Thermoformed Molded Fiber Products from China and Vietnam

Investigation Nos. 701-TA-739-740 and 731-TA-1716-1717 (Preliminary)

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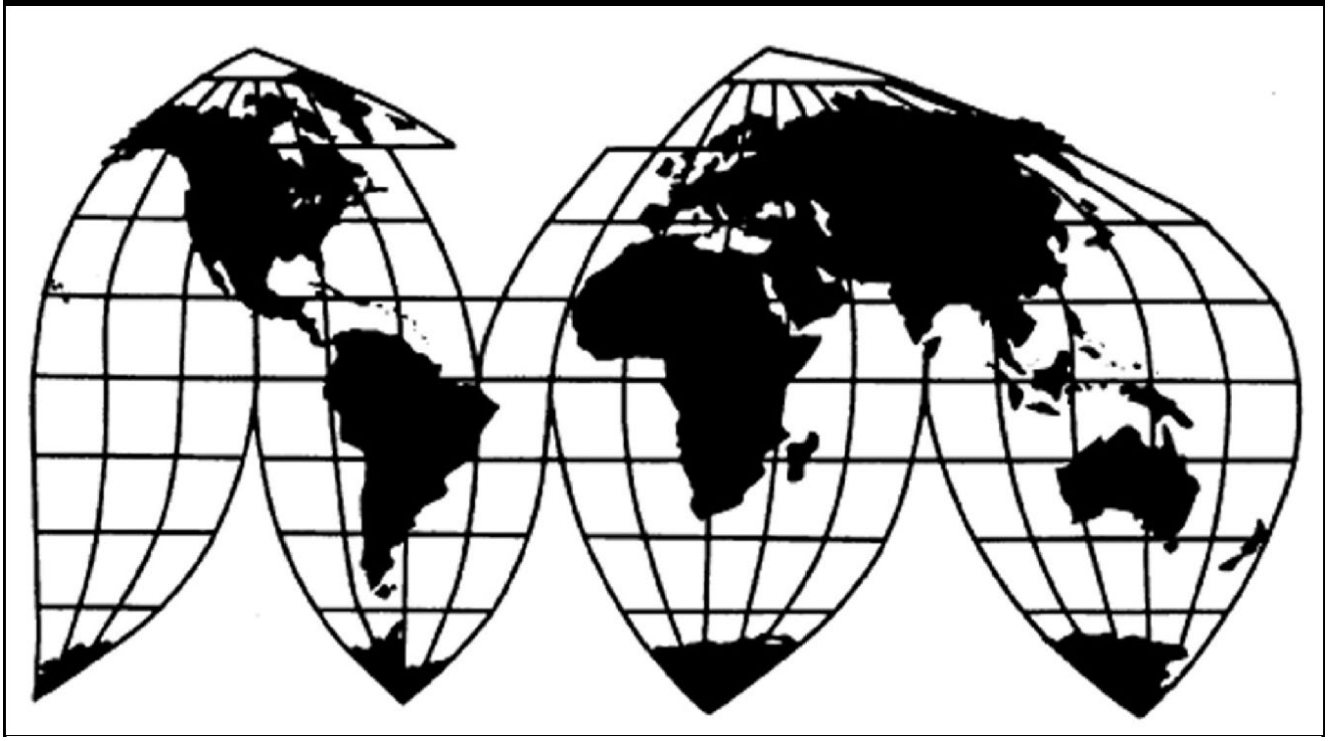
U.S. International Trade Commission



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Address all communications to
Secretary to the Commission
United States International Trade Commission
Washington, DC 20436

U.S. International Trade Commission

Washington, DC 20436
www.usitc.gov

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Note.—Information that would reveal confidential operations of individual concerns may not be published. Such information is identified by brackets in confidential reports and is deleted and replaced with asterisks (***) in public reports.

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 701-TA-739-740 and 731-TA-1716-1717 (Preliminary)

Thermoformed Molded Fiber Products from China and Vietnam

DETERMINATIONS

On the basis of the record[1] developed in the subject investigations, the United States International Trade Commission ("Commission") determines, pursuant to the Tariff Act of 1930 ("the Act"), that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of thermoformed molded fiber products ("TMFPs") from China and Vietnam, provided for in subheading 4823.70.00 of the Harmonized Tariff Schedule of the United States, that are alleged to be sold in the United States at less than fair value ("LTFV") and imports of the subject merchandise from China and Vietnam that are alleged to be subsidized by the governments of China and Vietnam.[2]

COMMENCEMENT OF FINAL PHASE INVESTIGATIONS

Pursuant to section 207.18 of the Commission's rules, the Commission also gives notice of the commencement of the final phase of its investigations. The Commission will issue a final phase notice of scheduling, which will be published in the *Federal Register* as provided in § 207.21 of the Commission's rules, upon notice from the U.S. Department of Commerce ("Commerce") of affirmative preliminary determinations in the investigations under §§ 703(b) or 733(b) of the Act, or, if the preliminary determinations are negative, upon notice of affirmative final determinations in those investigations under §§ 705(a) or 735(a) of the Act. Parties that filed entries of appearance in the preliminary phase of the investigations need not enter a separate appearance for the final phase of the investigations. Any other party may file an entry of appearance for the final phase of the investigations after publication of the final phase notice of scheduling. Industrial users, and, if the merchandise under investigation is sold at the retail level, representative consumer organizations have the right to appear as parties in Commission antidumping and countervailing duty investigations. The Secretary will prepare a

[1] The record is defined in § 207.2(f) of the Commission's Rules of Practice and Procedure (19 CFR 207.2(f)).

[2] 89 FR 87551 and 87556 (November 4, 2024).

public service list containing the names and addresses of all persons, or their representatives, who are parties to the investigations. As provided in section 207.20 of the Commission's rules, the Director of the Office of Investigations will circulate draft questionnaires for the final phase of the investigations to parties to the investigations, placing copies on the Commission's Electronic Document Information System (EDIS, https://edis.usitc.gov), for comment.

BACKGROUND

On October 8, 2024, the American Molded Fiber Coalition, which is comprised of Genera Inc., Vonore, Tennessee; Tellus Products, LLC, Belle Glade, Florida; and the United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union, AFL-CIO, filed petitions with the Commission and Commerce, alleging that an industry in the United States is materially injured or threatened with material injury by reason of subsidized imports of TMFPs from China and Vietnam and LTFV imports of TMFPs from China and Vietnam. Accordingly, effective October 8, 2024, the Commission instituted countervailing duty investigation Nos. 701-TA-739-740 and antidumping duty investigation Nos. 731-TA-1716-1717 (Preliminary).

Notice of the institution of the Commission's investigations and of a public conference to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* on October 15, 2024 (89 FR 83051). The Commission conducted its conference on October 29, 2024. All persons who requested the opportunity were permitted to participate.

Views of the Commission

Based on the record in the preliminary phase of these investigations, we determine that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of thermoformed molded fiber products ("TMFPs") from China and Vietnam that are allegedly sold in the United States at less than fair value ("LTFV") and subsidized by the governments of China and Vietnam.

I. The Legal Standard for Preliminary Determinations

The legal standard for preliminary antidumping and countervailing duty determinations requires the Commission to determine, based upon the information available at the time of the preliminary determinations, whether there is a reasonable indication that a domestic industry is materially injured or threatened with material injury, or that the establishment of an industry is materially retarded, by reason of the allegedly unfairly traded imports.[1] In applying this standard, the Commission weighs the evidence before it and determines whether "(1) the record as a whole contains clear and convincing evidence that there is no material injury or threat of such injury; and (2) no likelihood exists that contrary evidence will arise in a final investigation."[2]

II. Background

The American Molded Fiber Coalition ("Petitioner"), comprised of two domestic producers of thermoformed molded fiber products ("TMFPs") and a certified labor union representative of the domestic TMFP industry, filed the petitions in these investigations on

[1] 19 U.S.C. §§ 1671b(a), 1673b(a) (2000); *see also American Lamb Co. v. United States*, 785 F.2d 994, 1001–04 (Fed. Cir. 1986); *Aristech Chem. Corp. v. United States*, 20 CIT 353, 354–55 (1996). No party argues that the establishment of an industry in the United States is materially retarded by the allegedly unfairly traded imports.

[2] *American Lamb Co.*, 785 F.2d at 1001; *see also Texas Crushed Stone Co. v. United States*, 35 F.3d 1535, 1543 (Fed. Cir. 1994).

October 8, 2024.[3] Petitioner participated in the staff conference[4] accompanied by counsel and submitted a postconference brief.[5]

Several respondent entities participated in these investigations. Representatives of KD Distributing, LLC dba Ultra Green Packaging ("Ultra Green") and Source One Global, Inc. dba Source One ("Source One"), U.S. importers of subject merchandise, appeared at the staff conference.[6] Eco-Products, PBC ("Eco-Products") and World Centric (collectively, "Joint Respondents"), U.S. importers of subject merchandise, submitted a postconference brief.[7]

U.S. industry data are based on the questionnaire responses of seven domestic producers, which accounted for virtually all of U.S. production of TMFPs in 2023.[8] U.S. import data are based on questionnaire responses from 30 U.S. importers, estimated to account for *** percent of subject imports from China and *** percent of subject imports from Vietnam, for a total of *** percent of all subject imports in 2023.[9] The Commission received responses to its questionnaires from six Chinese producers or exporters[10] of subject merchandise, accounting for approximately *** percent of production of TMFPs in China in 2023,[11] whose exports accounted for *** percent of subject imports from China in 2023.[12] The Commission also received a questionnaire response from one Vietnamese producer of subject merchandise,

[3] *See generally* Petitions, EDIS Doc. 834238 (Oct. 8, 2024) ("Petitions"). Petitioner's members include domestic producers Genera Inc. ("Genera") and Tellus Products, LLC ("Tellus"), and the United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union, AFL-CIO ("USW"). *Id.*, vol. I, at 4.

[4] *See generally* Transcript of Preliminary Conference, EDIS Doc. 836018 (Oct. 29, 2024) ("Conf. Tr.").

[5] American Molded Fiber Coalition's Postconference Brief, EDIS Doc. 836263 (Nov. 1, 2024) ("Petitioner's Postconf. Br.").

[6] *See generally* Conf. Tr.

[7] Joint Respondents' Postconference Brief, EDIS Doc. 836259 (Nov. 1, 2024) ("Joint Respondents' Postconf. Br.").

[8] Confidential Report, Memorandum INV-WW-141 (Nov. 15, 2024), *as modified by* Revision Memorandum INV-WW-143 (Nov. 20, 2024) ("CR") at I-4, III-1 to III-2; Public Report, *Thermoformed Molded Fiber Products from China and Vietnam*, Inv. Nos. 701-TA-739–740 & 731-TA-1716–1717 (Preliminary), USITC Pub. 5568 (Dec. 2024) ("PR") at I-4, III-1 to III-2.

[9] CR/PR at I-4 & IV-1. The subject import coverage is a ratio of the total imports of subject merchandise as reported in questionnaire responses to adjusted official import statistics from Commerce for primary HTS numbers 4823.70.0020 and 4823.70.0040. These tariff headings are basket categories, so the coverage figure may be understated. *See id.* at IV-1 nn.2 & 4.

[10] *See* CR/PR at Tables VII-2 & VII-3.

[11] *Calculated from* CR/PR at Tables VII-2 & VII-4; ***'s & ***'s Foreign Producers'/Exporters' Questionnaires at II-7a.

[12] CR/PR at Table VII-1.

accounting for *** percent of production of TMFPs in Vietnam in 2023, whose exports accounted for *** percent of subject imports from Vietnam in 2023.[13]

III. Domestic Like Product

In determining whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of imports of the subject merchandise, the Commission first defines the "domestic like product" and the "industry."[14] Section 771(4)(A) of the Tariff Act of 1930, as amended ("the Tariff Act"), defines the relevant domestic industry as the "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."[15] In turn, the Tariff Act defines "domestic like product" as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation."[16]

By statute, the Commission's "domestic like product" analysis begins with the "article subject to an investigation," *i.e.*, the subject merchandise as determined by the U.S. Department of Commerce ("Commerce").[17] Therefore, Commerce's determination as to the scope of the imported merchandise that is subsidized and/or sold at less than fair value is "necessarily the starting point of the Commission's like product analysis."[18] The Commission then defines the domestic like product in light of the imported articles Commerce has identified.[19] The decision regarding the appropriate domestic like product(s) in an investigation

[13] CR/PR at Table VII-1.

[14] 19 U.S.C. § 1677(4)(A).

[15] 19 U.S.C. § 1677(4)(A).

[16] 19 U.S.C. § 1677(10).

[17] 19 U.S.C. § 1677(10). The Commission must accept Commerce's determination as to the scope of the imported merchandise that is subsidized and/or sold at less than fair value. *See*, *e.g.*, *USEC, Inc. v. United States*, 34 F. App'x 725, 730 (Fed. Cir. 2002) ("The ITC may not modify the class or kind of imported merchandise examined by Commerce."); *Algoma Steel Corp. v. United States,* 688 F. Supp. 639, 644 (Ct. Int'l Trade 1988), *aff'd*, 865 F.3d 240 (Fed. Cir.), *cert. denied*, 492 U.S. 919 (1989).

[18] *Cleo Inc. v. United States*, 501 F.3d 1291, 1298 (Fed. Cir. 2007); *see also Hitachi Metals, Ltd. v. United States*, 949 F.3d 710, 717 (Fed. Cir. 2020) (the statute requires the Commission to start with Commerce's subject merchandise in reaching its own like product determination).

[19] *Cleo*, 501 F.3d at 1298 n.1 ("Commerce's {scope} finding does not control the Commission's {like product} determination."); *Hosiden Corp. v. Advanced Display Mfrs.,* 85 F.3d 1561, 1568 (Fed. Cir. 1996) (the Commission may find a single like product corresponding to several different classes or kinds defined by Commerce); *Torrington Co. v. United States*, 747 F. Supp. 744, 748–52 (Ct. Int'l Trade 1990), *aff'd*, 938 F.2d 1278 (Fed. Cir. 1991) (affirming the Commission's determination defining six like products in investigations where Commerce found five classes or kinds).

is a factual determination, and the Commission has applied the statutory standard of "like" or "most similar in characteristics and uses" on a case-by-case basis.[20] No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.[21] The Commission looks for clear dividing lines among possible like products and disregards minor variations.[22] The Commission may, where appropriate, include domestic articles in the domestic like product in addition to those described in the scope.[23]

A. Scope Definition

In its notices of initiation, Commerce defined the imported merchandise within the scope of the investigations as follows:

> The merchandise subject to these investigations consists of thermoformed molded fiber products regardless of shape, form, function, fiber source, or finish. Thermoformed molded fiber products are formed with cellulose fibers, thermoformed using one or more heated molds, and dried/cured in the mold.

[20] *See, e.g.*, *Cleo*, 501 F.3d at 1299; *NEC Corp. v. Dep't of Commerce*, 36 F. Supp. 2d 380, 383 (Ct. Int'l Trade 1998); *Nippon Steel Corp. v. United States*, 19 CIT 450, 455 (1995); *Torrington Co. v. United States*, 747 F. Supp. 744, 749 n.3 (Ct. Int'l Trade 1990), *aff'd*, 938 F.2d 1278 (Fed. Cir. 1991) ("every like product determination 'must be made on the particular record at issue' and the 'unique facts of each case'"). The Commission generally considers a number of factors including the following: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) customer and producer perceptions of the products; (5) common manufacturing facilities, production processes, and production employees; and, where appropriate, (6) price. *See Nippon*, 19 CIT at 455 n.4; *Timken Co. v. United States*, 913 F. Supp. 580, 584 (Ct. Int'l Trade 1996).

[21] *See*, *e.g.*, S. Rep. No. 96-249 at 90–91 (1979).

[22] *See*, *e.g.*, *Nippon*, 19 CIT at 455; *Torrington*, 747 F. Supp. at 748–49*; see also* S. Rep. No. 96-249 at 90–91 (Congress has indicated that the like product standard should not be interpreted in "such a narrow fashion as to permit minor differences in physical characteristics or uses to lead to the conclusion that the product and article are not 'like' each other, nor should the definition of 'like product' be interpreted in such a fashion as to prevent consideration of an industry adversely affected by the imports under consideration.").

[23] *See*, *e.g.*, *Pure Magnesium from China and Israel*, Inv. Nos. 701-TA-403 & 731-TA-895–896 (Final), USITC Pub. 3467 (Nov. 2001) at 8 n.34; *Torrington,* 747 F. Supp. at 748–49 (holding that the Commission is not legally required to limit the domestic like product to the product advocated by the petitioner, co-extensive with the scope).

Thermoformed molded fiber products include, but are not limited to, plates, bowls, clamshells, trays, lids, food or foodservice contact packaging, and consumer or other product packaging.

Thermoformed molded fiber products are relatively dense, with a typical fiber density above 0.5 grams per cubic centimeter, and are generally characterized by relatively smooth surfaces. They may be derived from any virgin or recycled cellulose fiber source (including, but not limited to, those sourced from wood, woody crops, agricultural crops/byproducts/residue, and agricultural/industrial/other waste). They may have any weight, shape, dimensionality, design, or size, and may be bleached, unbleached, dyed, colored, or printed. They may include ingredients, additives, or chemistries to enhance functionality including, but not limited to, anti-microbial, anti-fungal, anti-bacterial, heat/flame resistant, hydrophobic, oleophobic, absorbent, or adsorbent. Thermoformed molded fiber products may also be subject to other processing or treatments, including, but not limited to, hot or after pressing, die-cutting, punching, trimming, padding, perforating, printing, labeling, dying, coloring, coating, laminating, embossing, debossing, repacking, or denesting. Thermoformed molded fiber products subject to these investigations may also have additional design features, including, but not limited to, tab closures, venting, channeling, or stiffening.

Thermoformed molded fiber products remain covered by the scope of these investigations whether the subject product is encased by exterior packaging or whether the subject product forms the outer packaging for non-subject products. They also remain covered by the scope of these investigations whether imported alone, or in any combination of subject and non-subject merchandise (*e.g.*, a lid or cover of any type packaged with a molded fiber bowl, addition of any items to make the thermoformed molded fiber packaging suitable for end-use such as absorbent pads). When thermoformed molded fiber products are imported in combination with non-subject merchandise, only the thermoformed molded fiber products are subject merchandise.

Excluded from the scope of these investigations are thermoformed molded fiber products imported as packaging material that enclose and/or surround nonsubject merchandise prepackaged for final sale upon importation into the United States (*e.g.*, molded fiber packaging surrounding a cellular phone).

