

To be published in Gazette of India, Extra ordinary, Part 1, Section 1

F. No. 6/29/2023-DGTR
Government of India
Ministry of Commerce & Industry
Department of Commerce
Directorate General of Trade Remedies
4th Floor, Jeevan Tara Building, 5, Parliament Street, New Delhi -110001

Date: 10th February, 2025

FINAL FINDINGS

Case No. AD(OI) – 27/2023

Subject: Anti-dumping investigation concerning imports of “Textured Tempered Glass” originating in or exported from China PR and Vietnam – Final Findings.

F. No. 6/29/2023-DGTR - Having regard to the Customs Tariff Act, 1975, as amended from time to time (hereafter also referred to as “the Act”) and the Customs Tariff (Identification, Assessment and Collection of Anti-Dumping Duty on Dumped Articles and for Determination of Injury) Rules, 1995 thereof, as amended from time to time (hereinafter referred to as “AD Rules”).,

A. BACKGROUND OF THE CASE

1. Borosil Renewable Limited (“hereinafter referred to as the ‘applicant’ or the ‘domestic industry’”) had filed an application before the Designated Authority (hereinafter referred to as the ‘Authority’) in accordance with the Customs Tariff Act, 1975 (hereinafter referred to as the ‘Act’) as amended from time to time and the Anti-dumping Rules, 1995 (hereinafter referred to as the “Rules”), for the initiation of an anti-dumping investigation concerning imports of Textured Tempered Glass’ (hereinafter also referred to as the ‘product under consideration’ or the ‘subject goods’ or the ‘PUC’) from China PR and Vietnam (hereinafter also referred to as the ‘subject countries’).
2. The Authority, on the basis of sufficient *prima facie* evidence submitted by the domestic industry, issued Initiation Notification vide Notification No. 6/29/2023-DGTR dated 13th February 2024, published in the Gazette of India, initiating an anti-dumping investigation into imports of PUC from the subject countries in accordance with Rule 5 of the antidumping rules to determine the existence, degree and effect of any alleged dumping of the subject goods and to recommend the amount of anti-dumping duty, which if levied, would be adequate to remove the alleged injury to the domestic industry.
3. Pursuant to initiation of the investigation, sufficient opportunity was given to the interested parties to provide relevant information and defend their interests, and on the basis of information and evidence on record and having regard to the act and the rules, the Authority issued preliminary findings on 5th November 2024, provisionally concluding that product under consideration has been exported from the subject countries at prices below respective normal values, thus resulting in dumping of the goods. The domestic industry has suffered material injury and the injury to the domestic industry has been caused by the dumped imports. The Authority recommended imposition of provisional anti-dumping duty on all imports of the product under consideration from the subject countries.

4. The Authority notified the interested parties about the following procedure that was to be followed subsequent to issuance of preliminary findings.
 - i. Comments were invited by all interested parties on the preliminary findings within 30 days of issuance of such findings.
 - ii. It was notified that an oral hearing will be conducted in terms of Rule 6(6) of the Anti-Dumping Rules.
 - iii. Further verification deemed necessary will be conducted.
 - iv. Essential facts would be disclosed prior to issuance of the final findings.
5. A copy of the preliminary findings was sent to Central Government for their consideration of the same for imposition of interim anti-dumping duty.
6. The preliminary recommendations were accepted by the Ministry of Finance and vide notification 26/2024 dated 4th December 2024 interim measures were imposed for a period of 6 months.

B. PROCEDURE

7. The procedure described herein below has been followed by the Authority with regard to the subject investigation:
 - a. The Authority received comments on the preliminary findings by various interested parties, which have been adequately considered in the present Final Findings.
 - b. In accordance with Rule 6(6) of the Rules, the Authority provided opportunity to the interested parties to present their views orally in a public hearing held on 20th December 2024. All the interested parties who had attended the oral hearing were provided an opportunity to file written submissions, followed by rejoinders, if any.
 - c. The submissions made by the interested parties, arguments raised, and information provided post issuance of the preliminary findings and during the course of investigation, to the extent the same are supported with evidence and considered relevant to the present investigation have been appropriately considered in this Final Findings.
 - d. The preliminary findings form an integral part of this Final Findings. It is clarified that for the sake of brevity, procedural details, arguments presented by the interested parties, and the preliminary determinations arrived at whether directly or by necessary implication in the preliminary findings and which have not been contested by any party, are not reiterated in this Final Findings. These elements, being descriptive in nature and previously disclosed, are deemed incorporated into this Final Findings to the extent they are consistent with the present document. Accordingly, the preliminary findings should be regarded as a complementary component of this Final Findings, forming a cohesive part of the factual and procedural record and should be read in conjunction with the present Final Findings.
 - e. The Authority satisfied itself with the accuracy of the information supplied by the interested parties which form the basis of this Final Findings to the extent possible. The Authority has verified the data / documents submitted by the interested parties to the extent considered relevant and necessary.
 - f. On site verification were carried out at the premises of the applicant, where various claims made by the applicant and other interested parties were verified and supporting information, to the extent considered relevant, was collected.
 - g. Verification of the exporter from Vietnam was also conducted and claims made were verified and supporting information, to the extent considered relevant, was collected.
 - h. In accordance with the Rules the Authority disclosed the essential facts of the case that would form the basis of its findings in the form of a disclosure statement on 28.01.2025 and the interested parties were allowed time up-to 4.2.2025 to comment

on the same. The comments of the interested parties, to the extent relevant, have been considered by the Authority and have been addressed in this finding.

- i. The Authority has examined all post – disclosure comments made by the interested parties in these final findings to the extent deemed relevant. Any submission which was merely a reproduction of the previous submission and which had been adequately examined by the Authority have not been repeated for the sake of brevity.
- j. '****' in this Final Findings represents information furnished by an interested party on a confidential basis and so considered by the Authority under the Rules.
- k. The exchange rate for the period of investigation (January 2023 to December 2023) adopted by the Authority is 1 US\$=Rs 83.52.

C. PRODUCT UNDER CONSIDERATION AND LIKE ARTICLE

8. The Authority, in the initiation notification and in preliminary findings, defined the product under consideration as follows:

"3. The product under consideration for the present investigation is 'Textured Toughened (Tempered) Glass with a minimum of 90.5% transmission of thickness not exceeding 4.2 mm (including tolerance of 0.2 mm) and where at least one dimension exceeds 1500 mm, whether coated or uncoated'.

C.1 Submissions made on behalf of the opposing interested parties.

9. None of the interested parties have provided any comments on the PUC.

C.2 Submissions made by the domestic industry.

10. The domestic industry made the following submissions with regard to the scope of the product under consideration and the like article:
 - a. The product under consideration is 'Textured Toughened (Tempered) Glass with a minimum of 90.5% transmission of thickness not exceeding 4.2 mm (including tolerance of 0.2 mm) and where at least one dimension exceeds 1500 mm, whether coated or uncoated' originating in or exported from China PR and Vietnam
 - b. The product in the market parlance is also known by various names such as Solar Glass, Solar Glass Low Iron, Solar PV Glass, High Transmission Photovoltaic Glass, Tempered Low Iron Patterned Solar Glass, heat strengthen glass etc. Textured Tempered Glass is used as a component in Solar Photovoltaic Panels and Solar Thermal applications. The level of transmission can be achieved by keeping the iron content low, typically less than 200 ppm. The transmission level goes up by about 2%-3% when coated with an anti-reflective coating liquid.
 - c. The subject products are predominantly imported under tariff classification at the 8-digit level is 70071900 even though the same are being classified and imported under various subheadings of the Customs Tariff Act, 1975, as can be seen from the import data. However, it is noted that subject goods are also being imported in the sub-headings 70031990, 70051010, 70051090, 70052190, 70052990, 70053090, 70071900, 70072190, 70072900, 70169000, 70200090 and 85414011 as evidenced by the import data. Moreover, it is also submitted that the custom classification is indicative only and in no way, it is binding upon the product scope and the product description prevails in circumstances of conflict.
 - d. There is no known difference in the subject goods produced by the domestic industry and those imported from the subject countries. The subject goods produced by the

domestic industry and the subject goods imported from the subject countries are comparable in terms of characteristics such as physical and chemical characteristics, manufacturing process and technology, functions and uses, product specifications, distribution and market & tariff classification of the goods. The applicants have claimed that the subject goods, which are coming into India, are identical to the goods produced by the domestic industry. There are no differences either in the technical specifications, quality, functions or end-uses of the subsidized imports and the domestically produced subject goods and the product under consideration manufactured by the applicants. The two are technically and commercially substitutable and hence should be treated as 'like article' under the Rules.

C.3 Examination by the Authority.

11. The product under consideration in the present investigation was, at the stage of initiation, defined as 'Textured Toughened (Tempered) Glass with a minimum of 90.5% transmission of thickness not exceeding 4.2 mm (including tolerance of 0.2 mm) and where at least one dimension exceeds 1500 mm, whether coated or uncoated.
12. The PUC is also known by various other names such as solar glass, solar glass low iron, solar PV glass, high transmission photovoltaic glass, tempered low iron patterned solar glass, heat strengthen glass etc. The PUC is used as a component in solar photovoltaic panels and solar thermal applications. The level of transmission can be achieved by keeping the iron content low, typically less than 200 ppm. The transmission level goes up by about 2%-3% when coated with an anti-reflective coating liquid.
13. The product under consideration is classified under the category 'Glass and Glassware' in Chapter 70 of the Customs Tariff Act, 1975 and further under 7003, 7005, 7007, 7016, 7020 and 8541 as per Customs Classification. However, Customs classification is indicative only and not binding on the scope of the investigation.
14. With regard to like article, Rule 2(d) of the Rules provides as under:

'Like article' means an article which is identical or alike in all respects to the article under investigation for being dumped in India or in the absence of such article, another article which although not alike in all respects, has characteristics closely resembling those of the articles under investigation.'

15. The Authority notes that there is no known difference in product under consideration produced by the Indian industry and exported from the subject countries. Product under consideration produced by the Indian industry and imported from the subject countries are comparable in terms of characteristics such as physical characteristics, manufacturing process & technology, functions & uses, product specifications, pricing, distribution & marketing and tariff classification of the goods. The two are technically and commercially substitutable. The consumers have used and are using the two interchangeably. Thus, the Authority hold that the product manufactured by the domestic industry constitutes the like article to the subject goods being imported into India from the subject countries in the terms of Rule 2(d).

D. SCOPE OF THE DOMESTIC INDUSTRY AND STANDING

D.1 Submissions made on behalf of the opposing interested parties.

16. The other interested parties have not made any submissions with regard to the scope of domestic industry and standing.

D.2 Submissions made on behalf of the domestic industry.

17. The submissions of the domestic industry with regard to the scope of domestic industry and standing are as follows:
- The present application has been filed by Borosil Renewables Limited (BRL) and they are the major producers of the subject goods in India.
 - There are five (5) other known producers of the subject goods in India.
 - The domestic industry has not imported the subject goods from the subject countries and is not related to any exporter of the subject goods in the subject countries or importer of the subject goods in India.

D.3 Examination by the Authority

18. Rule 2(b) of the Anti-Dumping Rules defines the domestic industry as under"

'(b) 'domestic industry' means the domestic producers as a whole engaged in the manufacture of the like article and any activity connected therewith or those whose collective output of the said article constitutes a major proportion of the total domestic production of that article except when such producers are related to the exporters or importers of the alleged dumped article or are themselves importers thereof in such case the term 'domestic industry' may be construed as referring to the rest of the producers'.

19. The Authority notes that the application has been filed by Borosil Renewables Limited (BRL). It is further noted that apart from applicant industry, there are 4 other producers namely Govind Glass & Industries Ltd, Triveni Renewables Private Ltd., Vishakha Glass Pvt. Ltd., and Gold Plus Float Glass Pvt. Ltd. who have commenced production in the POI.
20. The Authority further notes that the applicant has not imported the subject goods from the subject countries and that it is not related to any exporter of the subject goods in the subject countries or importer of the subject goods in India. Further, the production of the applicant accounts for a major proportion of the total domestic production. Therefore, the Authority proceeds with the same conclusion as drawn in the preliminary findings with regard to the domestic industry. The Authority holds that the applicant satisfies the requirement of standing under Rule 5 and constitutes domestic industry within the meaning of Rule 2(b).

