	390	71	61
Consumption	%	***	***	***	***
Trend	Indexed	100	118	67	91

105. The Authority notes that –

- a. The volume of subject imports has increased significantly over the injury period. In 2021-22, the volume of imports was more than double the imports in 2020-21. The volume of imports declined in 2022-23. The domestic industry has claimed that such decline was on account of the fact that Basic Customs Duty on the subject goods were increased. However, the volume of imports has increased during the period of investigation, despite higher customs duty in this period. As compared to the previous year, the volume of imports increased by 373% and by 240% when compared to 2020-21. The domestic industry submitted that the increase in imports in the period of investigation is due to steep reduction in the prices by the Chinese producers, and resultantly dumping in the Country.
- b. The volume of imports in relation to production and consumption have followed similar trends. During the period of investigation, the volume of imports was ***% of the domestic industry's production.
- c. The subject imports in relation to the Indian consumption were also very high, at ***% in the period of investigation.
- d. It is noted that the imports in relation to consumption were higher during the base year, with the imports accounting for ***% and ***% during the first two years respectively. The share of imports declined in 2022-23. However, the situation has reversed in the period of investigation, with the imports again commanding a much higher share in relation to consumption.
- e. The subject imports accounted for 77% of the total imports from all sources.
- 106. With regards the argument that the subject imports have increased in line with the increase in demand, the Authority notes that (a) the subject imports have increased at a rate higher than the rate of increase in demand in India, (b) there was continuous and significant reduction in prices (as analysed separately hereinbelow).

Particulars	Unit	2020-21	2021-22	2022-23	POI
Subject imports	MW	9,061	32,120	6,492	30,723
Change	%		255%	-80%	373%
Demand	MW	***	***	***	***
Change	%		197%	-63%	225%

H.3.2. Price effect of the dumped imports

107. With regard to the price effect of the imports from the subject countries, it is required to be analysed whether there has been a significant price undercutting by the alleged imports as compared to price of the like article in India, or whether the effect of such imports is otherwise to depress prices or prevent price increases, which otherwise would have occurred in the normal course. The impact on the prices of the domestic industry on account of the imports from the subject countries has been examined with reference to price undercutting, price suppression and price depression, if any.

a. Price undercutting

108. For the purpose of price undercutting analysis, the selling price of the domestic industry has been compared with the landed price of imports from subject countries. In this regard, a comparison has been made between the landed value of the product and the average selling price of the domestic industry, net of all rebates and taxes, at the same level of trade. In order to ensure a fair comparison, the Authority has calculated the PCN-wise price undercutting.

		Mono-	Multi-	Solar	
Particulars	Unit	crystalline	crystalline	modules /	PUC
		cells	cells	Panels	
Import volume	MW	12,722	10	17,990	30,722
Net sales realization	₹/Watt	***	***	***	***
Landed price	₹/Watt	7.92	8.37	18.56	14.15
Price undercutting	₹/Watt	***	***	***	***
Price undercutting	%	***	***	***	***
Price undercutting	Range	55-65%	Negative	Negative	0-10%

- 109. The Authority notes that while for some PCNs, the price undercutting is positive, for other PCNs, the price undercutting is negative. In case of mono-crystalline cells, the price undercutting is significantly positive. The price undercutting for product as a whole is also positive and significant.
- 110. As regard the submissions by the other interested parties that price undercutting has been reported only for the period of investigation and has not been provided for the previous years, it is clarified that price undercutting is required to be examined only in the period of investigation. The Authority has analysed trends of selling price, cost of sales and landed price for the injury period as a whole in the analysis for price suppression and depression.

b. Price suppression/depression

111. In order to determine whether the dumped imports are depressing the domestic prices to a significant degree or whether the effect of such imports is to suppress price to a significant degree or prevent price increase which otherwise would have occurred in normal course, the Authority has examined the changes in the costs and prices of the domestic industry over the injury period.