Thermoformed molded fiber products include thermoformed molded fiber products matching the above description that have been finished, packaged, or otherwise processed in a third country by performing finishing, packaging, or processing that would not otherwise remove the merchandise from the scope of the investigations if performed in the country of manufacture of the thermoformed molded fiber products. Examples of finishing, packaging, or other processing in a third country that would not otherwise remove the merchandise from the scope of the investigations if performed in the country of manufacture of the thermoformed molded fiber products include, but are not limited to, hot or after pressing, die-cutting, punching, trimming, padding, perforating, printing, labeling, dying, coloring, coating, laminating, embossing, debossing, repacking, or denesting.

Thermoformed molded fiber products are classified under subheadings {4}823.70.0020 and 4823.70.0040, Harmonized Tariff Schedule of the United States (HTSUS). Imports may also be classified under subheadings 4823.61.0020, 4823.61.0040, 4823.69.0020, 4823.69.0040, 4823.90.1000, HTSUS. References to the HTSUS classification are provided for convenience and customs purposes, and the written description of the merchandise under investigation is dispositive.[24] [25]

[24] *Thermoformed Molded Fiber Products from the People's Republic of China and the Socialist Republic of Vietnam: Initiation of Less-Than-Fair-Value Investigations*, 89 Fed. Reg. 87551, 87555–56 (Nov. 4, 2024) ("*LTFV Notice of Initiation*"); *Thermoformed Molded Fiber Products from the People's Republic of China and the Socialist Republic of Vietnam: Initiation of Countervailing Duty Investigations*, 89 Fed. Reg. 87556, 87560 (Nov. 4, 2024) ("*CVD Notice of Initiation*").

[25] This scope definition reflects modifications made by Petitioner after the filing of the petitions, which added certain physical characteristics, exclusions, and an additional HTS number. *Compare* Petitions, vol. I, at 9–10, *with LTFV Notice of Initiation*, 89 Fed. Reg. at 87555–56, *and CVD Notice of Initiation*, 89 Fed. Reg. at 87560. *See also* Petitioner's Responses to Second Supplemental Questionnaire at 3–4, EDIS Doc. 835577 (Oct. 24, 2024).

Molded fiber products are made from pulp composed of natural fibers that come from biomass resources such as wood, bamboo, agricultural crops (*e.g.*, wheat straw, rice straw, hemp, sugarcane bagasse, corn stover, etc.), or other agricultural and forest byproducts, residues, or wastes.[26] Molded fiber products can be made from virgin or recycled fibers or a mixture of both, and vary in size, shape, thickness, and fiber source.[27] The thermoforming process during production distinguishes TMFPs from other molded fiber products and imparts special characteristics to TMFPs, such as a smooth surface finish and thinner walls compared to other molded fiber products while maintaining rigidity.[28] They are primarily used as food containers, although they may be used for other packaging as well.[29]

B. Arguments of the Parties

Petitioner argues that the Commission's traditional domestic like product factors support defining a single domestic like product consisting of all TMFPs coextensive with the scope.[30] No respondent has argued for a different definition of the domestic like product than the one proposed by Petitioner in these preliminary investigations.[31]

C. Analysis

Based on the record in these preliminary phase investigations, we define a single domestic like product consisting of all TMFPs, coextensive with Commerce's scope in these investigations.

Physical Characteristics and Uses. All TMFPs generally share the same physical characteristics and uses, although they may differ in size, shape, and finish according to their

[26] CR/PR at I-7.

[27] CR/PR at I-7 to I-8.

[28] CR/PR at I-13 to I-15. Unlike other molding processes, such as transfer molding, thermoforming involves drying and curing the pulp after it has been pressed into a mold without removing the pulp from the mold. *Id.* TMFPs have a typical fiber density above 0.5 grams per cubic centimeter. CR/PR at I-8.

[29] CR/PR at I-8 to I-9.

[30] Petitioner's Postconf. Br. at 4–10.

[31] Joint Respondents express a "concern" that there is no clear dividing line between TMFPs and non-thermoformed molded fiber products. Joint Respondents' Postconf. Br. at 4–6. Moreover, they posit that "there is a basis to find" that the domestic like product should include containers made of other materials, such as Styrofoam and plastic. *Id.* at 6–7. Alternatively, Joint Respondents argue that there "may be separate domestic like products" among TMFPs depending on end use. *Id.* at 7. They request that the Commission collect data and analyze these issues in any final phase investigations. *Id.* at 5, 7.

specific end-use application.[32] TMFPs are made with pulp composed of natural fibers, which are derived from biomass such as wood, bamboo, crops, or agricultural byproducts.[33] By definition, all TMFPs undergo the thermoforming process, resulting in products that are permanently shaped, thin-walled yet rigid, and have a smooth surface finish.[34]

TMFPs primarily are used as containers and packaging in the food service industry, including food contact applications, although they are used for other consumer and product packaging as well.[35] Within those end uses, there are a wide range of TMFP products of varying shapes and sizes, such as round plates, rectangular trays, clamshell containers, and bowls. TMFPs may undergo a number of finishing or customization processes, such as printing, dyeing, bleaching, laminating, padding, or trimming, among other procedures, as stated in the scope.[36] Regardless of their final form, however, TMFPs tend to be more sustainable and recyclable than other packaging products as a result of the natural materials used in their production, and they all possess the same unique characteristics imparted by the thermoforming process.

In contrast to TMFPs, non-thermoformed molded fiber products typically rely on different fiber inputs and have distinct physical characteristics, such as different thickness and surface properties.[37] Non-thermoformed molded fiber products are also typically used in different end use applications than TMFPs. While TMFPs are primarily used for food contact applications, non-thermoformed molded fiber products are typically used as packaging for non-

[32] CR/PR at I-7 to I-8; Petitioner's Postconf. Br. at 5–6.

[33] CR/PR at I-7; Conf. Tr. at 23 (Serafini) (stating that Tellus uses sugarcane biomass to make TMFPs); *cf. id.* at 175, 177 (Davidson) (stating that Ultra Green's TMFPs imported from China are made of a blend of sugarcane bagasse and bamboo).

[34] CR/PR at I-15. As stated in the scope, TMFPs in their final form typically have a fiber density greater than 0.5 grams per cubic centimeter. *Id.* at I-8 & n.19.

[35] CR/PR at I-8 to I-9 & n.20; Petitions, vol. I, at 22. According to Petitioner, "foodservice and food packaging dwarf other non-food applications, and this trend is expected to continue{.}" Petitioner's Postconf. Br., Responses to Questions, at 4 (citing a presentation stating, "***"). Further, in response to the Commission's questionnaires, domestic producers reported that at least *** percent of their U.S. shipments in 2023 had food service applications. *Calculated from* CR/PR at Table IV-5; U.S. Producers' Questionnaires at II-10.

[36] *See* CR/PR at I-15 to I-16, II-1; Petitions, vol. I, at 12; Petitioner's Postconf. Br., Responses to Questions, at 5; Joint Respondents' Postconf. Br. at 16–17.

[37] Petitioner's Postconf. Br. at 5–6. Petitioner states that while non-thermoformed molded fiber products can be made from similar types of lignocellulose pulp as TMFPs, the non-thermoformed products are typically produced using recycled paper or newspaper, which, along with the transfer molding process, results in reduced fiber strength and thicker and rougher walls compared to TMFPs. *Id.*

fragile and heavy items, shipping trays, beverage cup holders, nursery pots, shoe packaging inserts, and wine shippers.[38]

Manufacturing Facilities, Production Processes, and Production Employees. All TMFPs are reportedly produced in the same manufacturing facilities, using the same production processes and employees.[39] TMFPs are produced using preheated molds that are shaped like the end product and are subjected to heat and pressure in the mold, which leads to a permanently shaped, thin walled yet rigid product with smooth surfaces.[40] In contrast, non-thermoformed molded fiber products are typically formed in various molds and then heated in an oven.[41] Petitioner states that TMFPs thus require different machinery and employees with different skillsets and educational backgrounds than non-thermoformed molded fiber products.[42]

Channels of Distribution. During the period of investigation ("POI"), domestic producers sold TMFPs primarily to distributors, but they also reported selling a substantial amount to end users, primarily in the food service industry.[43] Non-thermoformed molded fiber products are typically sold for electronic, household, and hardware packaging.[44]

Interchangeability. The limited record evidence indicates that all TMFPs are reasonably interchangeable in that they are used as containers or packaging in the food service industry. As discussed above, TMFPs are considered environmentally friendly because they are composed of natural fibers, and they share unique physical characteristics imparted by the thermoforming process. Although there may be differences between TMFPs designated for particular end uses, such as size, shape, and finish, the record does not indicate that those differences create any clear dividing lines within the spectrum of TMFPs, and some limitations on the interchangeability among types of products within such a grouping is not unexpected.[45]

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[38] Petitioner's Postconf. Br. at 5–6.

[39] Petitioner's Postconf. Br. at 9; *see* CR/PR at I-10 to I-17.

[40] Petitioner's Postconf. Br. at 9.

[41] Petitioner's Postconf. Br. at 9; Conf. Tr. at 11 (Tiller).

[42] Petitioner's Postconf. Br. at 9. No responding U.S. producer reported production of other products using the same equipment used to product TMFPs. CR/PR at III-10.

[43] Throughout the POI, domestic producers sold between *** and *** percent of their TMFPs to distributors and between *** and *** percent to end users. CR/PR at Table II-2.

[44] Petitioner's Postconf. Br. at 7–8.

[45] *See, e.g.*, *Citric Acid and Certain Citrate Salts from Belgium, Colombia, and Thailand*, Inv. Nos. 701-TA-581 & 731-TA-1374–1376 (Preliminary), USITC Pub. 4710 (July 2017) at 10–11 ("{A}s the Commission has indicated in other investigations where the scope encompasses a variety of products, a lack of interchangeability among types of products along the spectrum or included in a grouping of similar products is not unexpected. In those cases, the Commission considers the spectrum or grouping (Continued…)

Petitioner argues that non-thermoformed molded fiber products are not interchangeable with TMFPs, as due to their reduced fiber strength they are not used in the same end use applications as TMFPs.[46]

Producer and Customer Perceptions. The evidence available in these preliminary investigations indicates that producers and customers view all TMFPs as a single product category due to their smoother finish, greater strength and rigidity, and sustainability.[47] TMFPs are viewed as a premium product compared to other food containers due to their sustainability.[48] The available evidence indicates that customers and producers perceive non-thermoformed molded fiber products to be a separate product from TMFPs due to their different physical characteristics.[49]

Price. The pricing data indicate that prices for different TMFP products generally fell within a similar range and followed similar trends during the POI.[50] TMFPs are priced at a premium compared to other food containers due to their sustainability and physical characteristics.[51]

Conclusion. The record evidence indicates that TMFPs generally possess the same unique physical characteristics imparted by the thermoforming process, have generally the same end uses, and are produced through the same production processes at the same manufacturing facilities using the same employees. The evidence also shows that all TMFPs are sold through similar channels of distribution, market participants perceive all TMFPs to be a single product category, and TMFP prices fall within the same general range. In contrast, the record indicates that non-thermoformed molded fiber products have different physical characteristics and end uses and are not produced using the same processes on the same machinery. The current record also shows that non-thermoformed molded fiber products are perceived to be a different product than TMFPs, and TMFPs generally command a price premium compared to other types of products. Accordingly, we define a single domestic like

itself to constitute the domestic like product, and it disregards minor variations, absent a clear dividing line between particular products.").

[46] Petitioner's Postconf. Br. at 7.

[47] Petitioner's Postconf. Br. at 8.

[48] CR/PR at II-1.

[49] Petitioner's Postconf. Br. at 8.

[50] CR/PR at Tables V-3 to V-6; *accord* Petitioner's Postconf. Br. at 9–10.

[51] *See, e.g.*, CR/PR at II-1; Petitioner's Postconf. Br. at 9–10.

product consisting of all TMFPs, coextensive with the scope, for purposes of these preliminary determinations.[52] [53]

IV. Domestic Industry

The domestic industry is defined as the domestic "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."[54] In defining the domestic industry, the Commission's general practice has been to include in the industry producers of all domestic production of the like product, whether toll-produced, captively consumed, or sold in the domestic merchant market.

Petitioner argues that the Commission should define the domestic industry as all domestic producers of TMFPs.[55] No respondent contests the definition proposed by Petitioner in the preliminary phase of these investigations.[56]

We must determine whether any producer of the domestic like product should be excluded from the domestic industry pursuant to Section 771(4)(B) of the Tariff Act. This provision allows the Commission, if appropriate circumstances exist, to exclude from the domestic industry producers that are related to an exporter or importer of subject merchandise

[52] Although no party argues for a different definition of the domestic like product in these preliminary investigations, Joint Respondents state with respect to "{S}tyrofoam and plastic plates, bowls, clamshells, etc." that "there is a basis to find that these products also should be included within the domestic like product." Joint Respondents' Postconf. Br. at 6. While the record on this issue in this preliminary phase is limited, it suggests that while TMFPs may be interchangeable with Styrofoam/plastic containers in food contact applications, TMFPs are produced from different materials and have different physical characteristics than Styrofoam and plastic containers; they are not produced on the same machinery; they are perceived to be different products due to TMFPs' sustainability; and TMFPs are priced at a premium compared to other food containers due to their sustainability and physical characteristics. *See* CR/PR at I-9, II-1, II-9, III-10; Conf. Tr. at 25 (Serafini), 42 (Tiller), 57-58 (Mascarello).

[53] In any final phase of the investigations, parties wishing to raise domestic like product issues must do so in their comments on the draft questionnaires. 19 C.F.R. § 207.20(b). Parties must clearly identify and explain the bases for the proposed domestic like product definitions and indicate the new information that would need to be collected for consideration of the proposed definitions.

[54] 19 U.S.C. § 1677(4)(A).

[55] Petitioner's Postconf. Br. at 10.

[56] Consistent with their argument that the Commission should explore expanding the domestic like product definition to include all molded fiber products in any final phase of the investigations, Joint Respondents likewise request that the Commission consider expanding the definition of the domestic industry to include producers of all molded fiber products in any final phase of the investigations. Joint Respondents' Postconf. Br. at 8.

or which are themselves importers.[57] Exclusion of such a producer is within the Commission's discretion based upon the facts presented in each investigation.[58]

The record indicates that four domestic producers imported subject merchandise during the POI and are, therefore, subject to possible exclusion from the domestic industry under the related party provision in the preliminary phase of the investigations: ***.[59] *** and *** also qualify as related parties because both imported subject merchandise during the POI and they are related to each other.[60]

We discuss below whether appropriate circumstances exist to exclude any related party from the domestic industry.

***. *** commenced domestic production of TMFPs in the second half of 2023. It accounted for *** percent of domestic production in 2023 and *** percent of domestic production in January–June ("interim") 2024.[61] ***'s subject imports from China totaled *** pounds in 2021, *** pounds in 2022, *** pounds in 2023, and *** pounds in interim 2024, compared with domestic production of *** pounds in 2023 and *** pounds in interim 2024.[62] The ratio of ***'s subject imports to its domestic production was *** percent in 2023 and ***

[57] *See Torrington Co. v. United States*, 790 F. Supp. 1161, 1168 (Ct. Int'l Trade 1992), *aff'd without opinion*, 991 F.2d 809 (Fed. Cir. 1993); *Sandvik AB v. United States*, 721 F. Supp. 1322, 1331–32 (Ct. Int'l Trade 1989), *aff'd mem.*, 904 F.2d 46 (Fed. Cir. 1990); *Empire Plow Co. v. United States*, 675 F. Supp. 1348, 1352 (Ct. Int'l Trade 1987).

[58] The primary factors the Commission has examined in deciding whether appropriate circumstances exist to exclude a related party include the following:

> (1) the percentage of domestic production attributable to the importing producer;
>
> (2) the reason the U.S. producer has decided to import the product subject to investigation (whether the firm benefits from the LTFV sales or subsidies or whether the firm must import in order to enable it to continue production and compete in the U.S. market);
>
> (3) whether inclusion or exclusion of the related party will skew the data for the rest of the industry;
>
> (4) the ratio of import shipments to U.S. production for the imported product; and
>
> (5) whether the primary interest of the importing producer lies in domestic production or importation.

Changzhou Trina Solar Energy Co. v. USITC, 100 F. Supp. 3d 1314, 1326–31 (Ct. Int'l. Trade 2015), *aff'd*, 879 F.3d 1377 (2018); *see also Torrington Co.*, 790 F. Supp. at 1168.

[59] CR/PR at Tables III-10 to III-14.

[60] CR/PR at Table III-2. The current record evidence is limited and indicates only that *** and *** are related through common ownership. *See id.*

[61] CR/PR at Table III-7. *** the petitions. *Id.* at Table III-1.

[62] CR/PR at Table III-10. *** did not import TMFPs from Vietnam during the POI. *See id.*

percent in interim 2024.[63] *** reported that its reason for importing subject merchandise during the POI was that it "***."[64] The firm reported capital expenditures totaling $*** in 2021, $*** in 2022, $*** in 2023, and $*** in interim 2024, which it attributed to ***.[65] Its financial results in 2023 and interim 2024 were *** the domestic industry average.[66]

The high but decreasing ratios of ***'s subject imports to domestic production in 2023 and interim 2024 reflect that it commenced domestic production during the period. During the POI, *** made substantial capital investments in its domestic production operations that totaled $***, reflecting a commitment to increasing its domestic production.[67] ***'s imports of subject merchandise may have benefitted its domestic production operations to the extent that servicing customers with imports while it built up domestic production capabilities allowed it to win sales that it could later transition to its domestically produced product. However, there is no indication in the record that ***'s domestic production operations benefitted to such an extent that its inclusion in the domestic industry would mask injury to the domestic industry.[68] In any event, its U.S. operations were quite small even at the end of the POI, such that ***'s inclusion in the domestic industry would not skew the data for the domestic industry. Given these considerations, and the absence of any contrary argument, we find that appropriate circumstances do not exist to exclude *** from the domestic industry as a related party in the preliminary phase of these investigations.

*****. *** was the *** domestic producer of TMFPs throughout the POI, accounting for *** percent of U.S. production in 2021, *** percent in 2022, *** percent in 2023, *** percent in interim 2023, and *** percent in interim 2024.[69] ***'s imports of subject merchandise from China totaled *** pounds in 2021, *** pounds in 2022, *** pounds in 2023, *** pounds in

[63] CR/PR at Table III-10.

[64] CR/PR at Table III-14.

[65] CR/PR at Tables E-2 & E-3. *** also reported research and development ("R&D") expenses totaling $*** in 2021, $*** in 2022, $*** in 2023, and $*** in interim 2024. *Id.* at Table E-4.