E. CONFIDENTIALITY AND MISCELLANEOUS ISSUES**E.1 Submissions made on behalf of the opposing interested parties.**

21. The other interested parties have made the following miscellaneous submissions:
- That the anti-dumping duties on imports of textured tempered glass have been in place for over a decade. This prolonged reliance undermines the incentive for the domestic industry to improve efficiency and adapt to market changes, fostering dependency instead of competitiveness. It is further submitted that even WTO principles discourage the indefinite extension of trade remedies. Such prolonged measures distort market dynamics and reduce innovation, while unfairly impacting downstream industries dependent on imports.
 - It was also submitted that the Domestic industry in previous investigations conducted in 2017, 2021, and 2023 consistently failed to prove that imports caused material injury to the domestic industry.
 - Stakeholders like NIMMA and SPDA argued that the Authority has failed to substantiate the necessity of provisional measures. Rule 12 and Article 7 of the WTO Anti-Dumping Agreement require that such measures only be imposed to prevent imminent harm, supported by clear evidence. However, in the instant investigation issuance of provisional measures nearly eight months after the

investigation's initiation undermines their purpose, as the investigation was close to completion by then. Such delays render the measures unnecessary and inappropriate.

- d. It is further submitted that the significant delay in issuing preliminary findings reflects inefficiencies in the investigation process. Timely issuance would have provided more clarity and reduced market uncertainty and would have benefited all stakeholders.
- e. Interested parties contended that the Authority violated natural justice principles by not allowing parties to comment on preliminary findings before their issuance. Such comments could have clarified contentious points and ensured procedural fairness.
- f. One of the interested parties pointed that the errors in disseminating critical communications, such as Importer Questionnaires, prevented some stakeholders from submitting timely responses. This procedural oversight compromised their ability to fully present their case, undermining the investigation's fairness.
- g. Interested parties have requested imposing duties for 3 years instead of 5 as this would strike a balance between protecting the domestic industry and encouraging competitiveness. This will align with WTO principles discouraging prolonged protectionism.

E.2 Submissions made on behalf of the domestic industry.

22. The submissions of the domestic industry with regard to the miscellaneous issues are as follows:

- a. In relation to submission / participation by user association, Domestic Industry submitted that as a matter of conscious and strategic decision, user associations never provide the requested information or files information required under the law / trade notice issued by the Authority. Since they are also being represented by legal professional, it would be injustice with the other interested parties including Domestic Industry to accept their response or even allow them to make further submissions in the investigation. Even post hearing also, none of the user associations have fulfilled their legal obligations. Therefore, the Authority should carefully consider their unsubstantiated submissions.
- b. In relation to the issue of history of cases, Domestic Industry submitted that the history of the previous cases, that too, against different sources altogether, is of no legal or factual relevance to the fact of this case. The Authority is required only to see whether a case for imposition of anti-dumping duties / extension of anti-dumping duties is made out in the facts and circumstances of the case. It is further submitted that the previous measures are of no consequence in the present case, if the exporters continue to indulge in dumping practice, then the domestic industry has no other option but to seek remedy under the laws of the land for appropriate relief. Since none of the exporters dispute dumping, Domestic Industry has all the rights to seek protection against such practices.
- c. In relation to submission of interested parties that in the previous investigations, the Authority has not found any injury, Domestic Industry submitted that at a mere glance of the previous investigations against China and Malaysia, it would be clear to interested parties that the Authority has found injury in all the cases. However, against Malaysia, the Authority did not find any dumping and therefore, no duties were imposed against it.
- d. In relation to issue of inviting comments on the provisional findings, Domestic Industry submitted that none of the interested parties have pointed the provision of law which obligates the Authority for inviting comments prior to the issuance of the

- provisional findings. It is further submitted that interested parties post receiving the intimation along with non-confidential version of the application were free to make submissions. Since the interested parties did not make any such submissions, they cannot shift this failure to the Authority, that too when there is no such procedure prescribed either in the laws or anti-dumping agreement.
- e. In relation to the submission of the interested parties that the Authority has not followed Rule 12 of Anti-Dumping Rules read with Article 7 of ADA and judgement in the matter of GM Exports in this regard, the Domestic Industry has contended that the ratio of GM Exports does not apply in the present scenario, as there is no ambiguity or vagueness between the municipal laws (Anti-dumping Rules) and WTO Agreement. In any case, there is no occasion to resort to the said case law as the Indian laws do incorporate the obligations under the Anti-dumping Agreement (Article 7.1) in letter and spirit. Therefore, reliance on GM Exports is completely misplaced.
 - f. With regard to the claim of the interested parties that the provisional findings should not have been issued in view of the use of the word "expeditiously" in Rule 12, the Domestic Industry has submitted that the interested parties have completely misread / misunderstood Rule 12, which has used the expression "expeditiously" only with reference to "the conduct of the investigation". It is important to note that nowhere any timeframe is indicated, in which the Authority has to give its provisional findings post initiation of the investigation. Even the judgement of GM Exports also supports this interpretation.
 - g. Regarding impairment of rights of interested parties to participate, the Domestic Industry has submitted that once the initiation notification is published in the Official Gazette, it is presumed that all the interested parties have been sufficiently informed.
 - h. In relation to request of imposing duties for 3 years instead of 5, the Domestic Industry has submitted the interested parties failed to provide a single reason in support of their claim of recommending duties for 3 years and therefore, the Authority should disregard any such unsubstantiated and irrational submissions of the interested parties.

E.3 Examination by the Authority

23. With regard to confidentiality of information, Rule 7 of Anti-dumping Rules provides as follows:

Confidential information:

- (1) *Notwithstanding anything contained in sub-rules (2), (3) and (7) of rule 6, sub-rule(2) of rule 12, sub-rule(4) of rule 15 and sub-rule (4) of rule 17, the copies of applications received under sub-rule (1) of rule 5, or any other information provided to the designated authority on a confidential basis by any party in the course of investigation, shall, upon the designated authority being satisfied as to its confidentiality, be treated as such by it and no such information shall be disclosed to any other party without specific authorization of the party providing such information.*
- (2) *The designated authority may require the parties providing information on confidential basis to furnish non-confidential summary thereof and if, in the opinion of a party providing such information, such information is not*

susceptible of summary, such party may submit to the designated authority a statement of reasons why summarization is not possible.

(3) Notwithstanding anything contained in sub-rule (2), if the designated authority is satisfied that the request for confidentiality is not warranted or the supplier of the information is either unwilling to make the information public or to authorise its disclosure in a generalized or summary form, it may disregard such information.'

24. Submissions made by the domestic industry and other opposing interested parties with regard to confidentiality to the extent considered relevant were examined by the Authority and addressed accordingly. Information provided by the interested parties on confidential basis was examined with regard to sufficiency of the confidentiality claim. On being satisfied, the Authority has accepted the confidentiality claims, wherever warranted and such information has been considered confidential and not disclosed to other interested parties. Wherever possible, parties providing information on confidential basis were directed to provide sufficient non-confidential version of the information filed on confidential basis. The Authority made available the non-confidential version of the evidences submitted by various interested parties in the form of public file. The Authority also notes that all interested parties have claimed their business-related sensitive information as confidential.
25. It has been contended that the anti-dumping duty has been in force for more than a decade. In this regard, the Authority notes subject investigation is a fresh proceeding and does not involve a continuation of previously imposed duties. The Authority has conducted this investigation in strict compliance with the provisions of the Anti-Dumping Rules. The Authority further notes that the Domestic Industry is fully entitled to legal recourse and protection, if it is established that exporters from any source are engaged in dumping practices that is causing injury to the Domestic Industry.
26. The Authority notes that Rule 12 does not prescribe a fixed timeline for issuing preliminary findings. The phrase "shall proceed expeditiously" relates to the overall conduct of the investigation and does not impose any deadline for preliminary findings. Investigations involve examination / analysis of complex data, which must be done thoroughly to ensure compliance with both domestic rules and WTO obligations. The authority's adherence to these principles, rather than rigid timelines, ensures the sustainability of its determinations.
27. As regards the issuance of preliminary findings by the Authority after approximately eight months from the initiation of the investigation, it is noted that the findings are based on the factual matrix of the case, as it reflects a careful and evidence-based assessment of the injury suffered by the domestic industry during the course of the investigation. The necessity to issue preliminary findings arose from the factual determination, supported by post-initiation circumstances / facts, that the domestic industry was suffering material injury that could lead to irreparable harm without timely intervention. The Authority's decision thus demonstrates compliance with both the statutory framework and the principles of procedural fairness and due diligence.
28. The Authority notes that it initiated the captioned investigation on 13th February 2024 and fulfilled its obligation to notify all known interested parties, including exporters, governments of exporting countries, importers/users and their associations as identified by the domestic industry in the application by circulating the notification via email to these parties. Furthermore, the initiation notification was made widely accessible by publishing the same in the Extraordinary Gazette of India as well as on the DGTR website (www.dgtr.gov.in).
29. The publication in the Gazette serves as a notice in *rem*, ensuring that any parties not individually informed via email have an opportunity to become aware of the investigation through this public notice. Thus, there was sufficient dissemination regarding the initiation

of the investigation through email notifications to all known interested parties, publication on the DGTR's website, and the gazette notification. Thus, the contention of the interested parties regarding non receipt of the questionnaires is unsustainable. It is further noted that since the Authority has taken due cognizance of their submissions in the present Final Findings, no prejudice can be claimed by them.

F. NORMAL VALUE, EXPORT PRICE & DUMPING MARGIN

F.1 Submissions made on behalf of the opposing interested parties.

30. The other interested parties have made the following submissions with regard to normal value, export price and dumping margin.

- a. Since the Authority has not made any PCNs for the purpose of fair comparison for dumping margin and injury margin, it is submitted that the Authority should compute one dumping margin for the entire product under consideration.
- b. The exporters who have fully cooperated with the investigation should be granted specific duty rates reflecting their individual pricing practices. Further, the Authority should accept the responses filed by the exporters and confirm the adjustments claimed and export price in the final findings.
- c. The cooperating producer in Vietnam is purchasing the inputs from related as well as unrelated parties on arms-length basis. The quantum of related party purchase is miniscule as compared to the total purchase made by them. It is further submitted that their assets are also bought at fair price. Accordingly, they have requested that the Authority should compute the dumping margin based on the information provided by the cooperating exporters from Vietnam.

F.2 Submissions made on behalf of the domestic industry.

31. The domestic industry has submitted as follows with regard to normal value and export price:

- a. 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 terms of Annexure I, Rule 7 of the Rules.
- b. The domestic industry has not been able to determine the normal value based on the price in a market economy third country due to non-availability of verifiable information/data. The domestic industry has, therefore, determined the normal value on the basis of cost of production of the applicant with addition for administrative, selling and general expenses and reasonable profits.
- c. While computing normal value for Vietnam, the Authority should consider international prices for the raw material, which the exporters are procuring from China. The Authority in many cases had taken such approach in earlier investigations.
- d. The Authority should also consider the fair prices of the machinery imported from China to determine the actual and fair depreciation value.
- e. In relation to PCN-wise analysis, the Domestic Industry has submitted that in its application, it has clearly defined the product under consideration as "Textured Toughened (Tempered) Glass with a minimum of 90.5% transmission of thickness not exceeding 4.2 mm (including tolerance of 0.2 mm) and where at least one dimension exceeds 1500 mm, whether coated or uncoated" and have accordingly submitted the information and made the analysis based on both types of the product under consideration i.e., Coated and Uncoated and, therefore, the approach adopted by the Authority in the provisional findings is correct in law as well as on facts.