Particulars	Unit	2020-21	2021-22	2022-23	POI					
Multi-crystalline	Multi-crystalline cells									
Cost of sales	₹/W	***	***	***	***					
Trend	Indexed	100	129	161	133					
Selling price	₹/W	***	***	***	***					
Trend	Indexed	100	112	124	81					
Landed price	₹/W	7.32	10.17	12.98	8.37					
Trend	Indexed	100	139	177	114					
Monocrystalline	cells									
Cost of sales	₹/W	-	-	***	***					
Trend	Indexed	-	-	100	49					
Selling price	₹/W	-	-	***	***					
Trend	Indexed	-	-	100	87					
Landed price	₹/W	7.98	12.25	14.13	7.92					
Trend	Indexed	100	141	153	84					
Module / panel										
Cost of sales	₹/W	-	-	-	***					
Trend	Indexed	-	-	-	100					
Selling price	₹/W	-	-	-	***					
Trend	Indexed	-	-	-	100					
Landed price	₹/W	17.38	18.00	26.41	18.56					
Trend	Indexed	100	104	152	107					

112. It is noted that with respect to multi-crystalline cells, the cost of sales of the domestic industry has increased over the injury period. However, the selling price of the domestic industry did not increase commensurate to the cost, till previous year, and has declined significantly during the period of investigation. This is due to the fact that the landed price of the imports also declined and during the period of investigation, was lower than the cost of the domestic industry forcing it to reduce its prices in order to compete with the imports. The subject imports forced the domestic industry to reduce its selling price and sell at prices below its costs. Thus, the subject imports have significantly depressed and supressed the prices of the domestic industry in the market.

- 113. In case of mono-crystalline cells, the domestic industry commenced production in December 2022. Once the capacities of the domestic industry became operational, the landed price of the imports declined sharply and even below the cost and selling price of the domestic industry. Since the domestic industry started production only in December, 2022, the cost of production in 2022-23 were higher due to startup operations.
- 114. With respect to modules, the domestic industry commenced production in August 2023. Even in case of modules, as soon as the capacities of the domestic industry became fully operational, the landed price of the imports declined sharply and even below the cost of the domestic industry.
- 115. With regards to the argument that the selling price of the domestic industry has declined over the injury period and at a much faster pace than increase in cost, the Authority notes that the information on record demonstrates that the domestic industry was unable to increase its selling price in line with the increase in its cost in case of Mult crystalline cells, due to the pressure created by the low-priced imports. In case of monocrystalline cells and solar modules, the selling price of the domestic industry remained below costs, due to presence of dumped imports in the market.
- 116. The other interested parties have submitted that the import price increased in 2021-22 and 2022-23 due to Russia-Ukraine Conflict and declined in the period of investigation due to normalization of market situation and not due to dumping. The Authority notes that the import prices have shown decline even when compared with base year. Further, the import prices have declined continuously and steeply within the investigation period and even beyond the investigation period, as stated hereinabove. This continued decline in the prices remained unaddressed. The responses filed by the cooperating producers shows dumping of product under consideration in India. The dumping margin is not only positive, but also quite significant. Hence, the submission that there is no dumping leading to decline in prices is not appropriate.

H.3.3. Economic parameters of the domestic industry

117. Annexure II to the Anti-Dumping Rules require that the determination of injury shall involve an objective examination of the consequent impact of dumped imports on the domestic producers of the subject goods. With regards to the consequent impact of these imports on the domestic producers of subject goods, the Rules further provide that the examination of the impact of the dumped imports on the domestic industry would include an objective unbiased evaluation of all relevant economic factors and indices having a bearing on the state of the industry, including actual and potential decline in sales, profits, output, market share, productivity, return on investments or utilization of capacity; factors affecting domestic prices, actual and potential negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital investments. Accordingly, performance of the domestic industry has been examined over the injury period.

a) Production, capacity, capacity utilization and sales volumes

118. The performance of the domestic industry with regard to capacity, production, sales and capacity utilization over the injury period was as below.

Particulars	Unit	2020-21	2021-22	2022-23	POI
Installed Capacity	MW	***	***	***	***
Trend	Indexed	100	101	142	803
Production	MW	***	***	***	***
Trend	Indexed	100	91	101	556
Capacity Utilization	%	***	***	***	***
Trend	Indexed	100	90	71	70
Domestic Sales	MW	***	***	***	***
Trend	Indexed	100	82	107	212
Export sales	MW	***	***	***	***
Trend	Indexed	0	0	0	100