[66] In 2023, ***'s operating and net income margins were *** and *** percent, respectively, while the domestic industry's average operating and net income margins during the same period were *** and *** percent, respectively. CR/PR at Tables VI-1 & E-1. In interim 2024, ***'s operating and net income margins were *** and *** percent, respectively, while the domestic industry's average operating and net income margins during the same period were *** and *** percent, respectively. *Id.*

[67] CR/PR at Table E-2. Notably, however, *** which may imply that it does not intend to stop importing TMFPs altogether. *See id.* at Table III-14.

[68] Commissioner Rhonda K. Schmidtlein does not rely on this rationale. She finds that appropriate circumstances do not exist to exclude *** from the domestic industry because its primary interest is in domestic production and because its inclusion in the domestic industry would not mask injury to the domestic industry due to the small size of ***'s domestic production operations.

[69] CR/PR at Table III-7. *** on the petitions. *Id.* at Table III-1.

interim 2023, and *** pounds in interim 2024.[70] In comparison, *** produced *** pounds of TMFPs in 2021, *** pounds in 2022, *** pounds in 2023, *** pounds in interim 2023, and *** pounds in interim 2024.[71] The ratio of ***'s subject imports to its U.S. production was *** percent in 2021, *** percent in 2022, *** percent in 2023, *** percent in interim 2023, and *** percent in interim 2024.[72] *** reported importing subject merchandise during the POI to ***.[73] *** made significant capital expenditures for its domestic production operations during the POI, including $*** in 2021, $*** in 2022, $*** in 2023, and $*** in interim 2024.[74] Its profitability was *** the domestic industry average throughout the POI, but, as with the domestic industry as a whole, its operating and net income margins generally declined during that time.[75]

Because *** was the *** domestic producer and its ratio of subject imports to domestic production remained low throughout the POI, its principal interest appears to be domestic production. Furthermore, ***'s substantial capital expenditures reflect a commitment to domestic production. Although ***'s stated reasons for importing subject merchandise suggest that its domestic production operations may have benefitted to some degree from those imports (*e.g.*, to the extent that supplementing its domestic product offerings with imports allowed it to retain customers it may not have otherwise retained), the current record does not suggest that it benefitted to such an extent that inclusion of *** would mask injury to the domestic industry to a significant degree.[76] Given these considerations, and in the absence of

[70] CR/PR at Table III-11. *** did not import subject merchandise from Vietnam during the POI. *Id.*

[71] CR/PR at Table III-11.

[72] CR/PR at Table III-11.

[73] CR/PR at Table III-14. *** stated that it imported *** from China during the POI because ***. *Id.* It also reported importing "***." *Id.*

[74] CR/PR at Table E-2. *** also reported R&D expenses totaling $*** in 2021, $*** in 2022, $*** in 2023, and $*** in interim 2024. *Id.* at Table E-4.

[75] ***'s operating margins were *** percent in 2021, *** percent in 2022, *** percent in 2023, *** percent in interim 2023, and *** percent in interim 2024. CR/PR at Table E-1. In comparison, the domestic industry's average operating margins were *** percent in 2021, *** percent in 2022, *** percent in 2023, *** percent in interim 2023, and *** percent in interim 2024. *Id.* at Tables VI-1 & E-1.

***'s net income margins were *** percent in 2021, *** percent in 2022, *** percent in 2023, *** percent in interim 2023, and *** percent in interim 2024. CR/PR at Table E-1. In comparison, the domestic industry's average net income margins were *** percent in 2021, *** percent in 2022, *** percent in 2023, *** percent in interim 2023, and *** percent in interim 2024. *Id.* at Tables VI-1 & E-1.

[76] Commissioner Schmidtlein does not rely on this rationale. She finds that given ***'s primary interest in domestic production and its low ratio of subject imports to domestic production, it is unlikely that its imports would affect its performance in such a manner as to mask injury to the domestic industry.

any contrary argument, we find that appropriate circumstances do not exist to exclude *** from the domestic industry as a related party.

. *** was the *** domestic producer throughout the POI, accounting for *** percent of U.S. production in 2021, *** percent in 2022, *** percent in 2023, *** percent in interim 2023, and *** percent in interim 2024.[77] ***'s subject imports totaled *** pounds in 2021, *** pounds in 2022, *** pounds in 2023, *** pounds in interim 2023, and *** pounds in interim 2024.[78] In comparison, *** produced *** pounds of TMFPs in 2021, *** pounds in 2022, *** pounds in 2023, *** pounds in interim 2023, and *** pounds in interim 2024.[79] The ratio of ***'s total subject imports to its U.S. production was *** percent in 2021, *** percent in 2022, *** percent in 2023, *** percent in interim 2023, and *** percent in interim 2024.[80] *** reported importing subject merchandise during the POI due to ***.[81] *** made significant capital expenditures for its domestic production operations during the POI, including $ in 2021, $*** in 2022, $*** in 2023, and $*** in interim 2024.[82] Its financial profitability was *** the domestic industry average throughout the POI.[83]

Because *** was the *** domestic producer and its ratio of subject imports to domestic production remained relatively low throughout the POI, ***'s principal interest appears to be domestic production. Furthermore, ***'s significant capital expenditures reflect a commitment to domestic production. Although ***'s stated reason for importing subject merchandise suggests that these imports may have benefitted its domestic production operations (*e.g.*, to the extent that supplementing its domestic product offerings with imports allowed it to retain customers it may not otherwise have retained), the record is unclear as to whether ***'s domestic production operations benefitted to such an extent that its inclusion in the domestic

[77] CR/PR at Table III-7. *** on the petitions. *Id.* at Table III-1.

[78] CR/PR at Table III-12. ***'s subject imports from China totaled *** pounds in 2021, *** pounds in 2022, *** pounds in 2023, *** pounds in interim 2023, and *** pounds in interim 2024. *Id.* Its subject imports from Vietnam totaled *** pounds in 2021, *** pounds in 2022, *** pounds in 2023, *** pounds in interim 2023, and *** pounds in interim 2024.

[79] CR/PR at Table III-12.

[80] CR/PR at Table III-12.

[81] CR/PR at Table III-14. *** stated, "***." *Id.*

[82] CR/PR at Table E-2. *** did not report any R&D expenses during the POI. *Id.* at Table E-4.

[83] ***'s operating margins were *** percent in 2021, *** percent in 2022, *** percent in 2023, *** percent in interim 2023, and *** percent in interim 2024. CR/PR at Table E-1. In comparison, the domestic industry's average operating margins were *** percent in 2021, *** percent in 2022, *** percent in 2023, *** percent in interim 2023, and *** percent in interim 2024. *Id.* at Tables VI-1 & E-1.

***'s net income margins were *** percent in 2021, *** percent in 2022, *** percent in 2023, *** percent in interim 2023, and *** percent in interim 2024. CR/PR at Table E-1. In comparison, the domestic industry's average net income margins were *** percent in 2021, *** percent in 2022, *** percent in 2023, *** percent in interim 2023, and *** percent in interim 2024. *Id.* at Tables VI-1 & E-1.

industry would mask injury to the domestic industry.[84] Given these considerations, and the absence of any contrary argument, we find that appropriate circumstances do not exist to exclude *** from the domestic industry as a related party.

. *** was the *** domestic producer throughout the POI, accounting for *** percent of U.S. production in 2021, *** percent in 2022, *** percent in 2023, *** percent in interim 2023, and *** percent in interim 2024.[85] ***'s subject imports from China totaled *** pounds in 2021, *** pounds in 2022, *** pounds in 2023, *** pounds in interim 2023, and *** pounds in interim 2024.[86] In comparison, *** produced *** pounds of TMFPs in 2021, *** pounds in 2022, *** pounds in 2023, *** pounds in interim 2023, and *** pounds in interim 2024.[87] The ratio of ***'s subject imports to its U.S. production was *** percent in 2021, *** percent in 2022, *** percent in 2023, *** percent in interim 2023, and *** percent in interim 2024.[88] ***'s capital expenditures totaled $ in 2021, $*** in 2022, $*** in 2023, and $*** in interim 2024.[89] Its profitability was *** the domestic industry average for the majority of the POI.[90]

Although *** was the *** domestic producer throughout the POI, its ratio of subject imports to domestic production was consistently high. *** reported that it imported subject merchandise because of ***, and it attributed its capital expenditures totaling $*** during the

[84] Commissioner Schmidtlein does not rely on this rationale. She finds that given ***'s primary interest in domestic production and its relatively low ratio of subject imports to domestic production, it is unlikely that its imports would affect its performance in such a manner as to mask injury to the domestic industry.

[85] CR/PR at Table III-7. *** on the petitions. *Id.* at Table III-1.

[86] CR/PR at Table III-13. *** did not import subject merchandise from Vietnam during the POI. *Id.*

[87] CR/PR at Table III-13.

[88] CR/PR at Table III-13.

[89] CR/PR at Table E-2. *** attributed its capital expenditures to "***." *Id.* at Table E-3. *** also reported R&D expenses totaling $*** in 2021, $*** in 2022, $*** in 2023, and $*** in interim 2024. *Id.* at Table E-4.

[90] ***'s operating margins were *** percent in 2021, *** percent in 2022, *** percent in 2023, *** percent in interim 2023, and *** percent in interim 2024. CR/PR at Table E-1. In comparison, the domestic industry's average operating margins were *** percent in 2021, *** percent in 2022, *** percent in 2023, *** percent in interim 2023, and *** percent in interim 2024. *Id.* at Tables VI-1 & E-1.

***'s net income margins were *** percent in 2021, *** percent in 2022, *** percent in 2023, *** percent in interim 2023, and *** percent in interim 2024. CR/PR at Table E-1. In comparison, the domestic industry's average net income margins were *** percent in 2021, *** percent in 2022, *** percent in 2023, *** percent in interim 2023, and *** percent in interim 2024. *Id.* at Tables VI-1 & E-1.

POI to its efforts to expand its capacity.[91] Accordingly, ***'s principal interest appears to be domestic production. The current record does not indicate that the inclusion of *** in the domestic industry would mask injury. Given these considerations, and in absence of any contrary argument, we find that appropriate circumstances do not exist to exclude *** from the domestic industry as a related party in the preliminary phase of these investigations.

For the above reasons, we find that appropriate circumstances do not exist to exclude any producer from the domestic industry pursuant to the related parties provision. Accordingly, consistent with our definition of the domestic like product, we define the domestic industry as all domestic producers of TMFPs.

V. Negligible Imports

Pursuant to Section 771(24) of the Tariff Act, imports from a subject country of merchandise corresponding to a domestic like product that account for less than three percent of all such merchandise imported into the United States during the most recent 12 months for which data are available preceding the filing of the petition shall be deemed negligible.[92]

Petitioner argues that subject imports from both China and Vietnam exceed the three percent negligibility threshold and are therefore not negligible.[93] No respondent commented on the negligibility of subject imports from either subject country.

During the 12-month period preceding the filing of the petitions (October 2023–September 2024), subject imports from China for both the antidumping and countervailing duty investigations accounted for *** percent of total imports of TMFPs, and subject imports from Vietnam for both the antidumping and countervailing duty investigations accounted for *** percent of total imports of TMFPs.[94] Because subject imports from each subject country

[91] CR/PR at Tables III-14 & E-3. ***'s reported practical TMFP capacity, which remained constant throughout the POI, does not reflect this capacity expansion. *See id.* at Table III-7. ***'s practical TMFP capacity was *** pounds in 2021, 2022, and 2023, with a practical capacity of *** pounds in both interim 2023 and interim 2024. *Id.* *** did report an increase of *** pounds in installed overall capacity in 2023. *See* ***'s U.S. Producers' Questionnaire at II-3a. Its installed overall capacity was *** pounds in 2021 and 2022 and *** pounds in 2023, with an installed overall capacity of *** million pounds in both interim 2023 and interim 2024. *Id.* ***'s high capacity utilization rate throughout the POI – *** all domestic producers – provides further support for its assertion that it imported subject merchandise because of ***. Its capacity utilization rate was *** percent in 2021, *** percent in 2022, and *** percent in 2023, with a rate of *** percent in interim 2023 and *** percent in interim 2024. CR/PR at Table III-7.

[92] 19 U.S.C. §§ 1671b(a), 1673b(a), 1677(24)(A)(i), 1677(24)(B); *see also* 15 C.F.R. § 2013.1 (developing countries for purposes of 19 U.S.C. § 1677(36)).

[93] Petition, vol. I, at 4–5; Petitioner's Postconf. Br. at 11–12.

[94] CR/PR at Table IV-4.

exceed the three percent negligibility threshold, we find that imports from both China and Vietnam subject to the antidumping and countervailing duty investigations are not negligible.

VI. Cumulation

For purposes of evaluating the volume and effects for a determination of reasonable indication of material injury by reason of subject imports, section 771(7)(G)(i) of the Tariff Act requires the Commission to cumulate subject imports from all countries as to which petitions were filed and/or investigations self-initiated by Commerce on the same day, if such imports compete with each other and with the domestic like product in the U.S. market. In assessing whether subject imports compete with each other and with the domestic like product, the Commission generally has considered four factors:

(1) the degree of fungibility between subject imports from different countries and between subject imports and the domestic like product, including consideration of specific customer requirements and other quality related questions;

(2) the presence of sales or offers to sell in the same geographic markets of subject imports from different countries and the domestic like product;

(3) the existence of common or similar channels of distribution for subject imports from different countries and the domestic like product; and

(4) whether the subject imports are simultaneously present in the market.[95]

While no single factor is necessarily determinative, and the list of factors is not exhaustive, these factors are intended to provide the Commission with a framework for determining whether the subject imports compete with each other and with the domestic like product.[96] Only a "reasonable overlap" of competition is required.[97]

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[95] *See Certain Cast-Iron Pipe Fittings from Brazil, the Republic of Korea, and Taiwan*, Inv. Nos. 731-TA-278-80 (Final), USITC Pub. 1845 (May 1986), *aff'*d, *Fundicao Tupy, S.A. v. United States*, 678 F. Supp. 898 (Ct. Int'l Trade), *aff'd*, 859 F.2d 915 (Fed. Cir. 1988).

[96] *See*, *e.g.*, *Wieland Werke, AG v. United States*, 718 F. Supp. 50 (Ct. Int'l Trade 1989).

[97] The Statement of Administrative Action (SAA) to the Uruguay Round Agreements Act (URAA), expressly states that "the new section will not affect current Commission practice under which the statutory requirement is satisfied if there is a reasonable overlap of competition." H.R. Rep. No. 103-316, vol. I at 848 (1994) (*citing Fundicao Tupy*, 678 F. Supp. at 902); *see Goss Graphic Sys., Inc. v. United States*, 33 F. Supp. 2d 1082, 1087 (Ct. Int'l Trade 1998) ("cumulation does not require two products to be (Continued…)

A. Arguments of the Parties

Petitioner's Arguments. Petitioner argues that cumulation is mandatory in these investigations.[98] Petitioner asserts that the petitions for both China and Vietnam were filed on the same day, that all subject imports are fungible with each other and the domestic like product and sold through similar distribution channels in overlapping geographic markets, and that there is a reasonable overlap in competition between and among subject imports from China and Vietnam and the domestic like product.[99]

Respondents' Arguments. No respondent challenged cumulation of imports from all subject sources.

B. Analysis

We consider subject imports from China and Vietnam on a cumulated basis for our present material injury analysis because the statutory criteria for cumulation are satisfied. As an initial matter, Petitioner filed the antidumping and countervailing duty petitions on imports from both countries on the same day, October 8, 2024.[100] The record also supports finding a reasonable overlap of competition between subject imports from both countries, and between subject imports from each source and the domestic like product, for the reasons discussed below.[101]

Fungibility. The record indicates that domestically produced TMFPs and imports of TMFPs from each subject country are generally fungible. All responding domestic producers reported that subject imports from each subject country were always or frequently interchangeable with each other as well as with domestically produced TMFPs.[102] Most subject importers likewise reported that imports of TMFPs from each subject country were always or frequently interchangeable with each other, and almost all importers reported that imports of

highly fungible"); *Wieland Werke, AG*, 718 F. Supp. at 52 ("Completely overlapping markets are not required.").

[98] Petition at 20; Petitioner's Postconf. Br. at 13.

[99] Petition at 20–22; Petitioner's Postconf. Br. at 12–17.

[100] CR/PR at I-1.

[101] None of the statutory exceptions to cumulation applies. We observe that these investigations involve dumping and subsidy allegations regarding TMFPs from both China and Vietnam. Consequently, any decision to cumulate imports from all subject sources in these investigations will involve "cross-cumulating" dumped imports with subsidized imports. We have previously explained why we are continuing our longstanding practice of cross-cumulating. *See Polyethylene Terephthalate (PET) Resin from Canada, China, India, and Oman*, Inv. Nos. 701-TA-531–532 and 731-TA-1270–1273 (Final), USITC Pub. 4604 at 9–11 (Apr. 2016).

[102] CR/PR at Table II-11.

TMFPs from each subject country were at least sometimes interchangeable with the domestic like product.[103]

The record also shows that both the domestic industry's U.S. shipments of the domestic like product and the responding importers' U.S. shipments of subject imports from China and Vietnam in 2023 consisted of substantial volumes of five of the six main product types – round plates, clamshell containers, bowls, trays, and "other" containers.[104] U.S. producers reported *** shipments of lids in 2023, which were the least voluminous of the main product types.[105] Relatedly, responding domestic producers and U.S. importers of subject merchandise from China and Vietnam reported sales of all four pricing products throughout the POI.[106] Further, the data show that U.S. shipments of TMFPs from all sources included products with both plain bleached and plain unbleached finishes in 2023.[107]

Channels of Distribution. During the POI, the domestic like product and subject imports from China were sold primarily to distributors, with a considerable amount of TMFP sales going

[103] CR/PR at Table II-12.