- f. The export price must be determined considering the volume and value of imports for the period of investigation adopted from the published DGCIS data after due adjustments are made to determine the ex- factory price.
- g. The dumping margins for the subject countries are not only above the *de minimis* levels, but also significant.

F.3 Examination by the Authority.

32. 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.

33. The Authority has examined the issues raised during the proceedings in the following paragraphs:

- a. As regards the contention that the dumping margin ought to have been computed based on the entire product under consideration and not product types, the Authority notes that a fair comparison is required to be carried out in terms of the provisions of Annexure I of the Anti-dumping Rules read with Article 2.4 of the Anti-dumping Agreement. Accordingly, product type-wise analysis has been correctly carried out to ensure fair comparison.
- b. Post issuance of provisional findings, the Authority has called for the documents / data for the verification and the present Final Findings is based on such verified data.
- c. As regards the issue raised by the Domestic Industry relating to the correct valuation of the inputs as well as the plant and machinery by cooperating producer from Vietnam from their related parties situated in China, the Authority has carefully examined this issue from the records maintained by the company during onsite verification and found the same in order. The Authority has also checked the purchase prices of the major raw materials procured from the related party in China with the procurement made from the unrelated parties and also compared their purchase prices with the prevailing international prices wherever available and found the same in similar price band and reflective of their true market prices.

- d. In relation to purchase of machinery, the Authority has checked the relevant records maintained in the SAP and the financial statements. The Authority has also checked the records maintained by the company during onsite verification and found no discrepancy between them. It is also noted that since there are no published prices available for subject goods, it would be difficult to ascertain correct prices of the machinery other than records maintained by the exporters in their books of account.
34. The Authority notes that the following exporters of the subject goods have filed exporter's questionnaire responses: -
- a. Xinyi Group, China PR.
 - b. Kibing Group, China PR
 - c. Flat Group, China PR.
 - d. Anhui CSG New Energy Material Technology Co., Ltd.
 - e. Dongguan CSG Solar Glass Co., Ltd.
 - f. Wujiang CSG Glass Co., Ltd.
 - g. Anhui Flat Solar.
 - h. Flat Group Vietnam.

F.3.1 Normal value and export price for China PR.

Normal Value for China

35. The Authority notes the following relevant provisions with regard to the determination of normal value for China PR. Provisions under Para 7 and Para 8 of Annexure I to the Anti-Dumping Rules are as under:

'7. In case of imports from non-market economy countries, normal value Shall be determined on the basis of the price or constructed value in a market economy third country, or the price from such a third country to other countries, including India, or where it is not possible, 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 the selection. Account shall also be taken within time Limits; where appropriate, of the investigation if any made in a similar matter in respect of any other market economy third country. The parties to the investigation shall be informed without unreasonable delay of the aforesaid selection of the market economy third country and shall be given a reasonable period of time to offer their comments.

'8. (1) The term 'non-market economy country' means any country which the designated authority determines as not operating on market principles of cost or pricing structures, so that sales of merchandise in such country do not reflect the fair value of the merchandise, in accordance with the criteria specified in subparagraph (3).

(2) There shall be a presumption that any country that has been determine to be, or has been treated as, a now- market economy country for purposes of an anti-dumping, investigation by the designated authority or by the competent authority of any WTO member country during the three- year period preceding the investigation is a nonmarket economy country. Provided, however, that the non-market economy country or the concerned firms from such country may rebut such a presumption by providing information and evidence to the designated authority that establishes that such country is not a non-market economy country on the basis of the criteria specified in subparagraph (3).

(3) The designated Authority shall consider in each case the following criteria as to whether: (a) the decisions of the concerned firms in such country regarding prices, costs and inputs, including raw materials, cost of technology and Labour, output, sales and investment, are made in response to market signals reflecting supply and demand and without significant State interference in this regard, and whether costs of major inputs substantially reflect market values; (b) the production costs and financial situation of such firms are subject to significant distortions carried over from the former non-market economy system, in particular in relation to depreciation of assets, other write-offs, barter trade and payment via compensation of debts; (c) such firms are subject to bankruptcy and property laws which guarantee legal certainty and stability for the operation of the firms, and (d) the exchange rate conversions are carried out at the market rate. Provided, however, that where it is shown by sufficient evidence in writing on the basis of the criteria specified in this paragraph that market conditions prevail for one or more such firms subject to anti-dumping investigations, the designated authority may apply the principles set out in paragraphs 1 to 6 instead of the principles set out in paragraph 7 and in this paragraph.

(4) Notwithstanding, anything contained in sub-paragraph (2), the designated authority may treat such country as a market economy country, on the basis of the latest detailed evaluation of relevant criteria, which includes the criteria specified in subparagraph (3), has been, b) publication of such evaluation in a public document, treated or determined to be treated as a market economy country for the purposes of anti-dumping investigations, by a country which is a Member of the World Trade Organization.'

36. At the stage of initiation, the Authority proceeded with the presumption of treating China PR as a non-market economy country. Upon initiation, the Authority advised the producers/exporters in China PR to respond to the notice of initiation and provide information on whether their data/information could be adopted for normal value determination. The Authority sent copies of the market economy treatment/supplementary questionnaire to all the known producers/ exporters in China PR to provide relevant information in this regard.

Article 15 of China's Accession Protocol in WTO provides as follows:

'(a) 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:

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; 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.

(b) 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.

(c) 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.

(d) 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 an event, the provisions of subparagraph (a)(A) 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.'

37. The Authority notes that while the provisions of Article 15 (a)(ii) of China PR's Accession Protocol have expired with effect from 11th December 2016, the provision under Article 2.2.1.1 of the Anti-Dumping Agreement read with an obligation under 15(a)(i) of the Accession Protocol require criterion stipulated in Para 8 of Annexure I of Anti-Dumping Rules to be satisfied through the information/data to be provided in the supplementary questionnaire for claiming MET status. The Authority notes that no producer or exporter from China PR has submitted market economy treatment or supplementary questionnaire response. Therefore, the normal value computation for these producers/exporters is required to be determined in terms of provisions of Para 7 of Annexure-1 of Anti-Dumping Rules.
38. It is noted that paragraph 7 of Annexure-I to the AD Rules stipulates three methods of constructing the normal value for Non-Market Economies: (a) on the basis of price or constructed value in a market economy third country; (b) export price from a third country to other countries, including India; and (c) on any other reasonable basis. The Authority notes that under the provisions of paragraph 7 of Annexure-I to the AD Rules, the normal value must first be determined on the basis of the price or constructed value in a surrogate country, or the price of the exports from such country to other countries, including India.
39. At the application filing stage, the domestic industry submitted a computation of the normal value based on a constructed normal value methodology, given that all major sources of the subject goods were under investigation. Following the initiation of the investigation, neither the domestic industry nor any interested parties proposed a surrogate country for consideration. Furthermore, it has been observed that there is no dedicated Harmonized System (HS) Code for the PUC. In the absence of export data from the subject countries to other jurisdictions, the Authority has been unable to determine the normal value based on the exports of the subject goods from China to other countries. Consequently, in light of the insufficient available information, the Authority has opted to construct the normal value using the third method outlined in the relevant provisions, specifically relying on any other reasonable basis, including the price actually paid or payable in India.
40. For this purpose, the Authority has considered the optimized cost of production of the domestic industry, with a reasonable addition of selling, general and administrative expenses and profits.

Export price for producers / exporters from China.

a. Export price in case of Xinyi Group entities from China

41. The Authority notes that four entities of Xinyi Group, namely, Guangxi Xinyi Photovoltaic Industry Co., Ltd, Xinyi PV Products (Anhui) Holdings Ltd, Xinyi Solar (Suzhou) Ltd and Xinyi Solar (Hong Kong) Limited, have filed the exporter questionnaire response. From their responses, it is noted that Guangxi Xinyi Photovoltaic Industry Co., Ltd. and Xinyi Solar (Suzhou) Ltd, have exported the subject goods directly to India and also through Xinyi PV Products (Anhui) Holdings Ltd, and Xinyi Solar (Hong Kong) Limited. Xinyi PV Products (Anhui) Holdings Ltd. has also exported the subject goods directly to India and also through Xinyi Solar (Hong Kong) Limited. The Authority has considered the data submitted by the above entities for the purpose of this Final Findings. The exporters have claimed adjustments on account of inland freight, ocean freight, marine insurance, port and handling charges, credit cost, bank charges, etc. and these have been accepted after desk verification of information submitted by cooperating producer and exporter. The CNV & net export price have been calculated separately for coated and uncoated PUC for fair comparison and then weighted average has been determined which is mentioned below in the dumping margin table.

b. Export price in case of Kibing Group entities from China

42. The Authority notes that four entities of Kibing Group, namely, Hunan Kibing Solar Technology Co., Ltd., Zhangzhou Kibing Photovoltaic New Energy Technology Co., Ltd., Ningbo Kibing Photovoltaic Technology Co., Ltd. and Zhejiang Ninghai Kibing New Energy Management Co., Ltd., have filed the exporter questionnaire responses. From their responses, it is noted that the three companies Hunan Kibing Solar Technology Co., Ltd., Zhangzhou Kibing Photovoltaic New Energy Technology Co., Ltd., Ningbo Kibing Photovoltaic Technology Co., Ltd, have exported the subject goods through Zhejiang Ninghai Kibing New Energy Management Co., Ltd. The Authority has considered the data submitted by the above entities for the purpose of these Final Findings. The exporter has claimed adjustments on account of inland freight, ocean freight, port and handling charges, credit cost, bank charges, etc. and these have been accepted after desk verification of information submitted by cooperating producer and exporter. The CNV & net export price have been calculated separately for coated and uncoated PUC for fair comparison and then weighted average has been determined which is mentioned below in the dumping margin table.

c. Export price in case of Flat Glass Group from China

43. The Authority notes that the three entities of Flat Glass Group, namely, Anhui Flat Solar Glass Co., Ltd., Flat Glass Group Co., Ltd. and Flat (Hong Kong) Co., Limited. Have filed the exporter questionnaire responses. From their responses, it is noted that Anhui Flat Solar Glass Co., Ltd., Flat Glass Group Co., Ltd, have exported the subject goods through Flat (Hong Kong) Co. Ltd. The Authority has considered the data submitted by the above entities for the purpose of this Final Findings. The exporter has claimed adjustments on account of inland freight, port and handling charges, credit cost, bank charges, etc. and these have been accepted after desk verification of information submitted by cooperating producer and exporter. The CNV & net export price have been calculated separately for coated and uncoated PUC for fair comparison and then weighted average has been determined which is mentioned below in the dumping margin table.

d. Export price in case of Topray Group from China

44. The Authority notes that the two entities of Topray Group, namely, Shenzhen Topray Solar Co., Ltd. and Shaanxi Topray Solar Co., Ltd., have filed the exporter questionnaire response. From their responses, it is noted that Shenzhen Topray has exported the subject goods through Shaanxi Topray Solar Co., Ltd. The Authority has considered the data submitted by the above entities for the purpose of this Final Findings. The exporter has claimed adjustments on account of inland freight, ocean freight, marine insurance, port and handling charges, credit cost, bank charges, etc. and these have been accepted after desk verification of information submitted by cooperating producer and exporter. The CNV & net export price have been calculated separately for coated and uncoated PUC for fair comparison and then weighted average has been determined which is mentioned below in the dumping margin table.

e. Export price in case of Anhui CSG New Energy Material Technology Co., Ltd from China

45. The Authority notes from the questionnaire response of Anhui CSG New Energy Material Technology Co., Ltd. that during the POI it has directly exported the subject goods to India. The Authority has considered the data submitted by the above entity for the purpose of this Final Findings. The exporter has claimed adjustments on account of inland freight, port and handling charges, credit cost, etc. and these have been accepted after desk verification of information submitted by cooperating producer and exporter. The CNV & net export price have been calculated separately for coated and uncoated PUC for fair comparison and then weighted average has been determined which is mentioned below in the dumping margin table.

f. Export price in case of Dongguan CSG Solar Glass Co., Ltd from China

46. The Authority notes from the questionnaire response of Dongguan CSG Solar Glass Co., Ltd that during the POI it has directly exported the subject goods to India. The Authority has considered the data submitted by the above entity for the purpose of this Final Findings. The exporter has claimed adjustments on account of inland freight, ocean freight, marine insurance, port and handling charges, credit cost, bank charges, etc. and these have been accepted after desk verification of information submitted by cooperating producer and exporter. The CNV & net export price have been calculated separately for coated and uncoated PUC for fair comparison and then weighted average has been determined which is mentioned below in the dumping margin table.

g. Export price in case of Wujiang CSG Glass Co., Ltd from China

47. The Authority notes from the questionnaire response of Wujiang CSG Glass Co., Ltd. that during the POI it has directly exported the subject goods to India. The Authority has considered the data submitted by the above entity for the purpose of this Final Findings. The exporter has claimed adjustments on account of inland freight, ocean freight, marine insurance, port and handling charges, credit cost, bank charges, etc. and these have been accepted after desk verification of information submitted by cooperating producer and exporter. The CNV & net export price have been calculated separately for coated and uncoated PUC for fair comparison and then weighted average has been determined which is mentioned below in the dumping margin table.