119. It is noted that –

- a. The installed capacity of the domestic industry has increased over the injury period. It is seen that increase in production capacity is on account of (a) new production facilities set up by FS India for a capacity of *** MW which commenced production during the period of investigation, (b) addition of capacities by Jupiter which commenced production in December 2022. These became fully operation in the period of investigation.
- b. The production volume and domestic sales of the domestic industry have increased as consequence of increase in the installed capacity.
- c. The production volume and sales volumes of the domestic industry have increased at a lower rate than the increase in capacities, and despite significant demand in the country.
- d. Despite increased production and domestic sales, the domestic industry faced significantly underutilized capacities and was operating at ***% utilization.
- e. Whereas the production of the domestic industry increased by 456% over the injury period, the domestic sales increased only by 112%. Even if export sales are added, the increase in sales was much below the increase in production. This resulted in significant stock piling with the domestic industry, as further examined hereinbelow. Further, the domestic industry submitted that it was forced to export only because of absence of demand for its product in the Country owing to Chinese dumping of the product.

b) Market share

120. Market share of the imports and domestic industry is given in the table below.

Particulars	Unit	2020-21	2021-22	2022-23	POI
Subject imports	%	***	***	***	***
Trend	Indexed	100	119	68	91
Other imports	%	***	***	***	***
Trend	Indexed	100	42	473	388
Domestic Industry	%	***	***	***	***
Trend	Indexed	100	28	97	59
Other Indian producers	%	***	***	***	***
Trend	Indexed	100	41	128	49

121. It is seen that market share of the subject imports declined in 2022-23. However, the market share of the subject imports increased once again in the period of investigation. During the period of investigation, the subject imports commanded more than two-thirds of the market. As against this, the market share of the domestic industry was only around ***%. Further, the market share of the other Indian producers was also a meagre ***% during the period of investigation. This was despite significant new capacities set up by the domestic industry. The domestic industry could have achieved much higher market share in the absence of dumping. The Authority also notes that some of the market share of dumped imports is owing to imports against export orders and these imports have in any case not caused volume injury to the domestic industry.

c) Inventories

122. Inventory position of the domestic industry over the injury period is given in the table below.

Particulars	Unit	2020-21	2021-22	2022-23	POI
Opening inventory	MW	***	***	***	***
Closing inventory	MW	***	***	***	***
Average inventory	MW	***	***	***	***
Trend	Indexed	100	361	490	6,807
Closing inventory in value terms	₹ Crores	***	***	***	***

123. The Authority notes the average inventories with the domestic industry have increased substantially and the domestic industry is faced with significant accumulation of inventories, despite selling the subject goods at reduced prices and even below costs. Over the injury period, the domestic industry has faced a sharp increase in inventories by 5,897%. The inventory holding period of the domestic industry has also increased over the injury period. In relation to production, the inventory holding period of the domestic industry increased from only *** days to ***days. In relation to sales, the inventory holding period has increased from only *** days to *** days.

d) Lost contracts

124. The domestic industry has also submitted that it experienced reluctance on the part of customers to honor their purchase obligations under confirmed binding contracts for significant volumes, due to the dumped imports in the market during the period of investigation. Instead, the customers opted to buy modules at much lower prices. Eventually, the domestic industry was constrained to terminate a large volume of contracts owing to non-performance by customers. Further, despite reducing prices for some contracts, the domestic industry was able to execute very limited contract for very limited volumes. As a result, the inventories of the domestic industry increased substantially.

e) Profitability, cash profits and return on capital employed

125. Profits, cash profits and return on capital employed of the domestic industry over the injury period is given in the table below.

Particulars	Unit	2020-21	2021-22	2022-23	POI
Cost of sales	₹/W	***	***	***	***
Trend	Indexed	100	129	170	183
Net sales realisation	₹/W	***	***	***	***
Trend	Indexed	100	112	125	119
Profits	₹ Lacs	***	***	***	***
Trend	Indexed	100	47	-22	-189
Profits	₹/W	***	***	***	***
Trend	Indexed	100	57	-21	-84
Cash profit	₹ Lacs	***	***	***	***
Trend	Indexed	100	55	1	-69
Return on investment	%	***	***	***	***
Trend	Indexed	100	24	5	1

126. It is noted that –

- a. The profitability of the domestic industry witnessed a sharp decline over the injury period. While the domestic industry was initially earning profits, it started suffering financial losses in 2022-23. Such losses intensified in the period of investigation as the domestic industry sold the subject goods below its costs in order to survive in the market.
- b. The profitability of the domestic declined by 289% over the injury period. The profit per unit of the domestic industry declined by 189% as compared to the base year.
- c. The cash profitability of the domestic industry has followed a similar trend and declined by 158% over the injury period. In fact, the domestic industry has incurred cash losses during the period of investigation.