[104] CR/PR at Table IV-5. Domestic producers shipped *** pounds of round plates, *** pounds of clamshell containers, *** pounds of bowls, *** pounds of trays, and *** pounds of "other" products. *Id.* With respect to subject merchandise from China, importers shipped *** pounds of round plates, *** pounds of clamshell containers, *** pounds of bowls, *** pounds of trays, and *** pounds of "other" products. *Id.* With respect to subject merchandise from Vietnam, importers shipped *** pounds of round plates, *** pounds of clamshell containers, *** pounds of bowls, *** pounds of trays, and *** pounds of "other" products. *Id.*

U.S. producers reported that *** percent of their U.S. shipments in 2023 were of the "other" product type. CR/PR at Table IV-5. Of the seven responding producers, *** and *** reported shipping "other" products in 2023. *See* U.S. Producers' Questionnaires at II-10. Specifically, of its *** pounds of "other" shipments, *** reported that it shipped *** pounds of dinner plates, *** pounds of cup carriers, *** pounds of egg cartons, *** pounds of hospital and stadium trays, *** pounds of round school lunch plates, *** pounds of dessert plates, and *** pounds of "other products including laminated," leaving *** pounds unaccounted for. ***'s U.S. Producers' Questionnaire at II-10. ***'s "other" product shipments in 2023 consisted of *** pounds of egg cartons and beverage carriers. ***'s U.S. Producers' Questionnaire at II-10. The record is unclear why *** reported shipments of several types of plates and trays, especially the round school lunch plates, in the "other" category instead of the "round molded fiber plate" and "rectangular molded fiber tray" categories, but these data help explain the "other" product type's *** percent share of domestic producers' U.S. shipments in 2023.

[105] Importers shipped *** pounds of lids from China and *** pounds of lids from Vietnam in 2023. CR/PR at Table IV-5.

[106] CR/PR at V-4, Tables V-3 to V-7. Domestic producers and U.S. importers reported sales of all four pricing products – round plates, two types of clamshell containers, and rectangular trays – sourced from the domestic industry and both subject industries in all quarters of the POI. *Id.* at Tables V-3 to V-7.

[107] CR/PR at Tables IV-6 & D-1 to D-3.

to end users as well, primarily in the food service industry.[108] *** shipments of imports from Vietnam were made to distributors during the POI.[109]

Geographic Overlap. U.S. producers reported shipping the domestic like product to all regions in the United States during the POI.[110] Responding U.S. importers also reported shipping imports from each subject country to all regions in the United States during the POI.[111] The majority of subject imports from China entered through ports located in the East and West, while substantial quantities of subject imports from China also entered through ports located in the North and South.[112] The majority of subject imports from Vietnam entered through ports located in the South, while substantial quantities also entered through ports located in the North, East, and West.[113]

Simultaneous Presence in Market. Domestically produced TMFPs and imports from each subject country were present in the U.S. market throughout the POI, with imports of subject merchandise from both China and Vietnam in nearly every month of the POI.[114] Pricing data show sales of the domestic like product and subject imports from both countries during every quarter of the POI.[115]

Conclusion. The current record indicates that subject imports from China and Vietnam are generally fungible with the domestic like product and each other. It also shows that subject imports from both countries and the domestic like product were sold in similar channels of distribution and geographic markets and were simultaneously present in the U.S. market throughout the POI. Because there is a reasonable overlap of competition between and among subject imports from China and Vietnam and the domestic like product, we analyze subject

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[108] Throughout the POI, domestic producers sold between *** and *** percent of their U.S. shipments of TMFPs to distributors and between *** and *** percent to end users. CR/PR at Table II-2. Domestic producers reported that at least *** percent of their U.S. shipments in 2023 had food service applications. *Calculated from* CR/PR at Table IV-5; U.S. Producers' Questionnaires at II-10. Subject importers sold between *** and *** percent of their U.S. shipments of TMFPs from China to distributors and between *** and *** percent to end users during the POI. CR/PR at Table II-2. Responding U.S. importers reported that at least *** percent of their U.S. shipments of subject imports from China and *** percent of their U.S. shipments of subject imports from Vietnam in 2023 had food service applications. *Calculated from* CR/PR at Table IV-5; U.S. Importers' Questionnaires at II-5c, II-6c, II-7c.

[109] CR/PR at Table II-2.

[110] CR/PR at Table II-3.

[111] CR/PR at Table II-3.

[112] CR/PR at Table IV-7.

[113] CR/PR at Table IV-7.

[114] CR/PR at Tables IV-8, V-3 to V-7. Specifically, there were imports of subject merchandise from China during every month of the POI, while there were imports of subject merchandise from Vietnam in every month except January 2021. *Id.* at Table IV-8.

[115] CR/PR at Tables V-3 to V-7.

imports from China and Vietnam on a cumulated basis in determining whether there is a reasonable indication of material injury by reason of subject imports.

VII. Reasonable Indication of Material Injury by Reason of Subject Imports

C. Legal Standard

In the preliminary phase of antidumping and countervailing duty investigations, the Commission determines whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of the imports under investigation.[116] In making this determination, the Commission must consider the volume of subject imports, their effect on prices for the domestic like product, and their impact on domestic producers of the domestic like product, but only in the context of U.S. production operations.[117] The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant."[118] In assessing whether there is a reasonable indication that the domestic industry is materially injured by reason of subject imports, we consider all relevant economic factors that bear on the state of the industry in the United States.[119] No single factor is dispositive, and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[120]

Although the statute requires the Commission to determine whether there is a reasonable indication that the domestic industry is "materially injured or threatened with material injury by reason of" unfairly traded imports,[121] it does not define the phrase "by reason of," indicating that this aspect of the injury analysis is left to the Commission's reasonable exercise of its discretion.[122] In identifying a causal link, if any, between subject imports and material injury to the domestic industry, the Commission examines the facts of record that relate to the significance of the volume and price effects of the subject imports and any impact of those imports on the condition of the domestic industry. This evaluation under

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[116] 19 U.S.C. §§ 1671b(a), 1673b(a).

[117] 19 U.S.C. § 1677(7)(B). The Commission "may consider such other economic factors as are relevant to the determination" but shall "identify each {such} factor … and explain in full its relevance to the determination." 19 U.S.C. § 1677(7)(B).

[118] 19 U.S.C. § 1677(7)(A).

[119] 19 U.S.C. § 1677(7)(C)(iii).

[120] 19 U.S.C. § 1677(7)(C)(iii).

[121] 19 U.S.C. §§ 1671b(a), 1673b(a).

[122] *Angus Chemical Co. v. United States*, 140 F.3d 1478, 1484–85 (Fed. Cir. 1998) ("{T}he statute does not 'compel the commissioners' to employ {a particular methodology}."), *aff'g* 944 F. Supp. 943, 951 (Ct. Int'l Trade 1996).

the "by reason of" standard must ensure that subject imports are more than a minimal or tangential cause of injury and that there is a sufficient causal, not merely a temporal, nexus between subject imports and material injury.[123]

In many investigations, there are other economic factors at work, some or all of which may also be having adverse effects on the domestic industry. Such economic factors might include nonsubject imports; changes in technology, demand, or consumer tastes; competition among domestic producers; or management decisions by domestic producers. The legislative history explains that the Commission must examine factors other than subject imports to ensure that it is not attributing injury from other factors to the subject imports, thereby inflating an otherwise tangential cause of injury into one that satisfies the statutory material injury threshold.[124] In performing its examination, however, the Commission need not isolate the injury caused by other factors from injury caused by unfairly traded imports.[125] Nor does

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[123] The Federal Circuit, in addressing the causation standard of the statute, observed that "{a}s long as its effects are not merely incidental, tangential, or trivial, the foreign product sold at less than fair value meets the causation requirement." *Nippon Steel Corp. v. USITC*, 345 F.3d 1379, 1384 (Fed. Cir. 2003). This was further ratified in *Mittal Steel Point Lisas Ltd. v. United States*, 542 F.3d 867, 873 (Fed. Cir. 2008), where the Federal Circuit, quoting *Gerald Metals, Inc. v. United States*, 132 F.3d 716, 722 (Fed. Cir. 1997), stated that "this court requires evidence in the record 'to show that the harm occurred "by reason of" the LTFV imports, not by reason of a minimal or tangential contribution to material harm caused by LTFV goods.'" *See also Nippon Steel Corp. v. United States*, 458 F.3d 1345, 1357 (Fed. Cir. 2006); *Taiwan Semiconductor Industry Ass'n v. USITC*, 266 F.3d 1339, 1345 (Fed. Cir. 2001).

[124] SAA at 851–52 ("{T}he Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports."); S. Rep. No. 96-249 at 75 (1979) (the Commission "will consider information which indicates that harm is caused by factors other than less-than-fair-value imports."); H.R. Rep. No. 96-317 at 47 (1979) ("in examining the overall injury being experienced by a domestic industry, the ITC will take into account evidence presented to it which demonstrates that the harm attributed by the petitioner to the subsidized or dumped imports is attributable to such other factors"; those factors include "the volume and prices of nonsubsidized imports or imports sold at fair value, contraction in demand or changes in patterns of consumption, trade restrictive practices of and competition between the foreign and domestic producers, developments in technology and the export performance and productivity of the domestic industry"); *accord Mittal Steel*, 542 F.3d at 877.

[125] SAA at 851–52 ("{T}he Commission need not isolate the injury caused by other factors from injury caused by unfair imports."); *Taiwan Semiconductor Industry Ass'n*, 266 F.3d at 1345 ("{T}he Commission need not isolate the injury caused by other factors from injury caused by unfair imports ... Rather, the Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports." (emphasis in original)); *Asociacion de Productores de Salmon y Trucha de Chile AG v. United States*, 180 F. Supp. 2d 1360, 1375 (Ct. Int'l Trade 2002) ("{T}he Commission is not required to isolate the effects of subject imports from other factors contributing to injury" or make "bright-line distinctions" between the effects of subject imports and other causes.); *see also Softwood Lumber from Canada*, Inv. Nos. 701-TA-414 & 731-TA-928 (Remand), USITC Pub. 3658 at 100–01 (Dec. (Continued…)

the "by reason of" standard require that unfairly traded imports be the "principal" cause of injury or contemplate that injury from unfairly traded imports be weighed against other factors, such as nonsubject imports, which may be contributing to overall injury to an industry.[126] It is clear that the existence of injury caused by other factors does not compel a negative determination.[127]

Assessment of whether material injury to the domestic industry is "by reason of" subject imports "does not require the Commission to address the causation issue in any particular way" as long as "the injury to the domestic industry can reasonably be attributed to the subject imports."[128] The Commission ensures that it has "evidence in the record" to "show that the harm occurred 'by reason of' the LTFV imports," and that it is "not attributing injury from other sources to the subject imports."[129] The Federal Circuit has examined and affirmed various Commission methodologies and has disavowed "rigid adherence to a specific formula."[130]

The question of whether the material injury threshold for subject imports is satisfied notwithstanding any injury from other factors is factual, subject to review under the substantial

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2003) (Commission recognized that "{i}f an alleged other factor is found not to have or threaten to have injurious effects to the domestic industry, *i.e.*, it is not an 'other causal factor,' then there is nothing to further examine regarding attribution to injury" (citing *Gerald Metals*, 132 F.3d at 722 (the statute "does not suggest that an importer of LTFV goods can escape countervailing duties by finding some tangential or minor cause unrelated to the LTFV goods that contributed to the harmful effects on domestic market prices.")).

[126] S. Rep. No. 96-249 at 74–75; H.R. Rep. No. 96-317 at 47.

[127] *See Nippon Steel Corp*., 345 F.3d at 1381 ("{A}n affirmative material-injury determination under the statute requires no more than a substantial-factor showing. That is, the 'dumping' need not be the sole or principal cause of injury.").

[128] *Mittal Steel*, 542 F.3d at 876, 878; *see also id.* at 873 ("While the Commission may not enter an affirmative determination unless it finds that a domestic industry is materially injured 'by reason of' subject imports, the Commission is not required to follow a single methodology for making that determination ... {and has} broad discretion with respect to its choice of methodology." (citing *U.S. Steel Group v. United States*, 96 F.3d 1352, 1362 (Fed. Cir. 1996); S. Rep. No. 96-249 at 75)). In its decision in *Swiff-Train v. United States*, 793 F.3d 1355 (Fed. Cir. 2015), the Federal Circuit affirmed the Commission's causation analysis as comporting with the Court's guidance in *Mittal*.

[129] *Mittal Steel*, 542 F.3d at 873, 877–79 (quoting *Gerald Metals*, 132 F.3d at 722). One relevant "other factor" may involve the presence of significant volumes of price-competitive nonsubject imports in the U.S. market, particularly when a commodity product is at issue. In appropriate cases, the Commission collects information regarding nonsubject imports and producers in nonsubject countries in order to conduct its analysis.

[130] *Nucor Corp. v. United States*, 414 F.3d 1331, 1336, 1341 (Fed. Cir. 2005); *see also Mittal Steel*, 542 F.3d at 879 ("*Bratsk* did not read into the antidumping statute a Procrustean formula for determining whether a domestic injury was 'by reason' of subject imports.").

evidence standard.[131] Congress has delegated this factual finding to the Commission because of the agency's institutional expertise in resolving injury issues.[132]

D. Conditions of Competition and the Business Cycle

The following conditions of competition inform our analysis of whether there is a reasonable indication of material injury by reason of subject imports.

1. Demand Conditions

Domestic demand for TMFPs is largely driven by the demand for eco-sustainable containers and packaging products, primarily in the food service industry.[133] Most U.S. producers and importers reported that overall U.S. demand for TMFPs has increased since January 1, 2021, and the parties agree that demand increased over the POI.[134] Petitioner claims that state and local regulatory actions and the heightening environmental awareness of customers have increased demand for eco-friendly packaging products, including TMFPs, and expects demand to continue to rise.[135] Joint Respondents largely agree but contend that there is a limit to the premium customers are willing to pay for environmentally friendly products.[136]

Four U.S. producers and nine of 25 responding importers reported that demand for TMFPs is somewhat seasonal and subject to business cycles.[137] Joint Respondents contend that demand for imported TMFPs is higher in the fall and winter due to the holidays and that some

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[131] We provide in our discussion below a full analysis of other factors alleged to have caused any material injury experienced by the domestic industry.

[132] *Mittal Steel*, 542 F.3d at 873; *Nippon Steel Corp.*, 458 F.3d at 1350 (citing *U.S. Steel Group*, 96 F.3d at 1357); S. Rep. No. 96-249 at 75 ("The determination of the ITC with respect to causation is ... complex and difficult, and is a matter for the judgment of the ITC.").

[133] CR/PR at II-8 to II-9; Petitioner's Postconf. Br. at 17–18.

[134] CR/PR at Table II-5; Petitioner's Postconf. Br. at 17–19; Joint Respondents' Postconf. Br. at 17–18. Specifically, five domestic producers reported that overall demand steadily increased during the POI, one reported that demand fluctuated higher, and one reported that demand fluctuated lower. CR/PR at Table II-5. Of the 25 U.S. importers that provided a response regarding demand, 11 reported that overall demand steadily increased during the POI, seven reported that demand fluctuated higher, two reported that demand fluctuated lower, three reported that demand steadily decreased, and two reported no change in demand. *Id.*

[135] Petitioner's Postconf. Br. at 17–19.

[136] Joint Respondents' Postconf. Br. at 17–18.

[137] CR/PR at II-9. Some firms reported lower demand from schools in the summer, higher demand in warmer months due to increased outdoor dining, and higher demand around the fall holidays. *Id.*

customers also increase their orders of subject imports during this time to avoid any potential backlogs caused by celebration of the Lunar New Year in February.[138]

Apparent U.S. consumption of TMFPs increased from *** pounds in 2021 to *** pounds in 2022 and to *** pounds in 2023, for an overall increase of *** percent from 2021 to 2023.[139] Apparent U.S. consumption of *** pounds of TMFPs in interim 2024 was *** percent higher than apparent U.S. consumption of *** pounds in interim 2023.[140]

2. Supply Conditions

The domestic industry was the *** supply source for the U.S. market during the POI.[141] The industry's share of apparent U.S. consumption declined from *** percent in 2021 to *** percent in 2022 and *** percent in 2023, for an overall decline of *** percentage points.[142] Its share of *** percent in interim 2024 was *** percentage points lower than its *** percent share in interim 2023.[143]

During the POI, domestic producers experienced various production disruptions and capacity constraints due to production curtailments, equipment failure, weather events, the COVID-19 pandemic, and other developments.[144] Several U.S. producers also announced expansions and acquisitions during the POI.[145] *** installed its first TMFP *** production machines at its *** facility in 2021 and began production at the end of 2023.[146] It also expects to commence TMFP production at its *** facility at the end of 2024.[147] Similarly, *** commissioned its new plant in 2021 and began production at the beginning of 2022.[148] It added four new production machines in mid-2023 and another ten in mid-2024.[149] *** added and upgraded multiple forming machines from mid-2023 to mid-2024.[150] Startup ***

[138] Joint Respondents' Postconf. Br. at 18.
[139] CR/PR at Tables IV-9 & C-1.
[140] CR/PR at Tables IV-9 & C-1.
[141] CR/PR at Tables IV-9 & C-1.
[142] CR/PR at Tables IV-9 & C-1.
[143] CR/PR at Tables IV-9 & C-1.
[144] CR/PR at Tables III-4 & III-6. *** and *** attribute the production curtailments they suffered during the POI to price competitiveness and lost sales to subject imports. *Id.*
[145] CR/PR at Table III-4.
[146] CR/PR at Table III-4.
[147] CR/PR at Table III-4.
[148] CR/PR at Table III-4.
[149] CR/PR at Table III-4.
[150] CR/PR at Table III-4.

commenced *** production in interim 2024.[151] *** acquired *** and its *** at the end of 2021.[152] *** also reported a slight increase in production capacity during the POI.[153]

The domestic industry's practical TMFP capacity increased from *** pounds in 2021 to *** pounds in 2022 and *** pounds in 2023, for an overall increase of *** percent.[154] Its practical capacity utilization rate increased from *** percent in 2021 to *** percent in 2022, and then decreased to *** percent in 2023, for an overall decrease of *** percentage points.[155]

Cumulated subject imports were the *** supply source for the U.S. market during the POI.[156] Subject imports' share of apparent U.S. consumption increased from *** percent in 2021 to *** percent in 2022 and *** percent in 2023, for an overall increase of *** percentage points.[157] Cumulated subject imports' share of apparent U.S. consumption of *** percent in interim 2024 was *** percentage points higher than their share of *** percent in interim 2023.[158] Of the responding importers, 16 of 27 reported that they had not experienced supply constraints during the POI.[159] The 11 importers that did experience supply constraints attributed those issues to the COVID-19 pandemic, port strikes and shutdowns, limited domestic product range, lack of inventories, the inability of domestic producers to deliver the required amounts of TMFPs, and the U.S. ban on per- and polyfluoroalkyl substances ("PFAS").[160]

Nonsubject imports were the *** supply source for the U.S. market during the POI.[161] Their share of apparent U.S. consumption increased from *** percent in 2021 to *** percent in 2022 and *** percent in 2023, for an overall increase of *** percentage points.[162] The largest

[151] CR/PR at Table III-7. *** reported, "***." *Id.* at Table III-4.