Export price for all non-cooperative producers/exporters from China PR

48. The export price for all the non-cooperative producers/exporters from China has been determined based on facts available in terms of Rule6 (8) of the Rules.

Normal value for Flat (Vietnam) Co. Ltd. from Vietnam

49. Based on the information furnished in the questionnaire response, the Authority notes that M/s Flat (Vietnam) Co., Ltd. is a producer of the subject goods and has exported the subject goods to India during the POI through Flat (Hong Kong) Co. Ltd.
50. The exporter has sold *** MT of the PUC in the domestic market whereas, it has exported *** MT of the subject goods to India through Flat (Hong Kong) Co. Ltd during the POI. The Authority has first examined whether the total domestic sales of the subject goods by the producer/exporter concerned in the subject country were representative when compared to their total sales of the subject goods in the exporting country. Thereafter, it was examined whether their sales are under ordinary course of trade in terms of the Annexure-I to the Anti-dumping Rules. The Authority has considered the data submitted by the above entities after onsite verification.
51. The Authority examined all domestic sales transactions concerning the cost of production of the subject goods to determine if these sales were in the ordinary course of trade. To establish the normal value, the Authority conducted a test to identify profit-making domestic sales transactions. If more than 80% of these transactions are profitable, all domestic sales are considered for determining the normal value. If profitable transactions constitute less than 80%, only those profitable sales are considered. In this case, since over 80% of the sales were profitable by volume, all domestic sales were included in the determination of the normal value. The producer's claims for inland freight, credit costs, and bank charges as post-factory expenses have been accepted by the Authority after onsite verification. The normal value has been calculated separately for coated and uncoated PUC for fair comparison and then weighted average has been determined which is mentioned below in the dumping margin table.

Export prices for Flat (Vietnam) Co., Ltd.

52. The Authority notes that Flat (Vietnam) Co. Ltd. has exported the subject goods through Flat (Hong Kong) to India during the POI. The Authority has considered the data submitted by the above entity for the purpose of this Final Findings. The exporter has claimed adjustments on account of inland freight, ocean freight, port and handling charges, credit cost, bank charges, etc. and these have been accepted after onsite verification of information submitted by cooperating producer and exporter. The net export price has been calculated separately for coated and uncoated PUC for fair comparison and then weighted average has been determined which is mentioned below in the dumping margin table.

Export price and Normal value for all non-cooperative producers/exporters from Vietnam

53. The export price and normal value for all the non-co-operative producers/exporters has been determined based on facts available in terms of Rule6(8) of the Rules.

F.3.8 Dumping margin.

54. The normal value, export price and dumping margin determined in the present investigation are as follows:

Producer	Export Price (USD/MT)	Normal value (USD/MT)	Dumping Margin (USD/MT)	Dumping Margin (%)	Dumping Margin
					(Range)
China					
Shaanxi Topray Solar Co., Ltd / Shenzhen Topray Solar Co., Ltd	***	***	***	***	60-70
Anhui Flat Solar Glass Co., Ltd./ Flat Glass Group Co., Ltd./ Flat (Hong Kong) Co., Limited., Ltd.	***	***	***	***	50-60
Anhui CSG New Energy Material Technology Co., Ltd	***	***	***	***	40-50
Dongguan CSG Solar Glass Co., Ltd	***	***	***	***	40-50
Wujiang CSG Glass Co., Ltd	***	***	***	***	50-60
Xinyi group: Guangxi Xinyi Photovoltaic Industry Co., Ltd / Xinyi PV Products (Anhui) Holdings Ltd./ Xinyi Solar (Suzhou) Ltd / Xinyi Solar (Hong Kong) Limited	***	***	***	***	60-70
Kibing Group: Zhangzhou Kibing Photovoltaic New Energy Technology Co., Ltd./Hunan Kibing Solar Technology Co., Ltd./ Ningbo Kibing Photovoltaic Technology Co., Ltd.	***	***	***	***	50-60
Others	***	***	***	***	80-90
Vietnam					
Flat (Vietnam) Co., Ltd/ Flat (Hong Kong) Co., Limited., Ltd.	***	***	***	***	30-40
Others	***	***	***	***	80-90

G. INJURY AND CAUSAL LINK**G.1 Submissions made on behalf of the opposing interested parties.**

55. The opposing interested parties have made the following submissions with regard to injury and causal link.
- a. Domestic production volumes rose consistently during the period under investigation, disproving claims that imports suppressed production. This growth indicates that the domestic industry managed to increase output despite alleged injury from imports, suggesting that imports did not impede their competitiveness.
 - b. While import volumes increased, the domestic industry's selling prices also rose during some periods, indicating that imports did not lead to price suppression. The injury claimed by the domestic industry is not aligned with this data and points to other underlying factors.
 - c. The injury attributed to imports is overstated because it fails to consider significant external factors, such as raw material price volatility, global inflation, and supply chain disruptions. These factors independently impacted the domestic industry's financial health.
 - d. The domestic industry's losses stem from decisions like capacity over-expansion, which strained their financial resources. This expansion resulted in higher depreciation and interest costs, compounding operational inefficiencies. These self-inflicted issues cannot be attributed to imports.
 - e. The 22% Return on Capital Employed (ROCE) used to calculate NIP is excessive compared to renewable energy industry standards, which are typically around 14-15%. Such inflated benchmarks exaggerate injury margins, leading to unfair conclusions about injury from imports. The lack of clarity and consistency in the methodology used for calculating NIP has raised concerns among stakeholders. A standardized approach would enhance fairness and ensure that duty recommendations are based on realistic and equitable assessments.
 - f. The evidence fails to establish that imports are the primary cause of injury. Market dynamics, such as fluctuating demand and rising input costs, were likely more influential in determining the domestic industry's financial outcomes.
 - g. The domestic industry's outdated production technology and inefficient operations are key contributors to its challenges. Without modernizing their processes, the industry's financial problems will persist, irrespective of the presence of imports.
 - h. Imported solar glass adheres to internationally accepted standards, including those established by leading certification bodies like IEC (International Electrotechnical Commission). Domestic producers have yet to fully align their products with these benchmarks, particularly in terms of durability, optical clarity, and anti-reflective coating efficacy.
 - i. Renewable energy project developers argue that using lower-quality domestic glass can lead to higher maintenance costs and efficiency losses over time, discouraging foreign investment in India's solar sector. This reliance on imports is not a matter of preference but of necessity to ensure long-term project viability and performance.
 - j. Imported textured tempered glass offers innovative features, such as bifacial technology compatibility and high thermal stability, which domestic manufacturers have not yet been able to replicate. This technological gap further reinforces the reliance on imports for modules intended for large-scale solar projects.

- k. The domestic industry's failure to invest in R&D to meet these specialized needs exacerbates the issue, leaving downstream industries no choice but to source high-quality glass internationally.
- l. Quality issues in domestically produced glass can compromise module efficiency, increase energy losses, and reduce the overall lifespan of photovoltaic systems, making imports indispensable for ensuring reliability and competitiveness in international markets.
- m. It was also emphasized that quality variations in local glass have previously resulted in increased rejection rates during module manufacturing, driving up operational costs for manufacturers and forcing reliance on imports to maintain production schedules and quality benchmarks.
- n. Interested parties have highlighted significant concerns regarding the inability of domestic producers to meet the strict specifications required by global standards for advanced solar modules. For instance, imported glass often achieves transmission rates exceeding 91%, while domestic producers struggle to consistently meet these thresholds, leading to performance issues in solar panels.

G.2 Submissions made on behalf of the domestic industry.

56. The domestic industry has submitted as follows on the issue of injury and causal link:
- a. Despite the presence of the domestic industry and other producers, the imports have dominated the entire market. The imports from subject countries constitute ***% of the market share during the period of investigation.
 - b. The volume of imports from the subject country was *** times the Indian production in the period of investigation despite significant new capacities added in the Indian market. This clearly shows that the exporters are flooding the Indian market to drive out the domestic industry.
 - c. The dumped imports are undercutting the prices of the domestic industry which is significantly positive during the period of investigation.
 - d. The subject imports have continuously caused strain on the prices of the domestic industry as they were priced lower than the selling price of the domestic industry throughout the injury period.
 - e. In the period of investigation, the landed value of the subject goods was below the cost of sales and selling price of the domestic industry. This clearly shows the price pressure on the domestic industry.
 - f. The dumped imports have had a suppressing effect on the prices of the domestic industry.
 - g. The share of the domestic industry in the demand is a meagre ***%, despite having sufficient capacity to meet the Indian demand.
 - h. Due to the constant pressure of dumped imports, the domestic industry has not been able to dispose of its production sufficiently. As a result, the domestic industry was forced to undertake exports to dispose of their inventories to avoid piling up the goods.
 - i. In the period of investigation, the profitability of the domestic industry has declined by nearly ***% when compared to the base year. The domestic industry has also faced significant cash losses and a negative return of ***%. This is substantial by any standards.
 - j. The domestic industry has also submitted that post initiation, their losses increased substantially and imports also increased.
 - k. In relation to the alleged high return, it is submitted that the return of 22% has been the consistent practice of the DGTR which has also been upheld by the higher authorities in a number of cases. Moreover, the return of 22% is on capital employed

(working capital and fixed assets) determined with proper guidelines and is used for the limited purpose of arriving at the NIP. Domestic Industry also highlighted that 22% of ROCE typically translated to *** to ***% profit on cost and even less in many cases and, therefore, this cannot be considered as high or extraordinary. In support of 22%, Domestic Industry has also provided judgements wherein courts / tribunals have upheld 22% return on capital employed.

- l. The Domestic Industry emphasizes that injury parameters cannot be analyzed in isolation. Domestic Industry has submitted that both price undercutting and price depression exist in the present case and therefore, requirements of Article 3.2 of the AD Agreement are clearly met with. Similarly, as per Article 3.4 of the AD Agreement, the Domestic Industry highlights that all relevant economic factors must be evaluated collectively, even if not all of them may indicate injury.
- m. Domestic Industry also provided statistical evidence of injury and submitted that increased installed capacity to meet increasing demand, should not be interpreted as an absence of injury, as claimed by the interested parties. They have also highlighted that there is huge increase in the inventories despite higher production, sales and demand, indicating injurious impact of subject goods from subject countries.
- n. It is further submitted that verified data on record shows that Domestic Industry is suffering critically as there are losses, negative return on investment, coupled with increased inventories and reduced capacity utilization declining sales realization and losses, worsening financial performance, and reduced market share.
- o. In relation to demand and supply gap, the Domestic Industry submitted that Indian producers can meet ***% of Indian demand but has faced challenges due to dumped imports since the discontinuation of anti-dumping duties in 2022. It is further submitted that despite added module manufacturing capacities, domestic glass production has not gone up essentially due to unremunerative prices on account of incessant dumping.
- p. Domestic Industry has submitted that levy of provisional duties has revitalized plans for capacity expansion. It is also stated that even the 2024 budget speech of the Hon'ble Finance Minister supports these efforts. It is further submitted that due to sufficient domestic solar glass capacities existing in the country, exemptions of basic customs duty on imports of the subject goods have been discontinued.
- q. In relation to quality claims, Domestic Industry submitted that the quality of its goods is on par with imported goods. It is further submitted that the claims of inferior quality by some parties lack factual evidence, as no supporting data or impact on final products has been provided. In relation to specific issues raised by the interested parties, the Domestic Industry has submitted that most of the issues raised by the interested parties barring some stray instances, are not concerned with the product as such. It has been further submitted that transition from "glass-to-back sheet" to "glass-to-glass", technology has increased demand and is unrelated to quality concerns. Further, issues relating to pasting, blasting during lamination, adhesive failure cannot be attributed to quality of glass. None of the interested parties has provided any evidence to show that their modules were downgraded in quality index by their users because of using subject goods produced by Domestic Industry.
- r. In addition to above, it is submitted that the quality claims against the Domestic Industry account for less than ***% of total sales volume, indicating its insignificance. Domestic Industry further submitted that the Authority has consistently dismissed quality-related arguments when domestic and imported products are substitutable in the market.

- s. In relation to claims of higher depreciation and interest costs, Domestic Industry submits that both depreciation and interest costs account for only ***% of total costs, which is insufficient to account for the massive losses and cash losses of the industry.

G.3 Examination by the Authority

57. Rule 11 of the Rules read with Annexure II provides that an injury determination shall involve examination of factors that may indicate injury to the domestic industry, '*... taking into account all relevant facts, including the volume of dumped imports, their effect on prices in the domestic market for like articles and the consequent effect of such imports on domestic producers of such articles...*'.
58. In relation to issues related to appropriate return for the purpose of Non-Injurious Price, it is noted that the Authority has consistently used 22% return on capital employed in all its investigations and no substantive grounds have been made to deviate from Authority's consistent practice which has been also upheld by Courts/Tribunals in the past.
59. In relation to quality issues, it is noted that none of the interested parties has provided any concrete evidence related to technical difficulty in achieving specific quality specifications by the Domestic Industry. Some interested parties have submitted email communications and minutes of the meeting stating quality issues pertaining to the subject goods produced by the Domestic Industry. Domestic Industry has refuted the claims supported by email communications and minutes of the meeting with customers. The Authority also checked the compensation given by the Domestic Industry for not meeting the quality during the POI and it was found to be miniscule. In view thereof, it is noted that merely because of the existence of some stray quality-related issues, it cannot be considered that the Domestic Industry's injury cannot be attributed to the dumped imports. It is also noted that total quality claims received by the Domestic Industry is less than *** % of their total sales.
60. The Authority has examined the arguments and counter-arguments of the interested parties with regard to injury to the domestic industry. The injury analysis made by the Authority hereunder addresses the various submissions made by the interested parties.

Cumulative assessment of imports

61. Article 3.3 of WTO agreement and Para (iii) of Annexure II of the AD provide that in case where imports of a product from more than one country are being simultaneously subjected to anti-dumping investigation, the Authority will cumulatively assess the effect of such imports, in case it determines that:
 - a. The margin of dumping established in relation to the imports from each country is more than two percent expressed as percentage of export price and the volume of the imports from each country is three percent (or more) of the import of like article or where the export of individual countries is less than three percent, the imports collectively account for more than seven percent of the import of like article; and
 - b. Cumulative assessment of the effect of imports is appropriate in light of the conditions of competition between the imported article and the like domestic articles.
62. The Authority notes that:
 - a. The subject goods are being dumped into India from subject countries. The margins of dumping from each of the subject countries are more than the *de minimis* limits prescribed under the Rules.
 - b. The volume of imports from each of the subject countries is individually more than 3% of total volume of imports.

c. Cumulative assessment of the effects of imports is appropriate as the exports from the subject countries not only directly compete inter se but also with the like articles offered by the domestic industry in the Indian market.

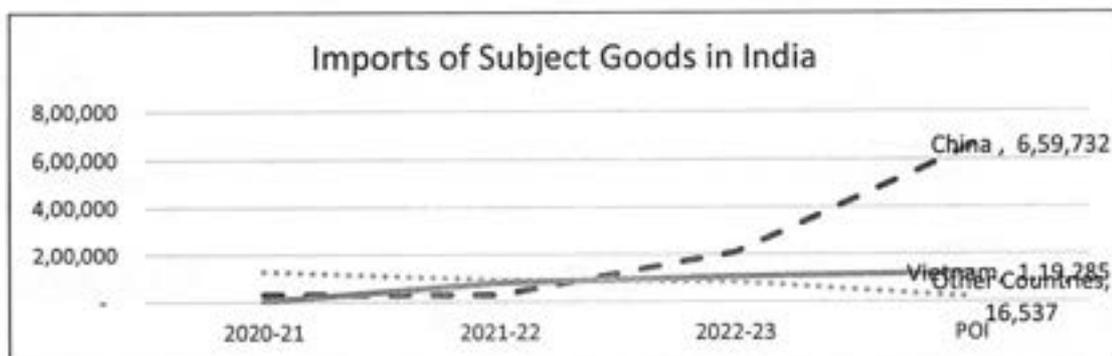
63. In view of the above, the Authority considers it appropriate to assess injury to the domestic industry cumulatively from exports of the subject goods from the subject countries.

Volume effect of the dumped imports

G.3.1 Assessment of demand / apparent consumption

64. The Authority has defined, for the purpose of the present investigation, demand or apparent consumption of the product concerned in India as the sum of the domestic sales of the domestic industry and other Indian producers and imports from all sources. The demand so assessed is given in the table below:

Particulars	Unit	2020-21	2021-22	2022-23	POI
Subject countries	MT	29,980	106,464	312,595	779,017
China	MT	29,324	28,372	209,317	659,732
Vietnam	MT	656	78,093	103,277	119,285
Other Imports	MT	128,819	91,972	82,930	16,537
Total Imports	MT	158,799	198,436	395,524	795,555
Sales of the domestic industry	MT	***	***	***	***
Sales of Other Domestic Producers	MT	0	0	0	***
Total Demand/Consumption	MT	***	***	***	***
Production-PUC	MT	***	***	***	***
Trend	Indexed	100	118	129	209
Import from Subject countries in relation to Consumption	%	***	***	***	***
Trend	Indexed	100	297	514	633
Production-PUC	%	***	***	***	***
Trend	Indexed	100	300	808	1,245



65. The Authority notes the following from the table and the graph above:

- a. Imports from Subject Countries: Imports from subject countries (including China and Vietnam) showed a significant increase over the years. Starting at 29,980 MT in 2020-21, they surged to 779,017 MT during the POI (Period of investigation).
- b. China's Contribution: Imports from China grew from 29,324 MT in 2020-21 to 659,732 MT during the POI.
- c. Vietnam's Contribution: Imports from Vietnam increased from 656 MT in 2020-21 to 119,285 MT in the POI, with the highest spike between 2020-21 and 2021-22.
- d. Other Imports: Imports from other sources outside the subject countries decreased over time, starting from 128,819 MT in 2020-21 to 16,537 MT during the POI.
- e. Total Imports: Reflecting the rise in imports from subject countries, the total imports grew significantly from 158,799 MT in 2020-21 to 795,555 MT in the POI, indicating a shift towards imports from the subject countries.
- f. Sales of the domestic industry: Sales volumes of the domestic industry remained relatively stable over the first three years, ranging between *** MT to *** MT, and increased to *** MT during the POI.
- g. Sales of Other Domestic Producers: There were no sales recorded for other domestic producers from 2020-21 to 2022-23. Sales of *** MT were made during the POI.
- h. Total Demand/Consumption: The overall market demand or consumption has been on an upward trend throughout the period, growing from *** MT in 2020-21 to *** MT during the POI, indicating increased market activity.
- i. Imports in relation to consumption and production has increased manifold during the injury investigation period.

G.3.3 Price effect of dumped imports

66. In terms of Annexure II (ii) of the Rules, with regard to the effect of the dumped imports on prices, the Authority is required to consider whether there has been a significant price undercutting by the dumped imports as compared with the price of the like product in India, or whether the effect of such imports is otherwise to depress prices to a significant degree or prevent price increase, which otherwise would have occurred, to a significant degree.

a) Price undercutting

67. Price undercutting has been determined by comparing the net sales realization of the domestic industry with the landed price of the imports for the period of investigation. It is seen that the price undercutting is positive during the period of investigation.

Particulars	Unit	2020-21	2021-22	2022-23	POI
Net selling price	₹/MT	***	***	***	***
Landed Price	₹/MT	48,072	47,848	45,606	42,872
Price undercutting	₹/MT	***	***	***	***
Price undercutting	%	***	***	***	***
Range	Range	0-10	10-20	10-20	0-10

It is noted that during the period of investigation, the subject imports were undercutting the prices of the domestic industry.

b) Price suppression/depression

68. In order to determine whether the dumped imports are depressing the domestic prices and whether the effect of such imports is to suppress prices to a significant degree or prevent price increase which otherwise would have occurred in the normal course, the changes in the costs and prices over the injury period, were compared as below:

Particulars	Unit	2020-21	2021-22	2022-23	POI
Cost of sales Domestic	₹/MT	***	***	***	***
Trend	Indexed	100	109	119	105
Selling price	₹/MT	***	***	***	***
Trend	Indexed	100	114	111	93
Landed Price	₹/MT	48,072	47,848	45,606	42,872
Trend	Indexed	100	100	95	89

69. The Authority notes from the above that the landed value of the imports was below the selling price of the domestic industry throughout the injury period.
70. During the period of investigation, the landed value of the subject goods remained lower than the cost of sales of the domestic industry and its domestic selling prices. This prevented the domestic industry from keeping its price in tandem with the cost of sales. It is, therefore, noted that the imports have prevented price increase, which otherwise, would have occurred. Thus, the imports have had suppressing effect on the prices of the domestic industry.