[152] CR/PR at Table III-4.

[153] CR/PR at Table III-4.

[154] CR/PR at Tables III-5 & C-1. The domestic industry's practical capacity of *** pounds in interim 2024 was *** percent larger than its practical capacity of *** pounds in interim 2023. *Id.*

[155] CR/PR at Tables III-5 & C-1. The domestic industry's practical capacity utilization rate of *** percent in interim 2024 was *** percentage points lower than its rate of *** percent in interim 2023. *Id.*

[156] CR/PR at Tables IV-9 & C-1.

[157] CR/PR at Tables IV-9 & C-1.

[158] CR/PR at Tables IV-9 & C-1.

[159] CR/PR at II-7.

[160] CR/PR at II-7.

[161] CR/PR at Tables IV-9 & C-1.

[162] CR/PR at Tables IV-9 & C-1. Nonsubject imports' share of apparent U.S. consumption of *** percent in interim 2024 was *** percentage points higher than their *** percent share in interim 2023. *Id*.

sources of nonsubject imports over the POI were Canada, Mexico, and Taiwan, which together accounted for 71.1 percent of nonsubject imports during that period.[163]

3. Substitutability and Other Conditions

Based on the record in the preliminary phase of these investigations, we find that there is a moderate-to-high degree of substitutability between cumulated subject imports and domestically produced TMFPs. Primary factors contributing to this level of substitutability are similar quality, availability, and general interchangeability between domestic and subject TMFPs, as well as little customer preference for TMFPs from a particular country of origin or producer.[164] Differences in some factors, such as product range, reliability of supply, and lead times, may limit substitutability to some extent.[165] As discussed above, all responding domestic producers reported that imports from each subject country were always or frequently interchangeable with domestically produced TMFPs, and almost all importers reported that imports of TMFPs from each subject country were at least sometimes interchangeable with the domestic like product.[166]

The current record indicates that price is an important factor in purchasing decisions for TMFPs, among other important factors.[167] Of the 12 purchasers that responded to the Commission's lost sales/lost revenue survey, ten purchasers ranked price within the top three purchasing factors, while eight purchasers ranked quality and five purchasers ranked availability within the top three purchasing factors.[168] U.S. producers and importers differed on the significance of factors other than price.[169] Importers reported that factors such as lead times,

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[163] CR/PR at II-7.

[164] *See* CR/PR at II-10, Tables II-11 & II-12.

[165] CR/PR at II-10. In any final phase, we intend to further explore the extent to which these and other factors affect the substitutability between subject imports and the domestic like product.

[166] CR/PR at Tables II-11 & II-12.

[167] CR/PR at Table II-7.

[168] CR/PR at Table II-7. Three purchasers rated price as the first most important purchasing factor, while four purchasers rated quality and three purchasers rated availability as the first most important factor. *Id*.

[169] CR/PR at Tables II-13 & II-14. Four producers reported that there are never significant differences other than price for subject imports and the domestic like product, two producers reported that there are sometimes significant differences other than price, and one producer reported that there are frequently significant differences other than price. *Id.* at Table II-13.

For domestically produced TMFPs and subject imports from China, nine importers reported that there are always significant differences other than price, eight importers reported that there are frequently significant differences other than price, four importers reported that there are sometimes (Continued…)

freight costs, tariffs, customer-specific requirements, product design, and brand factor into their sales of TMFPs.[170]

Domestic producers and importers primarily sold TMFPs through long-term contracts, but also reported sales via short-term contracts, annual contracts, and spot sales.[171] Domestic producers and importers reported setting prices using price lists, contracts, and transaction-by-transaction negotiations.[172]

The primary raw material used in the production of TMFPs is fibrous pulp made from plant products, such as grasses, wheat straw, sugarcane bagasse, bamboo, wood, recycled fibers, hemp, rice straw, and other byproducts and wastes.[173] Producers may purchase pulp or produce their own.[174] Raw material costs represent the *** component of the domestic industry's COGS, with raw materials' share of COGS fluctuating within a range of *** to *** percent annually from 2021 to 2023.[175] Three of the four responding producers reported indexing long-term contracts to raw material prices, and one of two reported indexing annual contracts to raw material prices.[176] No producer reported indexing short-term contracts to raw material prices.[177] A majority of importers reported that they do not index contracts to raw material prices, regardless of contract length.[178]

A majority of responding U.S. producers and importers noted the existence of one or more substitutes for TMFPs. Substitutes reportedly include plastics, paper, aluminum, and "plant-based fiber."[179]

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significant differences other than price, and three importers reported that there are never significant differences other than price. *Id.* at Table II-14.

For domestically produced TMFPs and subject imports from Vietnam, three importers reported that there are always significant differences other than price, six importers reported that there are frequently significant differences other than price, three importers reported that there are sometimes significant differences other than price, and two importers reported that there are never significant differences other than price. *Id.*

[170] *See* CR/PR at II-14.

[171] CR/PR at V-2 to V-3, Table V-2. Most U.S. producers reported that they do not renegotiate prices during long-term, annual, or short-term contracts, while a slight majority of importers reported that they are open to price renegotiation in contracts of all lengths. *Id.* at V-3.

[172] CR/PR at V-2 & Table V-1. One importer reported using a cost-plus pricing methodology. *Id.*

[173] CR/PR at V-1.

[174] CR/PR at V-1.

[175] CR/PR at Table VI-1. Raw materials' *** percent share of COGS in interim 2024 was *** percentage points lower than the *** percent share in interim 2023. *Id.*

[176] CR/PR at V-3.

[177] CR/PR at V-3.

[178] CR/PR at V-3.

[179] CR/PR at II-9.

Effective September 24, 2018, subject imports from China became subject to an additional 10 percent *ad valorem* duty, which was increased to 25 percent, effective May 10, 2019.[180] Exclusions granted by the U.S. Trade Representative in 2020 for certain items imported under HTS number 4823.61.0040 ended on December 31, 2020.[181] Exclusions granted by the U.S. Trade Representative in 2022 for certain items imported under HTS numbers 4823.70.0020 and 4823.70.0040 ended on June 14, 2024.[182]

E. Volume of Subject Imports

Section 771(7)(C)(i) of the Tariff Act provides that the "Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States, is significant."[183]

The volume of cumulated subject imports increased from 132.1 million pounds in 2021 to 203.3 million pounds in 2022, and then decreased to 181.7 million pounds in 2023, for an overall increase of 37.5 percent from 2021 to 2023.[184] Subject imports of 100.9 million pounds in interim 2024 were 11.7 percent higher than the 90.3 million pounds in interim 2023.[185] Subject imports as a share of apparent U.S. consumption increased from *** percent in 2021 to *** percent in 2022 and *** percent in 2023, for an overall increase of *** percentage points from 2021 to 2023.[186] Subject imports' *** percent share of apparent U.S. consumption in interim 2024 was *** percentage points higher than their *** percent share in interim 2023.[187]

Based on the record in the preliminary phase of these investigations, we find that the volume of subject imports and the increase in that volume are significant, both in absolute terms and relative to U.S. consumption.

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[180] CR/PR at I-7.

[181] CR/PR at I-7 n.12.

[182] CR/PR at I-7 n.12.

[183] 19 U.S.C. § 1677(7)(C)(i).

[184] CR/PR at Tables IV-2 & IV-3.

[185] CR/PR at Tables IV-2 & IV-3. The volume of cumulated subject imports increased by 53.8 percent from 2021 to 2022, and then decreased by 10.6 percent from 2022 to 2023. *Id.* U.S. importers' U.S. shipments of cumulated subject imports increased from 151.7 million pounds in 2021 to 170.7 million pounds in 2022 and 182.8 million pounds in 2023, for an overall increase of 20.5 percent. *Id.* at Tables IV-9 & C-1. These volumes represent an increase of 12.5 percent from 2021 to 2022 and an increase of 7.1 percent from 2022 to 2023. *Id.* U.S. importers' U.S. shipments of 103.5 million pounds of cumulated subject imports in interim 2024 were 15.8 percent higher than the 89.3 million pounds in interim 2023. *Id.*

[186] CR/PR at Tables IV-9 & C-1.

[187] CR/PR at Tables IV-9 & C-1.

F. Price Effects of the Subject Imports

Section 771(7)(C)(ii) of the Tariff Act provides that, in evaluating the price effects of subject imports, the Commission shall consider whether –

> (I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and
>
> (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.[188]

As discussed in section V.B.3. above, we find that there is a moderate-to-high degree of substitutability between subject imports and domestically produced TMFPs and that price is an important factor in purchasing decisions.

The Commission collected quarterly pricing data from the U.S. producers and importers for four pricing products shipped to unrelated customers during the POI.[189] [190] Seven domestic producers and 25 U.S. importers provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.[191] Pricing data reported by these firms accounted for *** percent of U.S. shipments of domestically produced

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[188] 19 U.S.C. § 1677(7)(C)(ii).

[189] The four pricing products are as follows:

Product 1.-- 8.75”–9.25” round molded fiber plate, of any color or weight, without compartments.

Product 2.-- 9” x 9” molded fiber “clamshell” container, with an attached hinged lid, of any color or weight, with or without compartments.

Product 3.-- 6” x 6” molded fiber “clamshell” container, with an attached hinged lid, of any color or weight, with or without compartments.

Product 4.-- 8”–8.75” x 5.6”–6.5” rectangular molded fiber tray, of any color or weight, with or without compartments.

CR/PR at V-4.

[190] Joint Respondents argue that TMFP pricing depends upon product weight, and the domestic like product is generally heavier than subject imports due to the difference in pulp composition. Joint Respondents’ Postconf. Br. at 17. We will investigate this issue further in any final phase of the investigations.

[191] CR/PR at V-4.

TMFPs by value, *** percent of U.S. shipments of subject imports from China by value, and *** percent of U.S. shipments of subject imports from Vietnam by value in 2023.[192]

Subject imports undersold domestically produced TMFPs in 77 of 112 quarterly comparisons, or 68.8 percent of the time, at margins ranging from *** to *** percent and averaging *** percent.[193] Subject imports oversold domestically produced TMFPs in 35 of 112 quarterly comparisons, or 31.3 percent of the time, at margins ranging from *** to *** percent and averaging *** percent.[194] There were *** pieces of subject import sales in quarters of underselling, equal to *** percent of the total volume of reported sales of subject imports covered by the Commission's pricing data during the POI.[195] There were *** pieces of subject import sales in quarters of overselling, equal to *** percent of the total volume of reported sales of subject imports.[196] [197] Underselling became more frequent in 2023 and was particularly prevalent in interim 2024, both in terms of numbers of quarterly comparisons and numbers of pieces, occurring in 14 of 16 comparisons (87.5 percent) accounting for *** pieces of subject imports, equal to *** percent of the total volume of reported sales of subject imports in interim 2024.[198]

We have also considered purchasers' responses to the Commission's lost sales/lost revenue survey. Commission staff contacted 23 purchasers identified by domestic producers and received responses to the lost sales/lost revenue survey from 12, who reported purchasing or importing 205.5 million pounds of TMFPs during the POI, including *** pounds of subject

[192] CR/PR at V-4. Pricing coverage is based on value instead of quantity because while trade data were collected by weight, price data were collected by 1,000 pieces.

[193] CR/PR at Table V-8.

[194] CR/PR at Table V-8.

[195] CR/PR at Table V-8.

[196] CR/PR at Table V-8.

[197] Subject imports predominantly undersold the domestic like product by quarterly comparisons and volume in products 2, 3, and 4, and oversold the domestic like product in product 1. CR/PR at Table V-8. Product 1 imported from China oversold domestic product in all but the last quarter, and product 1 was the highest volume pricing product. This contributed to the larger proportion of import volumes overselling the domestic product in the aggregate data despite fewer quarters of overselling than underselling. *Id*. at V-14. Although pricing product 1 (a plate product) accounted for *** percent of subject imports in the pricing data, plates only accounted for *** percent of importers' U.S. shipments of subject imports in 2023. *Id*. at Tables IV-5 & V-8.

[198] CR/PR at Table V-10. On an annual basis, subject imports undersold domestically produced TMFPs in 21 of 32 quarterly comparisons (65.6 percent) in 2021, 17 of 32 quarterly comparisons (53.1 percent) in 2022, and 25 of 32 quarterly comparisons (78.1 percent) in 2023. *Id.* There were *** pieces of subject import sales (*** percent of total volume) in quarters of underselling during 2021, *** pieces of subject import sales (*** percent of total volume) in quarters of underselling during 2022, and *** pieces of subject import sales (*** percent of total volume) in quarters of underselling during 2023. *Id.*

imports.[199] Ten responding purchasers reported that they had purchased subject imports instead of domestically produced TMFPs, and nine of those purchasers reported that the price of subject imports was lower than the price of the domestically produced product.[200] Of those nine purchasers, eight reported that price was a primary reason for their decision to purchase *** pounds of subject imports rather than the domestic like product.[201]

Given the degree of substitutability of subject imports and the domestic like product, the importance of price in purchasing decisions, the underselling by subject imports in 77 of 112 quarterly comparisons accounting for *** percent of reported subject import sales volume and in a greater percentage of comparisons and sales volume later in the POI, and the purchasers' reported substantial volume of lost sales, we find that there has been significant underselling by subject imports. As discussed further below, we also find that the underselling enabled subject imports to gain sales and market share at the expense of the domestic industry. We observe that in interim 2024, when subject import underselling was most frequent, cumulated subject imports gained the most market share from the domestic industry during the POI.[202]

We have also examined price trends during the POI. During the POI, domestic prices for pricing product 1 generally increased overall, domestic prices for pricing products 2 and 3 increased irregularly overall, and domestic prices for pricing product 4 decreased irregularly overall.[203] Prices for subject imports from China and Vietnam generally decreased over the POI.[204] Additionally, three of six responding purchasers reported that domestic producers had

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[199] CR/PR at V-16, Table V-11.

[200] CR/PR at V-18 & Table V-13. The ten purchasers purchased subject imports from China instead of the domestic like product. *Id.* at V-18. No purchaser reported purchasing subject imports from Vietnam rather than the domestic like product. *Id.*

[201] CR/PR at Table V-13. These lost sales are equivalent to *** percent of importers' U.S. shipments of subject imports and *** percent of responding purchasers' reported purchases of subject imports during the POI. *Id.* at Tables IV-9, V-11, V-13 & C-1.

[202] CR/PR at Tables IV-9, V-10 & C-1. Cumulated subject imports gained *** percentage points of market share from the domestic industry from 2021 to 2022 and *** percentage points from 2022 to 2023. *Id.* at Tables IV-9 & C-1. Subject imports' market share was *** percentage points higher in interim 2024 than in interim 2023. *Id.*

[203] CR/PR at Tables V-3 to V-6 & Figures V-1 to V-4. Over the POI, domestic prices increased by *** percent for Product 1, *** percent for Product 2, and *** percent for Product 3, and decreased by *** percent for Product 4. *Id.* at Table V-7.

[204] CR/PR at Tables V-3 to V-6 & Figures V-1 to V-4. Over the POI, prices for subject imports from China decreased by *** percent for Product 1, *** percent for Product 2, *** percent for Product 3, and *** percent for Product 4. *Id.* at Table V-7. Prices for subject imports from Vietnam decreased by *** percent for Product 1 and *** percent for Product 2, increased by *** percent for Product 3, and decreased by *** percent for Product 4 over the POI. *Id.*

reduced prices to compete with lower-priced subject imports, with estimated price reductions ranging from *** to *** percent and averaging 18.7 percent.[205]

We have also examined whether subject imports prevented price increases which otherwise would have occurred to a significant degree. The domestic producers' ratio of COGS to net sales increased from *** percent in 2021 to *** percent in 2022, and then declined to *** percent in 2023, for an overall increase of *** percentage points.[206] The domestic producers' total net sales average unit value ("AUV") increased by $*** per pound (*** percent) from 2021 to 2023, increasing by $*** per pound (*** percent) from 2021 to 2022 and by $*** per pound (*** percent) from 2022 to 2023.[207] The domestic producers' unit COGS increased by $*** per pound (*** percent) from 2021 to 2023, increasing by $*** per pound (*** percent) from 2021 to 2022 and by $*** per pound (*** percent) in 2023.[208] The increase in unit COGS was primarily driven by increasing other factory costs, which increased by $*** per pound from 2021 to 2023, and to lesser degrees by raw materials and direct labor, which increased by $*** and $*** per pound during that time, respectively.[209] [210] Apparent U.S. consumption increased by *** percent from 2021 to 2023 and was *** percent higher in interim 2024 than in interim 2023.[211]

In sum, based on the record of the preliminary phase of these investigations, we find that subject imports significantly undersold the domestic like product, leading to lost sales and a shift in market share from the domestic industry to subject imports. We therefore find that cumulated subject imports had significant price effects.

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[205] CR/PR at V-18 & Table V-15. These three purchasers reported that domestic producers had reduced prices to compete with subject imports from China. *Id.* at V-18. No purchaser reported domestic producers lowering prices to compete with subject imports from Vietnam. *Id.* Four purchasers reported that U.S. producers had not reduced prices, and five reported that they did not know. *Id.* at Table V-15.

[206] CR/PR at Tables VI-1 & C-1. The domestic producers' *** percent ratio of COGS to net sales in interim 2024 was *** percentage points higher than its *** percent ratio in interim 2023. *Id.*

[207] CR/PR at Tables VI-2 & C-1. The domestic producers' net sales AUV in interim 2024 was $*** per pound (*** percent) lower than in interim 2023. *Id.*

[208] CR/PR at Tables VI-2 & C-1. The domestic producers' unit COGS in interim 2024 was $*** per pound (*** percent) lower than its unit COGS in interim 2023. *Id.*

[209] CR/PR at Table VI-2.

[210] Joint Respondents argue that TMFPs compete with other types of food packaging and that customers will consider alternative products if the prices of TMFPs increase too much relative to other options. Joint Respondents' Postconf. Br. at 17–18. In any final phase of these investigations, we intend to investigate the extent to which price competition with alternative food packaging, as compared to competition with subject imports, limited the domestic industry's ability to raise prices for TMFPs.

[211] CR/PR at Tables IV-9 & C-1.

G. Impact of the Subject Imports[212]

Section 771(7)(C)(iii) of the Tariff Act provides that the Commission, in examining the impact of the subject imports on the domestic industry, "shall evaluate all relevant economic factors which have a bearing on the state of the industry." These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, gross profits, net profits, operating profits, cash flow, return on investment, return on capital, ability to raise capital, ability to service debt, research and development ("R&D"), and factors affecting domestic prices. No single factor is dispositive, and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[213]

As apparent U.S. consumption increased by *** percent from 2021 to 2023 and was *** percent higher in interim 2024 than in interim 2023, the domestic industry's output and employment indicia generally increased.[214] The domestic producers' practical capacity, production, end-of-period inventories, and ratio of end-of-period inventories to total shipments increased overall from 2021 to 2023 and were higher in interim 2024 than in interim 2023.[215] Total U.S. shipments also increased overall from 2021 to 2023, but were lower in interim 2024 than in interim 2023 despite increasing apparent U.S. consumption.[216] Capacity utilization

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[212] Commerce initiated antidumping duty investigations for subject imports from China based on an estimated dumping margin of 477.97 percent and for subject imports from Vietnam based on estimated dumping margins ranging from 231.73 to 260.56 percent. *LTFV Notice of Initiation*, 89 Fed. Reg. at 87554.

[213] 19 U.S.C. § 1677(7)(C)(iii).

[214] CR/PR at Tables IV-9 & C-1. The domestic industry's share of apparent U.S. consumption decreased from *** percent in 2021 to *** percent in 2022 and *** percent in 2023. *Id.* The domestic industry's *** percent share of apparent U.S. consumption in interim 2024 was *** percentage points lower than its *** percent share in interim 2023. *Id.*

[215] Practical capacity increased from *** pounds in 2021 to *** pounds in 2022 and *** pounds in 2023; practical capacity of *** pounds in interim 2024 was more than the *** pounds reported in interim 2023. CR/PR at Tables III-5 & C-1. Production increased from *** pounds in 2021 to *** pounds in 2022, and then decreased to *** pounds in 2023; production of *** pounds in interim 2024 was higher than the *** pounds reported in interim 2023. *Id.* End-of-period inventories increased from *** pounds in 2021 to *** pounds in 2022, and then decreased to *** pounds in 2023; end-of-period inventories of *** pounds in interim 2024 were more than the *** pounds reported in interim 2023. *Id.* at Tables III-9 & C-1. As a ratio to total shipments, end-of-period inventories increased irregularly by *** percentage points from 2021 to 2023, increasing from *** percent in 2021 to *** percent in 2022, and then decreasing to *** percent in 2023; the ratio of inventories to total shipments of *** percent in interim 2024 was higher than the ratio of *** percent in interim 2023. *Id.*

[216] Total U.S. shipments increased from *** pounds in 2021 to *** pounds in 2022, and then decreased to *** pounds in 2023; U.S. shipments of *** pounds in interim 2024 were lower than the *** pounds reported in interim 2023. CR/PR at Tables III-8 & C-1.

decreased irregularly overall from 2021 to 2023, and was lower in interim 2024 than in interim 2023.[217]

Most of the domestic industry's employment indicia increased from 2021 to 2023 and were higher in interim 2024 than in interim 2023, including production and related workers ("PRWs"), total hours worked, wages paid, hours worked per PRW, unit labor costs, and hourly wages.[218] Productivity decreased steadily from 2021–2023 and was lower in interim 2024 than in interim 2023.[219]

Despite improvements in the domestic industry's production- and employment-related data, many of its financial performance indicia worsened from 2021 to 2023 and were lower in interim 2024 than in interim 2023, in particular its gross profits and operating and net income.[220] Net sales value increased steadily from 2021 to 2023, but were lower in interim 2024 than in interim 2023.[221] The domestic producers' operating and net income margins

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[217] Capacity utilization increased from *** percent in 2021 to *** percent in 2022, and then decreased to *** percent in 2023; capacity utilization of *** percent in interim 2024 was lower than the *** percent reported in interim 2023. CR/PR at Tables III-5 & C-1.

[218] The number of PRWs increased from *** in 2021 to *** in 2022 and *** in 2023; the *** PRWs in interim 2024 were more than the *** PRWs reported in interim 2023. CR/PR at Tables III-15 & C-1. Total hours worked increased from *** in 2021 to *** in 2022 and *** in 2023; the *** total hours worked in interim 2024 were higher than the *** hours reported in interim 2023. *Id*. Wages paid increased from $*** in 2021 to $*** in 2022 and $*** in 2023; the $*** in wages paid in interim 2024 were higher than the $*** in wages paid in interim 2023. *Id.* Hours worked per PRW increased from *** in 2021 to *** in 2022, and then decreased to *** in 2023; the *** hours worked per PRW in interim 2024 were more than the *** hours worked per PRW reported in interim 2023. CR/PR at Tables III-15 & C-1. Unit labor costs increased from $*** in 2021 to $*** in 2022 and $*** in 2023; unit labor costs of $*** in interim 2024 were higher than the $*** reported in interim 2023. *Id.* Hourly wages decreased from $*** in 2021 to $*** in 2022, and the increased to $*** in 2023; hourly wages of $*** in interim 2024 were higher than the $*** reported in interim 2023. *Id.*

[219] Productivity decreased from *** pounds per hour in 2021 to *** pounds per hour in 2022 and *** pounds per hour in 2023; productivity of *** pounds per hour in interim 2024 was lower than the productivity of *** pounds per hour in interim 2023. CR/PR at Tables III-15 & C-1.

[220] Gross profits declined by *** percent from 2021 to 2023 and were *** percent lower in interim 2024 than in interim 2023. CR/PR at Tables VI-1 & C-1. Operating income declined by *** percent from 2021 to 2023 and was *** percent lower in interim 2024 than in interim 2023. *Id.* Net income declined by *** percent from 2021 to 2023 and was *** percent lower in interim 2024 than in interim 2023. *Id*. Gross profits decreased from $*** in 2021 to $*** in 2022, and then increased to $*** in 2023; gross profits of $*** in interim 2024 were lower than the $*** in interim 2023. *Id.* Operating income decreased from $*** in 2021 to $*** in 2022 and $*** in 2023; operating income of $*** in interim 2024 was lower than the $*** in interim 2023. *Id.* Net income decreased from $*** in 2021 to $*** in 2022 and $*** in 2023; net income of $*** in interim 2024 was lower than the $*** in interim 2023. *Id.*

[221] Net sales value increased from $*** in 2021 to $*** in 2022 and $*** in 2023; net sales of $*** in interim 2024 were lower than the $*** in interim 2023. CR/PR at Tables VI-1 & C-1.

declined steadily over the same period, and both were lower in interim 2024 than in interim 2023.[222] Their capital expenditures and R&D expenses increased from 2021 to 2023 and were higher in interim 2024 than in interim 2023.[223] The domestic industry's total assets increased steadily from 2021 to 2023, while its operating return on assets ("ROA") decreased steadily over the same period.[224]

Based on the record in the preliminary phase of these investigations, we have found that the significant volume of subject imports undersold the domestic like product to a significant degree and took sales and market share from the domestic industry. While the domestic industry's output and employment indicia generally improved over the POI concurrent with increased apparent U.S. consumption, the domestic industry performed worse than it otherwise would have due to losing sales and market share to the increasing and significant volumes of low-priced subject imports. Subject imports gained *** percentage points of market share from 2021 to 2023 and *** percentage points in interim 2024 compared with interim 2023 at the direct expense of the domestic industry.[225] As a result, the domestic industry's production, shipments, and revenues were lower than they otherwise would have been.[226] As the domestic industry lost market share over the POI, its financial performance steadily worsened overall by many measures, including gross profits, operating and net income, and operating and net income margins. In light of these considerations, we find that subject imports had a significant adverse impact on the domestic industry.

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[222] Operating income as a ratio to net sales declined from *** percent in 2021 to *** percent in 2022 and *** percent in 2023; the operating income margin of *** percent in interim 2024 was lower than the margin of *** percent in interim 2023. CR/PR at Tables VI-1 & C-1. Net income as a ratio to net sales declined from *** percent in 2021 to *** percent in 2022 and *** percent in 2023; the net income margin of *** percent in interim 2024 was lower than the margin of *** percent in interim 2023. *Id.*

[223] Capital expenditures increased from $*** in 2021 to $*** in 2022 and $*** in 2023; capital expenditures of $*** in interim 2024 were higher than the $*** in interim 2023. CR/PR at Tables VI-3 & C-1. R&D expenses increased from $*** in 2021 to $*** in 2022 and $*** in 2023; R&D expenses of $*** in interim 2024 were higher than the $*** in interim 2023. *Id.*

[224] Total net assets increased from $*** in 2021 to $*** in 2022 and $*** in 2023. CR/PR at Tables VI-3 & C-1. ROA declined from *** percent in 2021 to *** percent in 2022 and *** percent in 2023. *Id.* at Table VI-3.

[225] CR/PR at Tables IV-9 & C-1.

[226] Indeed, despite apparent U.S. consumption increasing by *** percent from interim 2023 to interim 2024, the domestic industry's U.S. shipment quantity declined by *** percent during that time as the industry lost market share to low-priced cumulated subject imports. CR/PR at Tables IV-9 & C-1. The domestic industry operated at a POI-low practical capacity utilization rate of *** percent in interim 2024, indicating that it could have produced and shipped substantially more TMFPs but for the increase in cumulated subject imports. *Id.* at Tables III-5 & C-1.

Joint Respondents argue that the domestic industry's declining performance during the POI was due to a number of non-price factors, including its limited product range compared to subject imports, its inability to produce some products due to inferior technology or government regulations, its lack of innovation and customization options, high minimum order quantities, and product quality and performance, among others.[227] We intend to further examine the role of non-price factors in any final phase of these investigations. We also note that many of Joint Respondents' arguments are directed at Genera and Tellus, who are members of the petitioning coalition.[228] Specifically, Joint Respondents argue that Genera and Tellus are startup companies that "appear to have underestimated the time and investment required to optimize and tune operational processes and that chose business models that turn off prospective customers," and are trying to pass the blame for their alleged injury to subject imports.[229] Congress instructed the Commission to determine whether the domestic industry as a whole is materially injured due to subject imports.[230] As directed by the statute, we have evaluated whether cumulated subject imports materially injured the domestic industry as a whole, and we have found that the domestic industry as a whole lost market share to subject imports due to significant underselling. Joint Respondents have not shown how that market share shift and the significant underselling can be attributed to the alleged startup nature of Genera and Tellus.

We have also considered whether there are other factors, such as nonsubject imports and demand, that may have had an impact on the domestic industry, to ensure that we are not attributing injury from such other factors to subject imports. Nonsubject imports were the *** source of supply to the U.S. market throughout the POI.[231] Their share of apparent U.S. consumption increased from *** percent in 2021 to *** percent in 2022 and *** percent in

[227] Joint Respondents' Postconf. Br. at 8–17. Some domestic producers appear to agree that there are some products – particularly *** – that they currently do not produce domestically. *See, e.g.*, CR/PR at IV-10 (reporting *** U.S. shipments of *** by U.S. producers in 2023); *id.* at Table III-14 (domestic producer *** stating that it imported *** from China during the POI because no U.S. producer can currently produce them). However, *** accounted for just *** percent of U.S. shipments of cumulated subject imports in 2023 and just *** percent of shipments of TMFPs from all sources in 2023. *Id.* at Table IV-5.

[228] *See* Joint Respondents' Postconf. Br. at 8–18.

[229] Joint Respondents' Postconf. Br. at 1, 8–9. Joint Respondents compare Genera and Tellus to Huhtamaki, who they claim is "able to produce thermoformed products at low prices." *Id.* at 8–9. Regardless, we have found that the domestic industry as a whole lost market share to subject imports due to significant underselling. Joint Respondents have not shown how that market share shift and the significant underselling can be attributed to the alleged startup nature of Genera and Tellus.

[230] 19 U.S.C. § 1677(4)(A).

[231] CR/PR at Tables IV-9 & C-1.

2023; it was *** percent in interim 2024 compared with *** percent in interim 2023.[232] Notwithstanding this increase, we find that nonsubject imports, whose volume and increase in volume were substantially smaller than the volume and increase in volume of cumulated subject imports, do not explain the extent of the domestic industry's declines in market share and financial performance or the confirmed lost sales to subject imports.[233] We also find that, as apparent U.S. consumption increased over the POI, changes in demand do not explain the domestic industry's loss of sales and market share, or its worsening financial performance.

VIII. Conclusion

For the reasons stated above, we determine that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of TMFPs from China and Vietnam that are allegedly sold in the United States at LTFV and that are allegedly subsidized by the governments of China and Vietnam.

[232] CR/PR at Tables IV-9 & C-1.

[233] The volume of U.S. shipments of nonsubject imports increased from 11.8 million pounds in 2021 to 16.1 million pounds in 2022 and 18.9 million pounds in 2023; it was 10.2 million pounds in interim 2024 compared with 8.6 million pounds in interim 2023. CR/PR at Tables IV-9 & C-1. In comparison, the volume of U.S. shipments of subject imports increased from 151.7 million pounds in 2021 to 170.7 million pounds in 2022 and 182.8 million pounds in 2023; it was 103.5 million pounds in interim 2024 compared with 89.3 million pounds in interim 2023. *Id*.

Part I: Introduction

Background

These investigations result from petitions filed with the U.S. Department of Commerce ("Commerce") and the U.S. International Trade Commission ("USITC" or "Commission") by American Molded Fiber Coalition, which is comprised of Genera Inc. ("Genera"), Vonore, Tennessee; Tellus Products, LLC ("Tellus"), Belle Glade, Florida; and the United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union, AFL-CIO ("USW"), on October 8, 2024, alleging that an industry in the United States is materially injured and threatened with material injury by reason of subsidized and less-than-fair-value ("LTFV") imports of thermoformed molded fiber products ("TMFPs")[1] from China and Vietnam. Table I-1 presents information relating to the background of these investigations.[2] [3]

Table I-1
TMFPs: Information relating to the background and schedule of this proceeding

Effective date	Action
October 8, 2024	Petitions filed with Commerce and the Commission; institution of the Commission investigations (89 FR 83051, October 15, 2024)
October 28, 2024	Commerce's notices of initiation (89 FR 87551 and 87556, November 4, 2024)
October 29, 2024	Commission's conference
November 21, 2024	Commission's vote
November 22, 2024	Commission's determinations
December 2, 2024	Commission's views

Statutory criteria

Section 771(7)(B) of the Tariff Act of 1930 (the "Act") (19 U.S.C. § 1677(7)(B)) provides that in making its determinations of injury to an industry in the United States, the Commission--

> *shall consider (I) the volume of imports of the subject merchandise, (II) the effect of imports of that merchandise on prices in the United States for domestic like products, and (III) the impact of imports of such*

[1] See the section entitled "The subject merchandise" in Part I of this report for a complete description of the merchandise subject in this proceeding.

[2] Pertinent Federal Register notices are referenced in appendix A and may be found at the Commission's website (www.usitc.gov).

[3] A list of witnesses appearing at the conference is presented in appendix B of this report.

merchandise on domestic producers of domestic like products, but only in the context of production operations within the United States; and. . . may consider such other economic factors as are relevant to the determination regarding whether there is material injury by reason of imports.

Section 771(7)(C) of the Act (19 U.S.C. § 1677(7)(C)) further provides that--[4]

In evaluating the volume of imports of merchandise, the Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States is significant.. . .In evaluating the effect of imports of such merchandise on prices, the Commission shall consider whether. . .(I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.. . . In examining the impact required to be considered under subparagraph (B)(i)(III), the Commission shall evaluate (within the context of the business cycle and conditions of competition that are distinctive to the affected industry) all relevant economic factors which have a bearing on the state of the industry in the United States, including, but not limited to. . . (I) actual and potential decline in output, sales, market share, gross profits, operating profits, net profits, ability to service debt, productivity, return on investments, return on assets, and utilization of capacity, (II) factors affecting domestic prices, (III) actual and potential negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment, (IV) actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product, and (V) in {an antidumping investigation}, the magnitude of the margin of dumping.

In addition, Section 771(7)(J) of the Act (19 U.S.C. § 1677(7)(J)) provides that—[5]

(J) EFFECT OF PROFITABILITY.—The Commission may not determine that there is no material injury or threat of material injury to an industry in the United States merely because that industry is profitable or because the performance of that industry has recently improved.

[4] Amended by PL 114-27 (as signed, June 29, 2015), Trade Preferences Extension Act of 2015.
[5] Amended by PL 114-27 (as signed, June 29, 2015), Trade Preferences Extension Act of 2015.

Organization of report

Part I of this report presents information on the subject merchandise, alleged subsidy and dumping margins, and domestic like product. Part II of this report presents information on conditions of competition and other relevant economic factors. Part III presents information on the condition of the U.S. industry, including data on capacity, production, shipments, inventories, and employment. Parts IV and V present the volume of subject imports and pricing of domestic and imported products, respectively. Part VI presents information on the financial experience of U.S. producers. Part VII presents the statutory requirements and information obtained for use in the Commission's consideration of the question of threat of material injury as well as information regarding nonsubject countries.

Market summary

TMFPs are produced from fibers that can come from various biomass resources such as wood, bamboo, and agriculture crops, or other agricultural and forest byproducts, residues, or wastes and are generally used as packaging, containers, and/or for food contact applications.[6] The leading U.S. producers of TMFPs are Huhtamaki Americas, Inc ("Huhtamaki") and Pactiv LLC ("Pactiv"), while leading producers of TMFPs outside the United States include *** of China and *** of Vietnam. The leading U.S. importers of TMFPs from China are ***, while the leading importers of TMFPs from Vietnam are ***, according to questionnaire data. Leading importers of product from nonsubject countries (primarily Taiwan, Malaysia, and Thailand) include ***. Lost sale/lost revenue surveys were sent to 23 purchasers of TMFPs. The Commission received 12 survey responses indicating that firms had purchased TMFPs since January 1, 2021. Responding U.S. purchasers are distributors and restaurants; leading purchasers include ***, which all reported purchasing/importing more than *** pounds of TMFPs between January 2021 and June 2024.

[6] Petition, p. 11, 21, October 8, 2024.

Apparent U.S. consumption of TMFPs totaled approximately *** pounds ($***) in 2023. According to petitioners, seven firms are known to produce TMFPs in the United States. U.S. producers' U.S. shipments of TMFPs totaled *** pounds ($***) in 2023 and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value. U.S. imports from subject sources totaled 182.8 million pounds ($396.6 million) in 2023 and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value. U.S. imports from nonsubject sources totaled 18.9 million pounds ($33.3 million) in 2023 and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value.

Summary data and data sources

A summary of data collected in these investigations is presented in appendix C, table C-1. Except as noted, U.S. industry data are based on questionnaire responses of seven firms that accounted for a majority of U.S. production of TMFPs during 2023. U.S. imports are based on questionnaire data.

Previous and related investigations

TMFPs have not been the subject of any prior countervailing or antidumping duty investigations in the United States.