G.3.4 Economic parameters related to the domestic industry

71. Annexure II to the Anti-Dumping Rules requires that the determination of injury shall involve an objective examination of the consequent impact of dumped imports on domestic producers of the subject goods. The Rules further provide that the examination of the impact of the dumped imports on the domestic industry should include an objective 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, the magnitude of the margin of dumping; actual and potential negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital investments. The various injury parameters relating to the domestic industry are discussed herein below.

a) Production, capacity, capacity utilization and sales volumes

72. Capacity, production, sales and capacity utilization of the domestic industry over the injury period were as below:

Particulars	Unit	2020-21	2021-22	2022-23	POI
Installed Capacity	MT	***	***	***	***
Trend	Indexed	100	114	128	232
Total Production	MT	***	***	***	***
Trend	Indexed	100	115	125	199
Production-PUC	MT	***	***	***	***

Particulars	Unit	2020-21	2021-22	2022-23	POI
Trend	Indexed	100	118	129	209
Capacity Utilization	%	***	***	***	***
Trend	Indexed	100	100	98	86
Domestic Sales	MT	***	***	***	***
Trend	Indexed	100	109	107	188
Export Sales	MT	***	***	***	***
Trend	Indexed	100	153	210	271
Demand / Consumption	MT	***	***	***	***
Trend	Indexed	100	120	203	411

73. From the above, the Authority notes that:

- The domestic industry has increased their capacity throughout the injury investigation period to cater to the increasing demand of India. Capacity utilization of the domestic industry was ***% of the installed capacity during the period of investigation. This implies that around ***% of the installed capacity remained unutilized, despite significant increase in the demand of the subject goods.
- The domestic sales of the domestic industry are negligible (around ***%), in comparison to the total demand of the subject goods.
- As per the data available on record, other producers have combined capacity of *** MT. The total available capacity in India along with applicant industry is as follows:

Particulars	Capacity	Sales	Imports - Total	Total Demand
Production (MT)				
Applicant (MT)	***	***		
Gobind Glass & Industries Ltd. (MT)	***	***		
Triveni Renewables Private Ltd. (MT)	***	***		
Vishakha Glass Pvt. Ltd. (MT)	***	***		
Gold Plus Float Glass Pvt. Ltd. (MT)	***			
Emerge Glass (MT)	***			
Total (MT)	***	***	795,555	***

- From the above, it is noted that currently Indian producers have around ***% of the Indian demand. Moreover, as submitted by the Indian industries, some of the other producers have delayed the installation of their machineries because of influx of imports from China, post expiry of anti-dumping duties.

b) Market Share

74. Market share of the domestic industry and of imports was as shown in the table below:

Market share	Unit	2020-21	2021-22	2022-23	POI
Domestic industry Sales	MT	***	***	***	***
Trend	Indexed	100	109	107	188

Market share	Unit	2020-21	2021-22	2022-23	POI
Sales of Other Indian Producers	MT	-	-	-	***
Trend	Indexed	-	-	-	100
Total Indian Sales	MT	***	***	***	***
Trend	Indexed	100	109	107	225
Imports from Subject Countries	MT	29,980	1,06,464	3,12,595	7,79,017
Trend	Indexed	100	355	1,043	2,598
Imports from Other Countries	MT	1,28,819	91,972	82,930	16,537
Trend	Indexed	100	71	64	13
Total Imports	MT	1,58,799	1,98,436	3,95,524	7,95,555
Trend	Indexed	100	125	249	501
Demand in India	MT	***	***	***	***
Trend	Indexed	100	120	203	411
Market Share					
Domestic industry	%-	***	***	***	***
Trend	Indexed	100	91	53	46
Other Producers Industry	%-	0%	0%	0%	***
Trend	Indexed	-	-	-	100
Indian producers	%-	***	***	***	***
Trend	Indexed	100	91	53	55
Subject imports	%-	***	***	***	***
Trend	Indexed	100	292	500	615
Other Country Imports	%-	***	***	***	***
Trend	Indexed	100	60	31	4

75. It is noted that despite having sufficient capacity of approximately ***% of the demand, the share of the domestic industry in the Indian market is only *** %. The imports from the subject countries have continued to dominate the Indian market throughout the injury period with an ***% share during the period of investigation.

(c) Inventories

76. 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	MT	***	***	***	***
Closing Inventory	MT	***	***	***	***
Average Inventory	MT	***	***	***	***

Trend	Indexed	100	104	289	405
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77. It is noted that the average inventories of the domestic industry have increased throughout the injury investigation period. Further, it is seen that the average inventory was highest during the period of investigation.

(d) Profit/loss, cash profit and return on capital invested.

78. Profitability, return on investment and cash profits of the domestic industry over the injury period are given in the table below:

Particulars	Unit	2020-21	2021-22	2022-23	POI
Cost of sales (domestic)	₹/MT	***	***	***	***
Trend	Indexed	100	109	119	105
Selling price	₹/MT	***	***	***	***
Trend	Indexed	100	114	111	93
Profit/ (loss)	₹/MT	***	***	***	***
Trend	Indexed	-100	-56	-236	-269
Profit/ (loss)	₹ Lacs	***	***	***	***
Trend	Indexed	-100	-61	-253	-505
Cash Profit / Loss	₹ Lacs	***	***	***	***
Trend	Indexed	-100	-43	-316	-633
Return of investment	%	***	***	***	***
Trend	Indexed	-100	-83	-269	-453

79. From the above, the Authority notes that:
- The selling price of the domestic industry has declined in the POI vis-i-vis year 2021-22 and 2022-23
 - During the POI, the cost of the domestic industry declined, however, the decline in selling price was steeper. The applicant has submitted that this has further worsened their position.
 - The applicant has incurred losses and cash losses and is suffering negative return on investment during the period of investigation.

(e) Employment, wages and productivity.

80. The Authority has examined the information relating to employment, wages and productivity, as given below.

Particulars	Unit	2020-21	2021-22	2022-23	POI
No. of employees	Nos.	***	***	***	***
Trend	Indexed	100	125	172	177
Salaries & Wages	₹ Lacs	***	***	***	***
Trend	Indexed	100	153	118	115
Salaries & Wages	Rs/Nos	***	***	***	***
Trend	Indexed	100	122	68	65
Productivity per day	MT/Days	***	***	***	***
Trend	Indexed	100	118	129	209
Productivity per employee	MT/Nos	***	***	***	***

Trend	Indexed	100	95	75	118
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81. It is noted that the number of employees increased throughout the injury investigation period, as the domestic industry has increased the capacity to cater to the increased demand. It is further noted that the productivity has also increased which shows that there is no negative impact of increase in the number of employees.
82. The salary paid to the employees decreased by around ***% i.e., from 100 indexed points in the base year to 65 indexed points in the period of investigation, which, as submitted by the domestic industry indicates the negative impact of dumping on it.

(f) Growth.

Particulars	Unit	2020-21	2021-22	2022-23	POI
Demand – MT	%	-	***	***	***
Production - MT	%	-	***	***	***
Domestic Sales - MT	%	-	***	***	***
Market share %	%	-	***	***	***
Domestic sales - Rs/MT	%	-	***	***	***
Profit / Loss - Rs/MT	%	-	***	***	***
Cash Profits - Rs/MT	%	-	***	***	***
Return on capital employed %	%	-	***	***	***

83. From the above, the Authority notes that the demand of the subject goods increased substantially during the injury investigation period. However, the domestic sales and market share have not increased in the same ratio. Profitability, cash flow and return on capital employed were significantly negative in the period of investigation which is reflective of the deterioration of performance of the domestic industry during the period of investigation.

(g) Ability to raise capital investment.

84. The applicant has submitted that it has incurred steep losses and is facing negative returns. The Earnings Before Interest, Taxes, Depreciation, and Amortization (EBIDTA) has continuously deteriorated over the injury period and remained negative. The applicant has further submitted that the negative EBIDTA shows that the domestic industry is not earning enough to even meet its present obligations and there is a negative impact on the ability to raise capital investment.

(h) Margin of dumping.

85. The margin of dumping is an indicator of the extent to which the dumped imports can cause injury to the domestic industry. The dumping margin is positive and significant for both countries.

Factors affecting prices of the domestic industry.

86. It is noted that the domestic industry has not been able to increase its prices to a remunerative level during the period of investigation. The imports have forced the domestic industry to sell the goods below cost. Further, the low-priced imports have also resulted in low market share, and underutilized capacity of the domestic industry. Thus, the subject imports have adversely affected the prices of the domestic industry.

CONCLUSION ON MATERIAL INJURY

87. After examining the volume and price effects of imports of subject goods from the subject countries and its impact on the domestic industry, the Authority concludes that the dumped imports of the subject goods from the subject countries increased significantly throughout the injury investigation period in absolute terms. With regard to price effect on account of imports of subject goods from subject countries, it is noted that imports of the subject goods from subject countries is suppressing / depressing the prices of domestic industry. With regard to consequent impact of the dumped imports on the domestic industry, it is noted that the market share of the domestic industry has declined significantly during the injury period while inventory has gone up significantly during the same period. It is also noted that the operating performance of the domestic industry remained negative in respect of profit, return on investment and cash flow. Thus, the Authority concludes that the domestic industry has suffered material injury during the period of investigation

H. NON-ATTRIBUTION ANALYSIS.

88. Having examined the existence of injury, volume and price effect of dumped imports on the prices of the domestic industry, the Authority has examined whether injury to the domestic industry can be attributed to any factor, other than the dumped imports, as listed under the Rules.

a. Volume and price of imports from third countries.

89. It is noted that imports from non-subject countries are negligible by the way of volume. The imports from the subject countries constitute around 98% of the imports in India. Therefore, the injury caused cannot be attributed to the third countries.

b. Contraction in the demand

90. The Authority notes that the demand for the subject goods has increased throughout the injury investigation period. Therefore, the domestic industry has not suffered injury due to a contraction in demand.

c. Pattern of consumption

91. It is noted that there has been no material change in the pattern of consumption of the product under consideration, which could have caused injury to the domestic industry.

d. Conditions of competition

92. The Authority notes that there is no evidence of conditions of competition or trade restrictive practices that could have been responsible for the claimed injury to the domestic industry.

e. Developments in technology

93. The Authority notes that there has been no change in technology for the production of the subject goods that could have caused injury to the domestic industry.

f. Export performance of the domestic industry

94. The injury information examined hereinabove relates only to the performance of the domestic industry in terms of its domestic market. Thus, the injury suffered cannot be attributed to the export performance of the domestic industry.

Factors establishing causal link

95. Analysis of the performance of the domestic industry over the injury period shows material injury to the domestic industry. The causal link between dumped imports and the injury to the domestic industry is established on the following grounds:
- i. Imports have increased in absolute terms and have remained significant in relative terms. Imports have increased despite increase in capacity and production in the country.
 - ii. Landed price of the subject imports is below the selling price of the domestic industry and also below the cost of sales in the POI and has caused price suppression.
 - iii. The market share of the domestic industry has significantly declined during the injury period.
 - iv. Inventories of the domestic industry has been on the rise and has increased significantly in the POI.
 - v. The domestic industry's profitability and return on capital employed has been adversely affected.
96. The above analysis indicates that the domestic industry is suffering material injury due to increased dumped imports of the PUC into India from the subject countries. There exists a causal relation between the increase in dumped imports of the subject goods originating in or exported from the subject countries and the material injury suffered by the domestic industry.

I. MAGNITUDE OF INJURY MARGIN.

97. The Authority has determined Non-Injurious Price for the domestic industry on the basis of principles laid down in the Rules read with Annexure III, as amended. The non-injurious price of the product under consideration has been determined by adopting the verified information/data relating to the cost of production for the period of investigation. The non-injurious price has been considered for comparing the landed price from the subject country for calculating the injury margin. For determining the non-injurious price, the best utilisation of the raw materials by the domestic industry over the injury period has been considered. The same treatment has been carried out with the utilities. The best utilisation of production capacity over the injury period has been considered. It is ensured that no extraordinary or non-recurring expenses are charged to the cost of production. A reasonable return (pre-tax @ 22%) on average capital employed (i.e. average net axed assets plus average working capital) for the product under consideration was allowed as pre-tax profit to arrive at the non-injurious price as prescribed in Annexure III of the Rules and being followed.
98. The landed price for the cooperative exporters has been determined on the basis of the data furnished by the exporters. For all the non-cooperative producers/exporters from the subject countries, the Authority has determined the landed price based on the facts available.
99. Based on the landed price and non-injurious price determined as above, the injury margin for producers/exporters has been determined by the Authority and the same is provided in the table below:

Producer	Landed value (USD/MT)	NIP (USD/MT)	Injury margin (USD/MT)	Injury Margin (%)	Injury Margin
					(Range)
China					
Shaanxi Topray Solar Co., Ltd / Shenzhen Topray Solar Co., Ltd	***	***	***	***	20-30
Anhui Flat Solar Glass C., Ltd./ Flat Glass Group Co., Ltd/ Flat (Hong Kong) Co., Ltd.	***	***	***	***	20-30
Anhui CSG New Energy Material Technology Co., Ltd	***	***	***	***	30-40
Dongguan CSG Solar Glass Co., Ltd	***	***	***	***	30-40
Wujiang CSG Glass Co., Ltd	***	***	***	***	30-40
Xinyi group: Guangxi Xinyi Photovoltaic Industry Co., Ltd / Xinyi PV Products (Anhui) Holdings Ltd/ Xinyi Solar (Suzhou) Ltd / Xinyi Solar (Hong Kong) Limited.	***	***	***	***	40-50
Kibing Group: Zhangzhou Kibing Photovoltaic New Energy Technology Co., Ltd./Hunan Kibing Solar Technology Co., Ltd./ Ningbo Kibing Photovoltaic Technology Co., Ltd	***	***	***	***	20-30
Others	***	***	***	***	60-70
Vietnam					
Flat (Vietnam) Solar Glass Co., Ltd/ Flat (Hong Kong) Co., Limited., Ltd.	***	***	***	***	50-60
Others	***	***	***	***	50-60

J. ISSUES OF THE INDIAN INDUSTRY

J.1 Submissions made on behalf of the opposing interested parties.