Nature and extent of alleged subsidies and sales at LTFV

Alleged subsidies

On November 4, 2024, Commerce published a notice in the Federal Register of the initiation of its countervailing duty investigations on TMFPs from China and Vietnam.[7]

Alleged sales at LTFV

On November 4, 2024, Commerce published a notice in the Federal Register of the initiation of its antidumping duty investigations on TMFPs from China and Vietnam.[8] Commerce has initiated antidumping duty investigations based on estimated dumping margins of 477.97 percent for TMFPs from China and 231.73 to 260.56 percent for TMFPs from Vietnam.

[7] For further information on the alleged subsidy programs see Commerce's notice of initiation and related CVD Initiation Checklist. 89 FR 87556, November 4, 2024.

[8] 89 FR 87551, November 4, 2024.

The subject merchandise

Commerce's scope

In the current proceeding, Commerce has defined the scope as follows:[9]

> *{T}hermoformed molded fiber products regardless of shape, form, function, fiber source, or finish. Thermoformed molded fiber products are formed with cellulose fibers, thermoformed using one or more heated molds, and dried/cured in the mold.*
>
> *Thermoformed molded fiber products include, but are not limited to, plates, bowls, clamshells, trays, lids, food or foodservice contact packaging, and consumer or other product packaging.*
>
> *Thermoformed molded fiber products are relatively dense, with a typical fiber density above 0.5 grams per cubic centimeter, and are generally characterized by relatively smooth surfaces. They may be derived from any virgin or recycled cellulose fiber source (including, but not limited to, those sourced from wood, woody crops, agricultural crops/byproducts/residue, and agricultural/ industrial/other waste). They may have any weight, shape, dimensionality, design, or size, and may be bleached, unbleached, dyed, colored, or printed. They may include ingredients, additives, or chemistries to enhance functionality including, but not limited to, anti-microbial, anti-fungal, antibacterial, heat/flame resistant, hydrophobic, oleophobic, absorbent, or adsorbent.*
>
> *Thermoformed molded fiber products may also be subject to other processing or treatments, including, but not limited to, hot or after pressing, die-cutting, punching, trimming, padding, perforating, printing, labeling, dying, coloring, coating, laminating, embossing, debossing, repacking, or denesting. Thermoformed molded fiber products subject to these investigations may also have additional design features, including, but not limited to, tab closures, venting, channeling, or stiffening. Thermoformed molded fiber products remain covered by the scope of these investigations whether the subject product is encased by exterior packaging or whether the subject product forms the outer packaging for non-subject products. They also remain covered by the scope of these investigations whether imported alone, or in any combination of subject and non-subject merchandise (e.g., a lid or cover of any type packaged with a molded fiber bowl, addition of any items to make the thermoformed molded fiber packaging suitable for end-use such as*

[9] 89 FR 87551, November 4, 2024.

absorbent pads). When thermoformed molded fiber products are imported in combination with non-subject merchandise, only the thermoformed molded fiber products are subject merchandise.

Excluded from the scope of these investigations are thermoformed molded fiber products imported as packaging material that enclose and/or surround nonsubject merchandise prepackaged for final sale upon importation into the United States (e.g., molded fiber packaging surrounding a cellular phone).

Thermoformed molded fiber products include thermoformed molded fiber products matching the above description that have been finished, packaged, or otherwise processed in a third country by performing finishing, packaging, or processing that would not otherwise remove the merchandise from the scope of the investigations if performed in the country of manufacture of the thermoformed molded fiber products. Examples of finishing, packaging, or other processing in a third country that would not otherwise remove the merchandise from the scope of the investigations if performed in the country of manufacture of the thermoformed molded fiber products include, but are not limited to, hot or after pressing, die-cutting, punching, trimming, padding, perforating, printing, labeling, dying, coloring, coating, laminating, embossing, debossing, repacking, or denesting.

Tariff treatment

TMFP are currently imported under Harmonized Tariff Schedule of the United States ("HTS") statistical reporting numbers 4823.70.0020 and 4823.70.0040. The general rate of duty is free for subheading 4823.70.00.[10] TMFP may also be imported under HTS statistical reporting numbers 4823.61.0020, 4823.61.0040, 4823.69.0020, 4823.69.0040, and 4823.90.1000. The general rate of duty is free for subheadings 4823.61.00, 4823.69.00, and 4823.90.10.[11] Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

[10] USITC, HTS (2024) Revision 9, Publication 5548, September 2024, p. 48-25.
[11] USITC, HTS (2024) Revision 9, Publication 5548, September 2024, p. 48-25.

Effective September 24, 2018, TMFP originating in China were subject to an additional 10 percent ad valorem duty under section 301 of the Trade Act of 1974. Effective May 10, 2019, the section 301 duty for TMFP was increased to 25 percent ad valorem.[12]

The product[13]

Description and applications

Molded fiber products ("MFP") are products that are produced with natural cellulosic[14] or lignocellulosic[15] fibers (figure I-1) and molded into a desired shape. These fibers come from various biomass resources such as wood, bamboo, agriculture crops (wheat straw, rice straw, hemp, sugarcane bagasse, corn stover, etc.), or other agricultural and forest byproducts, residues, or wastes. MFPs can be made with virgin fibers, recycled fibers, or a combination of both. Generally, virgin fibers are fibers that have been harvested for the first time and recycled fibers are fibers that have been recycled one or more times (e.g. recycled product scraps).[16]

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[12] 83 FR 47974, September 21, 2018; 84 FR 20459, May 9, 2019. See also HTS heading 9903.88.03 and U.S. notes 20(e)–20(f) to subchapter III of chapter 99 and related tariff provisions for this duty treatment. USITC, HTS (2024) Revision 9, Publication 5548, September 2024, pp. 99-III-28–99-III-29, 99-III-42, 99-III-317.

In 2022, exclusions granted by the U.S. Trade Representative (USTR) were listed in U.S. notes 20(ttt)(iii)(53) and (54) of chapter 99 for certain items imported under HTS statistical reporting numbers 4823.70.0020 and 4823.70.0040. These exclusions ended on June 14, 2024. 87 FR 17380, Mar. 28, 2022, and 89 FR 46948, May 30, 2024.

In 2020, exclusions granted by the U.S. Trade Representative (USTR) were listed in U.S. note 20(iii)(78) of chapter 99 for certain items imported under HTS statistical reporting number 4823.61.0040. These exclusions ended on December 31, 2020. 85 FR 48600, Aug. 11, 2020.

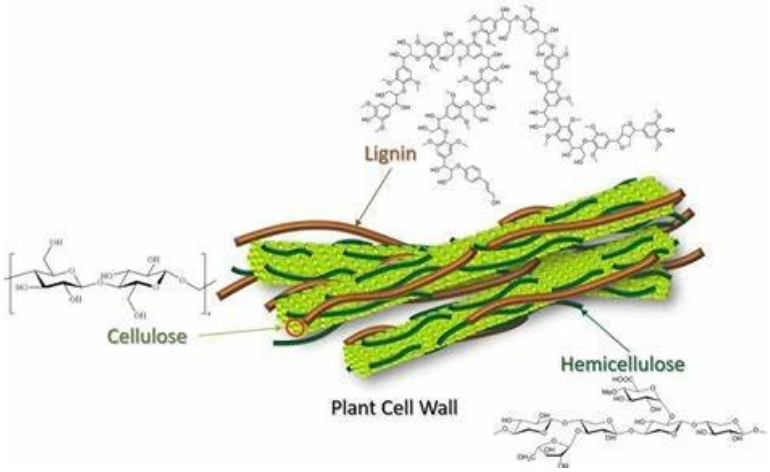
[13] Unless otherwise noted, the information in this section is based on Petition, Vol. I, pp. 11-13, Response of Petitioner to Second Supplemental Questionnaire, pp. 1-4, Petitioners' postconference brief, Exhibit 2. The universe of TMFPs is extensive, and the discussion provided is not exhaustive.

[14] "Cellulosic fiber is a type of fiber made from cellulose, a natural polymer that is found in plants and serves as a structural component of plant cell walls. These fibers are used in a variety of applications, including textiles, papermaking, and building materials. They are valued for their strength, durability, and sustainability. Cellulosic fibers can be obtained from the stem, leaf, or seed of a plant." https://textileengineering.net/cellulosic-fibers-types-properties-and-uses/

[15] Lignocellulosic fibers are fibers that contain both cellulose and lignin, a complex oxygen-containing organic polymer. Lignin adds compressive strength and stiffness, as well as waterproofs the cell wall. Britannica, "Lignin," https://www.britannica.com/science/lignin, retrieved November 5, 2024.

[16] Petition, Exhibit I-11

Figure I-1
TMFPs: Cellulose and lignin found in plant cells



Source: Jensen et. al, (2017). "Fundamentals of Hydrofaction™: Renewable crude oil from woody biomass." https://link.springer.com/article/10.1007/s13399-017-0248-8, retrieved November 4, 2024.

Thermoformed molded fiber products (TMFPs) are a subset of MFPs, irrespective of fiber source, and are manufactured via a thermoforming process that results in unique structural properties that differentiate the subject product from non-thermoformed MFPs.

MFPs vary in size, shape, thickness, and fiber source. The thickness of thermoformed MFPs differs from non-thermoformed MFPs; TMFPs are categorized as "thin-walled,"[17] though domestic industry states that there is no specific measurement that uniformly defines the thickness of a thin-walled product as opposed to a thick-walled product.[18] TMFPs have a typical fiber density above 0.5 grams per cubic centimeter.[19]

TMFPs are typically manufactured for single-use packaging in food service and retail markets (figure I-2).[20] Examples of TMFPs include plates, bowls, clamshells, and trays, among

[17] The International Molded Fiber Association ("IMFA") categorizes these products as Type 3, which are molded fiber manufactured using multiple heated molds and a product wall thickness of about 3/32 to 5/32 inches (2 to 4mm). IMFA, "Molded Fiber Masterclass," https://www.imfa.org/molded-fiber-masterclass/, accessed November 5, 2024.

[18] Conference transcript, pp. 84- 85 (Bhatti).

[19] The density refers to the final thermoformed molded fiber product. Conference transcript, p. 93 (Tiller).

Individual fiber types vary in density. Petition, Exhibit I-12.

[20] Food contact applications tend to be the primary use of TMFPs, though TMFPs can also be used for packaging and/or as containers for non-food related applications, such as for consumer products. Petitioners' postconference brief, p. 6.

other containers and product packaging.[21] TMFPs may be manufactured with or without a lid; the lid may be attached (i.e. clamshell) or separate from the product.[22]

Figure I-2
TMFPs: Example of various TMFP

Source: Petition, p. 11.

Product standards

The tensile strength of the end product varies with fiber sources, although it is most common for manufacturers to produce TMFPs from a combination of fiber sources.[23] Generally, purchasers choose TMFPs as opposed to other substrate products (e.g., plastic, styrofoam, etc.) because TMFPs are more environmentally friendly and compostable. To be certified as fully compostable,[24] the TMFP must be manufactured without per- and polyfluoroalkyl substances (PFAs), also known as "forever chemicals."[25] Domestic industry generally produces PFA-free products.[26]

[21] This not an exhaustive list of TMFPs. Examples listed above were described at the staff conference. Conference transcript, p. 15 (Mascarello).

[22] Lids are not always thermoformed. Please see footnote 52

[23] Conference transcript, p. 92 (Tiller).

[24] The Biodegradable Products Institute ("BPI") is a commonly used third-party authority that verifies the composability of TMFPs. One requirement of BPI certification is having PFAs under 100 parts per million. Conference transcript, p. 73 (Serafini).

[25] There are regional regulations restricting the use of PFAs but the regulations are not strongly enforced. Conference transcript, p. 62 (Mokaddem).

[26] Subject countries also market some of their products as PFA-free, but those marketing claims are not always true. Conference transcript, p. 19 (Mokaddem).

Otherwise, TMFPs do not have industry-wide standard specifications that must be met by the manufacturer.[27] Customers, however, typically provide standards to TMFP producers for manufacture.[28] Both domestic and subject manufacturing plants, specifically those that manufacture direct-contact food products, have food safety certifications in place.[29] Beyond the certification requirements, customers may choose to conduct their own audits of plants to ensure food safety standards are met.

Manufacturing processes

The manufacturing process for TMFP can generally be divided into the following six stages: fiber processing, pulp preparation, molding, secondary processes, quality control, and packaging.

Fiber Processing

First, cellulose fibers must be extracted from a fibrous source (e.g. wood, bamboo, bagasse, etc.). There are multiple different methods to extract the cellulose fibers, depending on the fiber type, and they are generally classified into two methodologies: mechanical pulping and chemical pulping (see figures I-3 and I-4).[30]

Chemical pulping processes are more common for wood-based fibers, whereas mechanical processes are more common in non-wood fibers.[31] There are also combinations of

[27] Please see footnote 39

[28] There are various standards put forth by the American Society for Testing and Materials ("ASTM") and Technical Association of the Pulp and Paper Industry ("TAPPI") that are referenced in Exhibit I-12 of the petition. Generally, there are not specific requirements to produce a product. However, in order to sell into certain markets, customers may require a particular standard or certification. Conference transcript, p. 90 (Tiller).

[29] Safe Quality Food ("SQF") and British Retail Consortium ("BRC") are two most common food safety certifications. Conference transcript, p. 118 (Mascarello).

Food safety regulations in North America require fiber-based food containers, including non-TMFPs, to be manufactured with virgin fibers because recycled fiber has a higher risk of contaminants. Petition, Exhibit I-12.

Recycled fibers may be available that are certified for food contact. Conference transcript, p. 95 (Mokaddem).

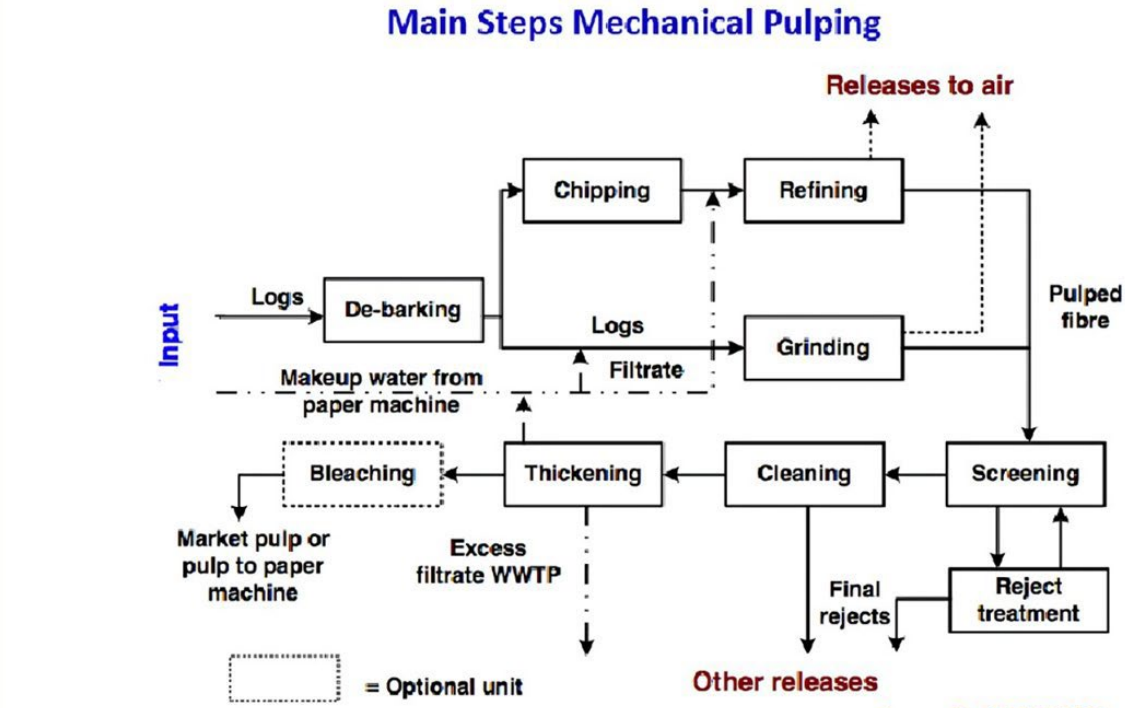
[30] Petition, Exhibit I-12.

[31] Wood requires more effort to liberate the cellulose and hemi-cellulose from the ligand bonds in that fiber, which requires a chemical process. Conference transcript, p. 88 (Tiller).

the two methodologies, chemi-mechanical and semi-chemical/mechanical, in which some chemicals are applied to soften the fibers but not as intensely as a pure chemical pulping process.[32] Previously manufactured pulp that has since dried may also go through a hydro pulping process to rehydrate and reuse the pulp prior to processing into the final product.[33]

Most often, in both domestic industry and in the subject countries, multiple fiber types are blended into the pulp in some ratio to achieve strength targets and other performance attributes for molded fiber products. Because a combination of multiple fibers is most often used, a combination of chemical and mechanical processing is also most common in both domestic industry and subject countries.[34] In both domestic industry and subject countries, TMFPs may be produced from pulp manufactured in an integrated facility, purchased pulp, or a combination of manufactured and purchased pulp.[35]

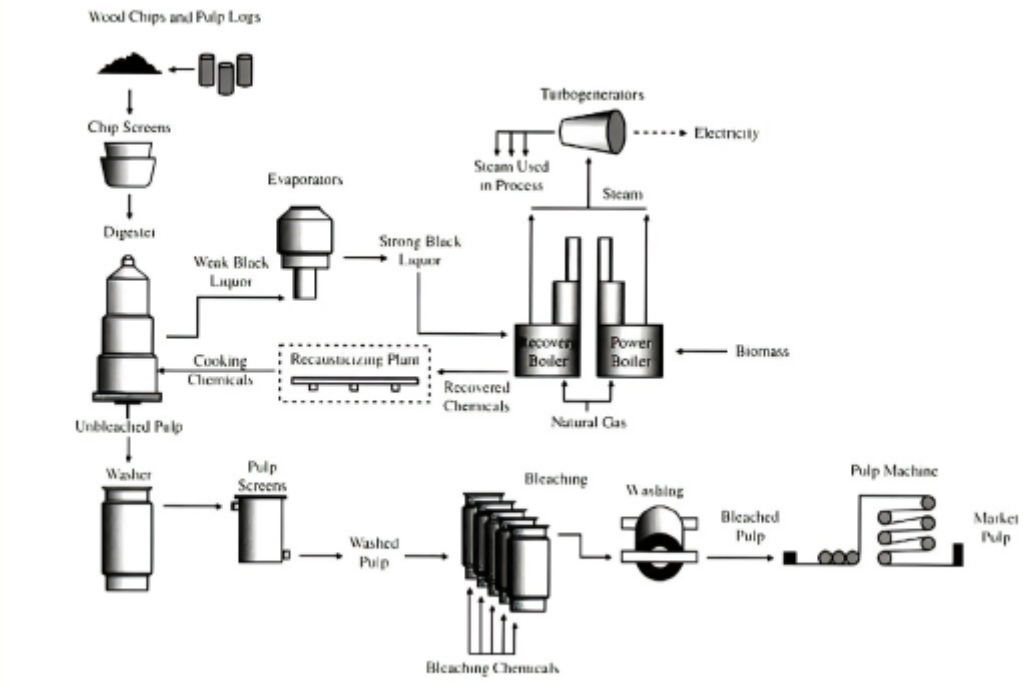
Figure I-3
TMFPs: Flow chart of the mechanical pulping process



Source: Petitioners' postconference brief, Exhibit 2-A.