100. The other interested parties have made following submissions with regard to the Indian industry's interest.

- a. Anti-dumping duties on solar glass will significantly raise production costs for solar module manufacturers, particularly those relying on imported textured tempered glass for advanced photovoltaic technologies. This increase in cost will

not only affect India's solar competitiveness but also slow down progress toward achieving national climate goals and renewable energy targets.

- b. The downstream industries argue that higher costs could lead to reduced adoption of solar energy due to less competitive pricing in both domestic and global markets, further disadvantaging India in its green energy initiatives.
- c. It was also submitted that the impact of duties is much more than what is indicated by the Authority in the provisional findings. According to the calculation submitted by them the impact of the duties would be around 3% from Vietnam and 6% from China.

J.2 Submissions made on behalf of the domestic industry.

101. The domestic industry has made the following submissions with regard to the Indian industry's interest:

- a. The domestic industry has the capacity to cater around *** % the Indian demand.
- b. It is further noted that apart from the domestic industry, five more producers have set up plants for production of the subject goods with the intention of making India self-sufficient.
- c. If the current situation continues, the domestic industry will have no option but to permanently shut down its operations and India and it will once again become import dependent.
- d. In light of the widening trade deficit, it is important to rely more on domestic production capacities. Imposition of duties would allow conservation of the outgoing foreign exchange favoring the balance of payment account
- e. The impact of the imposition of anti-dumping duty on subject goods will be negligible as compared to the cost of the solar module.
- f. Since there are already six players in the market and few more are to commence production, this would ensure that there is no monopoly in India and that the users would have enough sources in the domestic market as well.
- g. The product under consideration can be imported at fair prices from other sources also and, therefore, there would be no adverse impact on users.
- h. In relation to the high impact of the duties on users, it is submitted that the calculation provided by the association was based on the landed value for which no evidence was provided. The association has simply used lower landed value to show higher impact of the proposed anti-dumping duty. Domestic Industry has further submitted that it would not be appropriate to calculate the alleged adverse impact of the duty on the user industry on a price which itself is held to be significantly dumped price. The Domestic Industry has further submitted that if the impact is calculated based on the average import prices prevailing during the previous three years of the injury investigation period, it will show no impact for Vietnam and a negligible ****% impact qua China, even from the analysis which users have given.
- i. Domestic Industry submitted that Solar Photovoltaic Panels/ module manufacturers have 40% BCD and support of Approved List of Module Manufacturers (ALMM). This gives protection to the solar module manufacturers from low priced imports from China and other countries. It is also important to state that the subject goods constitute very small portion of the cost of solar module. Therefore, there would be no serious adverse impact of the anti-dumping duties on the end product.
- j. In relation to impact of duties, it is submitted that the impact of reference-price duty on subject goods would be less than ****% on module cost based on prevailing costs in the POI. In terms of impact on the per unit cost of electricity, the impact of duties on subject goods would be much less. Thus, the impact the anti-dumping duties on the subject goods is either non-existent or very insignificant. It is also submitted that

- in view of the reference price based anti-dumping duty, importers would not be required to pay any anti-dumping duties if imports are made at fair prices.
- k. In relation to levy of reference price-base duties, it is submitted that by recommending levy of reference price-based duties, the Authority has restored fair prices in the market place.
 - l. Domestic Industry has also submitted that these duties would significantly contribute towards creating a local supply chain for a critical component and also to achieve the larger goal of "Atmanirbhar Bharat" in this strategically important sector besides saving the foreign exchange outgo and create jobs. Therefore, the duties are in interest of Indian users.

J.3 Examination by the Authority.

102. The Authority underscores that the primary objective of anti-dumping duties is to rectify the injury inflicted upon the domestic industry by the unjust trade practices of dumping, thereby fostering an environment of open and equitable competition in the Indian market. The imposition of anti-dumping measures is not designed to curtail imports from the subject countries arbitrarily. Rather, it is based on a detailed analysis regarding dumping injury and the causal link between the two and is a mechanism to ensure a level playing. The Authority acknowledges that the presence of anti-dumping duties may influence the price levels of the product in India. However, it is crucial to note that the essence of fair competition in the Indian market will remain unscathed by the imposition of these measures. Far from diminishing competition, the imposition of anti-dumping measures serves to prevent the accrual of unfair advantages through dumping practices. It safeguards the consumers' access to a broad selection of the subject goods. Thus, anti-dumping duties are not a hindrance but a facilitator of fair-trade practices.
103. The Authority issued initiation notification inviting views from all the interested parties, including importers, consumers and others. The Authority also prescribed a questionnaire for the users/ consumers to provide relevant information about the present investigation. An Economic Interest Questionnaire was also prescribed to allow various stakeholders, including the domestic industry, producers/exporters and importers/users/consumers to furnish pertinent information related to the ongoing investigation including the possible effect of anti-dumping duty on their operations.
104. The Authority sought information on, inter-alia, interchange ability of the product supplied by various suppliers from different countries. Ability of the domestic industry to switch sources, effect of anti-dumping duty on the consumers, factors that are likely to accelerate or delay the adjustment to the new situation caused by imposition of antidumping duty.
105. The Authority notes that no user of the subject goods has stepped forward to participate before the Authority or furnished a response to the Economic Interest Questionnaire. Furthermore, no party has presented any evidence to indicate the adverse effect of the duties in force. This lack of evidence and participation of the stakeholders underscores the Authority's position and reinforces the necessity of anti-dumping measures to ensure fair trade practices.
106. The Authority, however, notes that the domestic industry, based on the current market prices, has provided an estimate of the possible impact of the anti-dumping duties on the end consumers in the following table:

Particulars	Reference	UoM	Amount
Price of 540 Wp solar module based on MIC) solar cells	A	Rs./Module	***

Subject goods used in 540 Wp solar module based on MIO solar cells	B	Kgs./Module	***
Price of Subject goods – Coated	C	Rs./Kg.	***
Costs of subject goods build in 540 Wp solar module based on M10 solar cells	$D=C*B$	Rs/MT	***
% cost of subject goods in Module	$E=D/A$	%	***
Additional cost on Module due to 25% antidumping duties on subject goods	$F=D*25\%$	Rs/MT	***
Total cost of subject goods in module adding anti-dumping duties	$G=D+F$	Rs/MT	***
% cost of subject goods in Module	$H=G/A$	%	***
Additional impact per Solar Module due to anti-dumping duties	$I=F/A$	%	2.52%

107. From the above submission the Authority notes that the impact of the anti-dumping duties on the end consumers will be insignificant.
108. In relation to the high impact of the duties on users, it is noted that the users have not provided any evidence how it will impact their financial performance or the impact of duties on the final consumer. No analysis / data / working was also provided to substantiate their claim. Further, user association merely substituted lower landed value in the Table provided in the provisional findings to show higher impact, but none of them showed impact based on the prices prevailing during injury investigation period.
109. The Authority notes that the imposition of anti-dumping duty will not lead to scarcity of the subject goods in India. It is noted that anti-dumping duty does not restrict imports but ensures that imports are available at fair prices. The imposition of duty would, therefore, not affect the availability of the product.
110. The Authority notes that the applicant has submitted data showing substantial hardships faced by the domestic producers of PUC in the period following the POI. Notably, the data reveals an alarming surge in import volumes and a steep decline in import prices, underscoring the aggressive nature of imports that have flooded the Indian market with low-cost products.
111. From the POI's average daily import of approximately *** MT, import volumes have surged heavily, reaching *** MT per day by September 2024—a staggering ****% increase. Concurrently, CIF prices have plummeted, with the price per metric ton decreasing from an average of Rs. *** during the POI to Rs. *** in September 2024, representing a decline of roughly ****%. This downward trajectory continued into October, with prices further falling to an unprecedented Rs. *** per MT, which signals a significant ****% reduction from the POI prices.
112. The Authority further notes that the applicant has requested for reference price-based duties and has reasoned that such form of duties will not only mitigate the injurious effects but also establish a fair competitive landscape, ensuring that duties are effectively targeted to protect the domestic industry from persistent, low-priced imports without burdening fair-priced exporters.
113. The Authority recognizes that the aforementioned economic parameters are indicative of severe injury, warranting the need of robust remedial measures.

K. POST DISCLOSURE SUBMISSIONS

114. The Authority has examined all post disclosure comments made by the interested parties in these final findings to the extent deemed relevant. Any submission which was merely a reproduction of the previous submission and which had been adequately examined by the Authority have not been repeated for the sake of brevity.

Submissions made by the other interested parties

115. The submissions made by the other interested parties are as under:

- a. One of the participating exporters has contended that since the Authority has made product type-wise analysis of the dumping margin and injury margin, they should have considered thickness also while calculating margins.
- b. Interested parties have also contended that the domestic industry, being the sole manufacturer of the subject goods, cannot meet India's total demand, forcing reliance on imports. Granting protection to this monopoly would raise costs for solar panel producers, reduce competitiveness, and hinder India's net-zero emissions goal by disproportionately benefiting a single produce i.e. Borosil Renewables Energy Limited.
- c. The producers/exporters have argued that imposing anti-dumping duties on textured tempered glass from China PR would harm India's renewable energy goals. As textured tempered glass is a key component of solar panels, the duties would increase costs, making solar projects less affordable and competitive, and undermine efforts to meet India's renewable energy targets. Therefore, they claim such duties are not justified.
- d. It has been submitted that India does not have an established ecosystem for manufacturing the PUC and satisfying the increasing demand for the same in India and therefore, the duties will create monopoly in the market. The duties will further lead to demand and supply gap, due to which imports are necessary in India.
- e. There is no causal link between imports and domestic industry's financial struggles. It is further stressed that due to overcapacity and interest costs domestic industry is suffering injury.
- f. It has also been submitted that BRL has not adequately addressed the quality complaints from users and therefore, the Authority should address them in final findings.
- g. Interested parties have also submitted that the Domestic Industry losses are not due to imports from subject countries but other factors such as expansion-related financial burdens, demand-supply gap in domestic production and high depreciation and interest costs
- h. High return on capital employed (22%) has been considered by the Authority while calculating NIP and due to this inflated NIP, injury margins are also very high leading to high injury margin and duties for users.
- i. Some of the interested parties have opposed reference-price based duties while the others have requested the Authority for the continuation of the same.

Submissions of the Domestic Industry:

116. The submissions made by the Domestic Industry are as under:

- a. Domestic Industry has requested the Authority to share detailed calculations of the Non-Injurious Price (NIP) and consider the NIP based on the verified information and also to give due cognizance to the information submitted during verification and accordingly, modify injury margin in the final findings.

- b. It has been submitted that certain importers, with the help of exporters, are clearing the subject goods under the name "heat strengthened solar glass" instead of "textured tempered glass" to evade anti-dumping duties. Domestic industry believes that this change in description is intended to bypass the duties. Therefore, the Domestic Industry has requested the Authority to clarify that "heat strengthened solar glass" is also covered under the product under consideration in the final findings, to ensure that no undue advantage is taken by importers due to the altered description.
- c. The Domestic Industry has requested the Authority to impose a single anti-dumping duty for the entire Flat Glass Group, regardless of origin, to prevent trade flow manipulation. Since the group manufactures in both China and Vietnam and exports via Hong Kong, a lower duty on Vietnam could shift exports there, undermining the duty's effectiveness.
- d. In relation to quality concerns, the Domestic Industry asserts that its products are at par with imports and that minor quality issues are a normal business occurrence. They have also submitted that from the data on record, it is very clear that the total quality claims received by the Domestic Industry during injury investigation period or post POI is very miniscule.

Examination by the Authority

- 117. The Authority observes that the majority of the submissions made by interested parties have already been duly considered and appropriately dealt with in the disclosure statement. These, along with any additional submissions, have been comprehensively addressed in the relevant sections of these final findings. The concerns raised by the Domestic Industry have also been examined and duly responded to within the appropriate sections of these findings.
- 118. With regards to submissions of domestic industry to share detailed calculations of NIP, and consider the NIP based on the verified information, it is reiterated that the Authority has determined Non-Injurious Price for the domestic industry on the basis of principles laid down in the Rules read with Annexure III, as amended. The non-injurious price of the product under consideration has been determined by adopting the verified information/data relating to the cost of production for the period of investigation. Further detailed calculations have been shared with the domestic industry at the time of issuance of disclosure statement.
- 119. As regards submission regarding comparison based on thickness for determination of dumping margin, the Authority notes that none of the interested parties have made any submission at the time of adoption of PCNs in the subject investigation. It is noted that for the analysis of import data as well as the data furnished by the participating producers/exporters, the parameter of thickness has been used to convert volume (SQM) of subject goods into mass (MT), and therefore, the impact of thickness has appropriately been factored in while undertaking injury analysis and computing injury and dumping margins.
- 120. Further, in relation to assessment of dumping and injury margins, the Authority reiterates that it has made an appropriate apple to apple and fair comparison for computation of dumping and injury margins by considering coated and uncoated variants of the PUC ensuring that the principles of fair comparison in terms of Annexure I of the Rules and Article 2.4 of the Anti-dumping Agreement are adhered to.
- 121. With regard to creation of monopoly and reliance on imports due to demand and supply gap, it is noted that the issue of monopoly does not arise since there are several other domestic producers who have already established the manufacturing units for production

of subject goods in India. Additionally, the imported subject goods are always available in the Indian market at undumped price.

122. The Authority notes that anti-dumping duties are imposed only after the outcome of a thorough investigation which establishes that dumped imports are causing material injury to the domestic industry. The objective is to counteract the unfair pricing practices of foreign exporters and ensure a level playing field, rather than granting undue protection to domestic producers. Moreover, anti-dumping investigations consider the presence of multiple domestic producers, as in the subject investigation, and assess the competitive dynamics within the market. The duties are designed to prevent injury to the domestic industry without unduly restricting imports, ensuring that fair-priced imports remain available to consumers. Additionally, anti-dumping measures are subject to periodic review, allowing for their withdrawal if circumstances change. Thus, these duties do not create monopolies rather uphold the principles of fair competition in international trade, in line with the provisions of the WTO Agreement.
123. In relation to impact of duties on India's renewable energy goals, the Authority has already noted in the appropriate paragraph of the final findings that the impact of anti-dumping duties is not significant and hence it will not have an adverse impact on Indian Solar mission. The level playing field will encourage the development of entire value chain in the country and thus ensure proper ecosystem for manufacturing of the PUC.
124. In relation to demand and supply gap, it is noted that, with the present capacity available with the domestic producers, it can cater to ****% of the demand in India. The presence of anti-dumping duties will not stop the imports but will only provide a level playing field and promote fair competition in the market.
125. In relation to impact of overcapacity built by domestic industry and its impact on financial performance, it is noted that depreciation and finance cost constitutes ****% of the total cost. In view thereof, it is clear that such small percentage cannot be responsible for the significant injury and losses of the domestic industry.
126. In relation to quality concerns, the Authority has verified the compensation made in lieu of quality concerns and net of sales return over the injury investigation period and found the same to be inconsequential as can be seen from the table below.

Year Wise	Total Sales (Rs. In Lakhs)	Quality Claim (Rs. In Lakhs)	Sales return (Net of Resales) (Rs. In Lakhs)	Total Claim (Rs. In Lakhs)	% (Total Claim / Total sales)	Range (%)
FY 2020-21	***	***	***	***	***	0-1
FY 2021-22	***	***	***	***	***	0-1
FY 2022-23	***	***	***	***	***	0-1
POI - CY 2023	***	***	***	***	***	0-1
CY 2024	***	***	***	***	***	0-1

127. In relation to the mode of duties, the Authority notes that the levy of reference-price based duty provides a stable pricing framework, allowing both domestic producers and importers to operate with greater predictability. It ensures that the remedial measure is proportionate and does not unfairly restrict imports beyond what is necessary to counteract the dumping/injury. After careful examination the Authority notes that the reference-price based duty is the most appropriate form of duties in the factual matrix of the subject investigation.
128. The Authority acknowledges the concern of the domestic industry regarding the description change from "textured tempered glass" to "heat strengthened solar glass." The

matter has been duly considered, and appropriate clarifications have been incorporated in the final findings to prevent any evasion of anti-dumping duties.

129. The request of the Domestic Industry for a single anti-dumping duty for Flat Glass group across the subject countries has been examined. The Authority in line with the AD Rules and the Agreement, has recommended separate duty for Flat Glass Group entities situated in China and Vietnam.

L. CONCLUSIONS

130. Having regard to the contentions raised, information provided, and submissions made by the interested parties and facts available before the Authority, as recorded in the above findings, and on the basis of above analysis of the dumping, injury and causal link to the domestic industry, the Authority concludes as follows:
- a. The product under consideration for the present investigation is Textured Toughened (Tempered) Glass with a minimum of 90.5% transmission of thickness not exceeding 4.2 mm (including tolerance of 0.2 mm) and where at least one dimension exceeds 1500 mm, whether coated or uncoated. The PUC is also known by various other names such as solar glass, solar glass low iron, solar PV glass, high transmission photovoltaic glass, tempered low iron patterned solar glass and heat strengthened glass.
 - b. The product produced by the applicant is a like article to the imported product.
 - c. Borosil Renewable Limited, constitutes 'the domestic industry' within the meaning of Rule 2(b) of the Rules and the application satisfies the criteria of standing in terms of Rule 5(3).
 - d. Considering the normal value and export price for the product under consideration, the dumping margins for the product under consideration from the subject countries have been determined, and the margins are significantly positive.
 - e. The examination of the imports of the product under consideration shows that the volume of dumped imports from the subject countries have increased manifold in the period of investigation. The imports have increased in both absolute terms and in relation to production and consumption.
 - f. The import price is below the selling price of the domestic industry resulting in price undercutting.
 - g. The import price has not moved in line with the cost of production which has prevented the domestic industry from increasing its prices to the appropriate levels.
 - h. The domestic industry is suffering from financial losses, cash losses and a negative return on capital employed.
 - i. The Authority has examined the submissions made by other interested parties on any other factors which could have caused injury to the domestic industry. No other factor appears to have caused injury to the domestic industry. The Authority concludes that material injury suffered by the domestic industry is caused by the dumped imports from the subject countries.
 - j. Imposition of anti-dumping duty would not affect the availability of the product to the customers. The imports of the product under consideration will continue to happen at fair prices.
 - k. The Authority has quantified the impact of anti-dumping duty on the users. It is seen that the impact of the recommended measures on the eventual end consumers will be insignificant.

M. RECOMMENDATIONS

131. The Authority notes that the investigation was initiated and notified to all interested parties and adequate opportunity was given to the domestic industry, exporters, importers and other interested parties to provide positive information on the aspects of dumping, injury and the causal link. Having initiated and conducted an investigation into dumping, injury and causal link thereof in terms of the Anti-Dumping Rules and having established a positive dumping margin as well as material injury to the domestic industry caused by such dumped imports, the Authority is of the view that imposition of definitive anti-dumping duty is necessary to offset dumping and injury concerning the imports of subject goods originating in or exported from subject countries.
132. Having regard to the lesser duty rules followed by the Authority, the Authority recommends imposition of anti-dumping duty equal to the lesser of margin of dumping and margin of injury so determined in these findings for the period under investigation, so as to remove the injurious effects of the dumped imports on the domestic industry. Taking into account factual matrix of the case, and having regard to information provided, and submissions made by interested parties, it is considered appropriate to recommend benchmark/reference form of anti-dumping duties. Accordingly, reference form of anti-dumping duty is recommended to be imposed on all imports of subject goods originating in or exported from the subject countries, for a period of five years from the date of issue of the notification of imposition of preliminary duty by the Central Government vide Notification No. 26/2024-Customs (ADD) dated 4th December, 2024. The anti-dumping duty is recommended as the difference between the landed value of the subject goods as described in Col.3 of the duty table below and the reference amount indicated in Col.7 of the duty table appended below, provided the landed value is less than the value indicated in Col.7. If the landed value is more than the value indicated in Col 7, the anti-dumping duty will not be applicable. The landed value of imports for this purpose shall be the assessable value as determined by the customs under the Customs Act, 1962 and applicable level of custom duties except duties levied under Section 3, 3A, 8B, 9 and 9A of the Customs Tariff Act, 1975.

DUTY TABLE

S. No.	Heading	Description	Country of Origin	Country of Export	Producer	Amount	Unit	Currency
1	2	3	4	5	6	7	8	9
1	7003, 7005, 7007, 7016, 7020 and 8541*	Textured Toughened (Tempered) Coated and Uncoated Glass **	China PR	China PR	Shaanxi Topray Solar Co., Ltd	664	MT	USD
2	-do-	-do-	China PR	China PR	Anhui Flat Solar Glass Co., Ltd. / Flat Glass Group Co., Ltd.	664	MT	USD

S. No.	Heading	Description	Country of Origin	Country of Export	Producer	Amount	Unit	Currency
3	-do-	-do-	China PR	China PR	Anhui CSG New Energy Material Technology Co., Ltd	664	MT	USD
4	-do-	-do-	China PR	China PR	Dongguan CSG Solar Glass Co., Ltd	658	MT	USD
5	-do-	-do-	China PR	China PR	Wujiang CSG Glass Co., Ltd	664	MT	USD
6	-do-	-do-	China PR	China PR	Guangxi Xinyi Photovoltaic Industry Co., Ltd / Xinyi PV Products (Anhui) Holdings Ltd. / Xinyi Solar (Suzhou) Ltd.	658	MT	USD
7	-do-	-do-	China PR	China PR	Zhangzhou Kibing Photovoltaic New Energy Technology Co., Ltd / Hunan Kibing Solar Technology Co., Ltd. / Ningbo Kibing Photovoltaic Technology Co., Ltd.	659	MT	USD
8	-do-	-do-	China PR	All countries, including China PR	Any Producer other than those mentioned in SN 1 To 7	664	MT	USD
9	-do-	-do-	All countries other than China PR and Vietnam	China PR	Any	664	MT	USD
10	-do-	-do-	Vietnam	Vietnam	Flat (Vietnam) Co., Ltd	570	MT	USD
11	-do-	-do-	Vietnam	All countries including Vietnam	Any Producer other than those mentioned in SN 10	664	MT	USD

S. No.	Heading	Description	Country of Origin	Country of Export	Producer	Amount	Unit	Currency
12	-do-	-do-	All countries other than Vietnam and China PR	Vietnam	Any	664	MT	USD

**The customs classification is only indicative and not binding on the scope of the product under consideration.*

****Textured Toughened (Tempered) Glass** with a minimum of 90.5% transmission of thickness not exceeding 4.2 mm (including tolerance of 0.2 mm) and where at least one dimension exceeds 1500 mm, whether coated or uncoated. The product is also known by various other names such as solar glass, solar glass low iron, solar PV glass, high transmission photovoltaic glass, tempered low iron patterned solar glass and heat strengthened glass.

133. Subject to the above, the preliminary findings issued vide notification no 6/29/2023-DGTR-dated 05.11.2024 is confirmed.

N. FURTHER PROCEDURE

134. An appeal against the recommendation of the Authority shall lie before the Customs, Excise and Service Tax Appellate Tribunal in accordance with the relevant provisions of the Act.


(Darpan Jain)
Designated Authority