[32] Conference transcript, p. 88 (Tiller).
[33] Conference transcript, p. 89 (Tiller).
[34] Conference transcript, p. 92 (Tiller).
[35] Petition, pp. 11 and 12.

Figure I-4
TMFPs: Flow chart of the chemical pulping process



Source: Paper Pulp Machine, "Chemical pulping process" http://www.paperpulpermachine.com/process/chemical-pulping-process.html, retrieved November 5, 2024.

Pulp preparation

Pulp preparation begins with mixing the raw materials until a desired consistency and format of pulp has been achieved. In addition to being referred to as pulp preparation (pulp prep), this step can also be known as stock preparation (stock prep), or the 'approach system'.[36]

There are two types of thermoforming, wet and dry, that are characterized by the pulp format and preparation. Wet thermoforming uses pulp slurry, which is pulp that is mixed and diluted with water.[37] Dry thermoforming uses dry matter, which is pulp that has been fluffed and dried with air pressure. Additives, such as sizing agents, fillers, or various chemistries to

[36] Petition, p. 12.

[37] Pulp slurry contains more than 99% water and less than 1% fiber. Conference transcript, p. 10 (Tiller).

improve the molding process or product performance may be introduced at this stage.[38] The pulp may also be bleached or not bleached.[39]

Molding

Molding is the process of forming the pulp into the shape, size, and thickness of the desired product. Thermoforming uses different machinery than other molding processes, such as transfer molding (see figure I-5). In transfer molding, once the pulp is pressed into a mold, the wet shaped products are taken out of the mold and put in a separate dryer. The drying time is also longer in transfer molding, which creates a final product with a different surface finish than TMFPs.[40]

Each intended shape of TMFP has its own forming mold that is dipped into the pulp during the molding process. The purchaser typically provides shaped molds to the manufacturer based on their product needs.[41] The processing conditions for manufacturing different types of MFPs are mainly determined by the molding temperature, pressure, and process time.[42]

Wet Thermoforming

In the wet thermoforming process, the slurry is fed into a tub at the forefront of a thermoforming machine.[43] A forming mold, shaped as the desired final product (i.e., a plate,

[38] Domestic industry reportedly does not have the capability to produce bakeable products. Conference transcript, p. 137 (Davidson).

[39] Chlorine bleach is banned in direct-contact food products (FDA). There are alternatives to using chlorine bleach to achieve the bleached pulp look, such as elemental chlorine-free (ECF) bleaching or oxygen delignification. Customers, however, typically prefer the "natural" look of non-bleached fibers. Conference transcript, p. 100 (Mokaddem).

[40] Conference transcript pp. 11 and 12, (Tiller).

[41] Conference transcript, pp. 138 and 150 (Davidson).

[42] Didone et. al, 2017. "Moulded Pulp Manufacturing: Overview and Prospects for the Process Technology" https://onlinelibrary.wiley.com/doi/abs/10.1002/pts.2289, retrieved October 23, 2024.

Some of those operating conditions are proprietary to the business, but they are all designed to achieve a finished product that meets a particular quality specification. Conference transcript, p. 105 (Tiller).

[43] Conference transcript, p. 10 (Tiller).

There is a type of molding, injection molding, by which heated liquid is injected into the mold via a tube. Domestic industry representatives stated that method is not used in the thermoforming process. Conference transcript, p. 98 (Tiller, Mokaddem).

Mr. Elfassy, an importer, stated that it is possible to use injection molding in the thermoforming process, but local producers do not use that method. Conference transcript, p. 181 (Elfassy).

bowl, clamshell, etc.), is then dipped into the tub. Vacuum pressure is used to suck the pulp onto the mold, creating a fiber mat.[44] The slurry is left to drain for a few seconds and then the wet fiber mat is placed into preheated male and female molds, also known as positive and negative molds, which are then pressed together using heat and pressure.[45]

Dry Thermoforming

In the dry thermoforming process, the dry matter is compressed to form an airlaid fiber mat[46] and then placed into preheated male and female molds, where it is pressed together using heat and pressure. The machinery for dry thermoforming is slightly different than that used for wet thermoforming (see Figure I-5), but the final product has the same qualities as those created by wet thermoforming.[47]

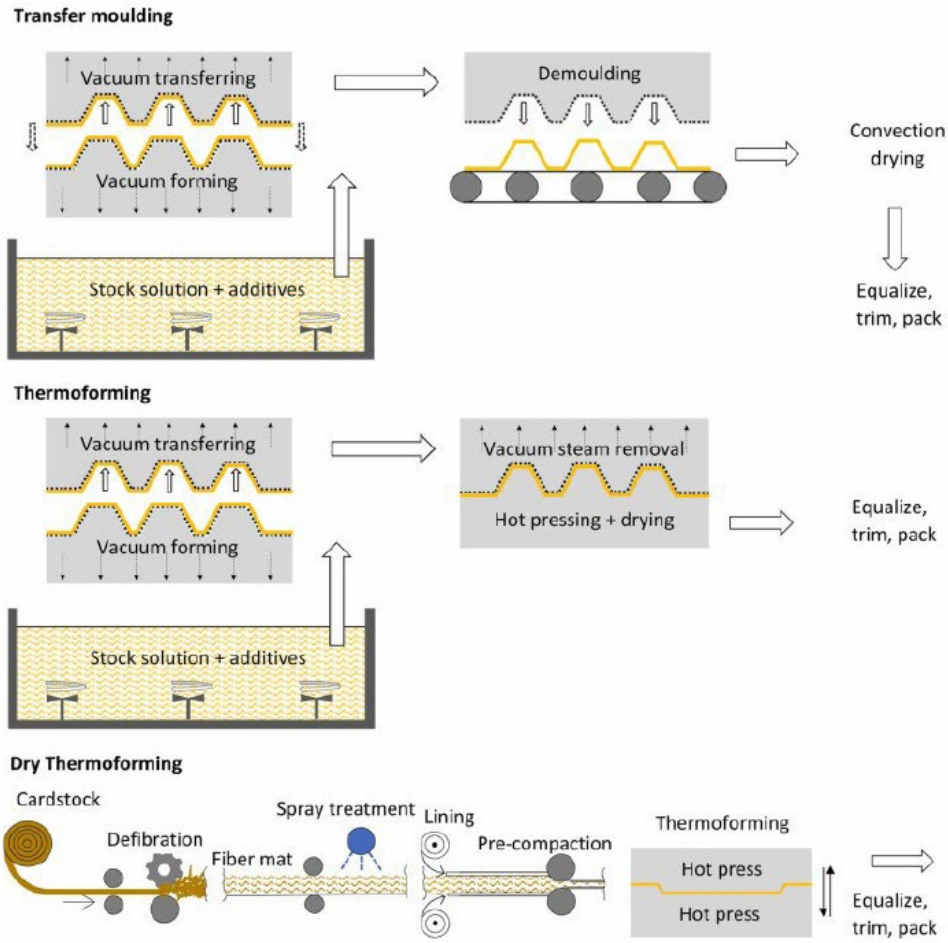
[44] A fiber mat is created when fibers settle down vertically by gravity and are randomly distributed on the surface of a screen, held together by a binder. In wet thermoforming, the binder is the water in the pulp slurry. Tang et. al, 2017. "Multi-flexible fiber flows: A direct-forcing immersed boundary lattice-Boltzmann lattice-spring approach" https://www.sciencedirect.com/science/article/abs/pii/S0301932216305572 retrieved November 4, 2024.

[45] Conference transcript (Tiller) p. 11.

[46] Airlaid mats are a type of fiber mat created when dry fibers are distributed and condensed using air pressure as the binder. Campen Machinery, "Airlaid paper in packaging – a sustainable alternative", https://campenmachinery.com/airlaid/airlaid-packaging, retrieved November 4, 2024.

[47] Conference transcript (Tiller), p. 11.

Figure I-5
TMFPs: Comparison of (wet) thermoforming, and dry thermoforming processes and equipment



Source: Petition, Exhibit I-12.

Heat and pressure are the key processes in both wet and dry thermoforming, quickly flash drying and curing the molded fiber product.[48] The resulting thermoformed product is described as permanently shaped, thin walled yet rigid, and with a smooth surface finish.[49]

Secondary processes

Once the product has been thermoformed, it may go through one or more secondary processes to meet specific product needs (e.g. trimming, surface treatments, coating,

[48] The drying and curing process for thermoforming takes less than 20 seconds, in which the fibers undergo physical and chemical changes, and the water rapidly evaporates. Conference transcript, p. 10 (Tiller).

[49] Conference transcript, p. 10 (Tiller).

laminating,[50] printing, labeling, punching, perforating, padding, embossing, etc.). Some customizations may also occur during the thermoforming process using mold inserts and other tooling.[51] Mold inserts create an imprint, such as a company's logo, on the final product during the thermoforming process without needing a separate mold. Customization can also include incorporating a separate piece to the final product that is not a TMFP, such as a plastic lid for a thermoformed bowl.[52]

Quality Control

Before the final product is packaged and sold, it is inspected for quality, either manually or by automation, and scraps or rejected products are generally recycled back into the pulp mixture.[53] Manual inspection includes a person inspecting the final product by hand including, but not limited to, weighing the product, cutting it open to look at the thickness, and other physical tests to determine density, strength, or other desired attributes. Automated inspection includes sensors, cameras, and other measuring instruments that are integrated into the machinery to perform tests or identify imperfections in the product.[54]

Packaging

The final product is placed into a plastic bag, often in sleeves containing multiple TMFPs, and then placed into corrugated boxes. The sleeves are a protective measure so that the final product can be taken out of the box without damage. In the domestic industry, boxes are then

[50] Reportedly the domestic industry currently does not have laminating capability. Conference transcript, p. 150 (Davidson).

[51] The tooling may be produced by the manufacturer, purchased from a tooling maker, or provided by the customer. Postconference brief, p. 27.

[52] While the lid may not be a thermoformed molded fiber product, it is most often designed and manufactured concurrently with the TMFP to ensure the shape, size, and fit are compatible. Conference transcript, p. 51 (Mascarello).

"Fiber lids are required in dozens of markets like Hawaii's Oahu (Bill 40, Single Use Plastics ban) and Cupertino California (Single-Use-Plastics ban) due to legislation that requires the entirety of the single-use product to be compostable and made of natural fibers, these legislated markets will not accept clear PLA (Polylactic Acid) or petroleum plastic lidding made from PET, PP or HDPE which are the only lids that the petitioners offer" Respondent postconference brief, p. 11.

[53] Petition, p. 13.

[54] Conference transcript, p. 106 (Tiller).

loaded onto pallets and delivered to the customer.[55] Importers receive container shipments from subject countries and palletize them in domestic warehouses.[56]

Domestic like product issues

The petitioners propose the Commission define a single domestic like product consisting of the continuum of TMFPs, irrespective of the type of pulp used in the production process, coextensive with the proposed scope of the investigations.[57] Respondents request that, should these investigations proceed to a final phase, the Commission should collect all relevant data necessary to fully assess whether the domestic like product includes all molded fiber products. Respondents further state that there is a basis to find that non-compostable and non-biodegradable products, such as Styrofoam and plastic plates, bowls, clamshells, etc., should be included within the domestic like product in U.S. submarkets where they are not limited by regulation.[58]

[55] Petitioners claim that pallets are used to deliver the products in both domestic industry and subject countries Conference transcript, p. 108 (Tiller). Importer claims subject countries do not put their goods on pallets to deliver to importers. Conference transcript, p. 144 (Elfassy).

[56] Ibid.

[57] Petition, p. 19 and petitioners' postconference brief, p. 10.

[58] Respondents' postconference brief, pp. 5-6.

Part II: Conditions of competition in the U.S. market

U.S. market characteristics

TMFPs are items made of plant fibers that are molded to shapes via a process that uses heat and vacuum power to impart the product with strength, smoothness, and other desirable characteristics. TMFPs are largely used as foodservice containers, but can also be used as packaging for other products.[1] TMFPs can be formed into many different shapes, but the most frequent are plates, bowls, clamshell containers, and trays. The type of TMFP produced is determined by the shape of the molds used to create the product. Some shapes, such as certain lids are more difficult to manufacture.[2] The majority of TMFPs are natural in color, though some are bleached to be white. TMFPs can be customized via printing or embossing (e.g., with a purchaser's logo) either during the manufacturing process or after.[3] TMFPs are viewed in the market as a premium product compared to other food containers due to their sustainability, (compostability, recyclability) and are priced accordingly.[4]

Apparent U.S. consumption of TMFPs increased *** percent during 2021-23 and was *** percent higher in January to June ("interim") 2024 than in interim 2023.

One of 7 U.S. producers and 9 of 25 responding importers[5] indicated that the market was subject to distinctive conditions of competition. Producer *** noted the market is price sensitive. Two importers stated that there are pricing pressures from other substrates such as plastic and foam, while *** stated that TMFP clamshell demand has increased due to increasing sustainability requirements in the United States. Importer *** stated that "TMFP is subject to additional competitive pressures depending on state, local or federal legislation. This pressure can impact the availability and/or pricing of competitive substrates which in turn can impact overall demand for TMFP items." Lastly, ***[6] reported a number of distinctive conditions to the TMFP market: cost, food safety, recyclability, ethical sourcing, environmental certifications (compostability, renewable materials, and sustainability).

[1] Petition, p. 18.
[2] Conference transcript, p. 130 (Tiller).
[3] Conference transcript, p. 46 (Tiller).
[4] Conference transcript, p. 58 (Mascarello).
[5] ***.`
[6] ***.

Purchasers

Lost sale/lost revenue surveys were sent to 23 purchasers of TMFPs. The Commission received 12 survey responses indicating that firms had purchased TMFPs since January 1, 2021.[7] Some purchasers also import TMFPs. The largest purchases of TMFPs were reported by ***, each of which reported purchasing more than *** pounds of TMFPs between January 2021 and June 2024. Plates, bowls, and clamshell/hinged containers were the most frequently purchased products, although purchasers also noted dinnerware, drink carriers, lids, platters, and trays were among their most frequently purchased items.

Impact of section 301 tariffs

U.S. producers and importers were asked if the section 301 tariffs on products imported from China had an impact on the market, and what effects they have had. A plurality of producers and a majority of importers reported there has been an effect (table II-1). Two U.S. producers *** suggested that TMFPs were "recharacterized" as imports of bamboo in order to take advantage of a section 301 exclusion, although that exclusion ended in June 2024 and *** stated that there was no change in pricing behavior in the market afterward.[8] *** indicated that the tariffs caused higher prices and reduced quality in the TMFP market.[9] Importers most frequently noted that they passed along at least some of the increased costs to consumers. Importer *** absorbed some of the cost due to contractual obligations. Some importers also noted decreased demand for TMFPs from China, and switching to other container products or other sources to mitigate the impact of the tariffs.

[7] These purchasers were ***.

[8] ***.

[9] A fourth U.S. producer, ***, stated it was unable to match prices at times and had to lower its pricing.

Table II-1
TMFPs: Count of firms reporting if the section 301 tariffs on Chinese origin products had an impact

Firm type	Yes	No	Do not know
U.S. producers	3	2	2
Importers	18	4	8

Source: Compiled from data submitted in response to Commission questionnaires.

Channels of distribution

U.S. producers and importers from all sources sold mainly to distributors in every period. Among all sources, the proportion sold to distributors was lowest for domestic producers and therefore was highest for sales direct to end users, as shown in table II-2. Food service was noted as the largest sales channel for TMFPs, including large food service providers and distributors that sell to smaller end-users, as noted by a witness for petitioners.[10]

Table II-2
TMFPs: Share of U.S. shipments by source, channel of distribution, and period

Shares in percent

Source	Channel	2020	2021	2022	Jan-Jun 2023	Jan-Jun 2024
United States	Distributor	***	***	***	***	***
United States	End user	***	***	***	***	***
China	Distributor	***	***	***	***	***
China	End user	***	***	***	***	***
Vietnam	Distributor	***	***	***	***	***
Vietnam	End user	***	***	***	***	***
Subject sources	Distributor	***	***	***	***	***
Subject sources	End user	***	***	***	***	***
Nonsubject sources	Distributor	***	***	***	***	***
Nonsubject sources	End user	***	***	***	***	***
All import sources	Distributor	***	***	***	***	***
All import sources	End user	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

[10] Conference transcript, p. 24 (Serafini).

Geographic distribution

U.S. producers and importers from subject countries reported selling TMFPs to all regions in the United States (table II-3). For U.S. producers, 20.7 percent of sales were within 100 miles of their production facility, 74.3 percent were between 101 and 1,000 miles, and 5.0 percent were over 1,000 miles. Importers sold 28.7 percent within 100 miles of their U.S. point of shipment, 57.1 percent between 101 and 1,000 miles, and 14.2 percent over 1,000 miles.

Table II-3
TMFPs: Count of U.S. producers' and U.S. importers' geographic markets

Region	U.S. producers	China	Vietnam	Subject sources
Northeast	7	22	4	22
Midwest	6	20	4	20
Southeast	6	24	4	24
Central Southwest	6	20	5	20
Mountain	6	20	5	20
Pacific Coast	6	21	5	21
Other	2	13	1	13
All regions (except Other)	6	17	4	17
Reporting firms	7	28	5	28

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Other U.S. markets include AK, HI, PR, and VI.

Supply and demand considerations

U.S. supply

Table II-4 provides a summary of the supply factors regarding TMFPs from U.S. producers and from subject countries.

Table II-4
TMFPs: Supply factors that affect the ability to increase shipments to the U.S. market, by country

Quantity in 1,000 pounds; ratio and share in percent

Factor	Measure	United States	China	Vietnam
Capacity 2021	Quantity	***	***	***
Capacity 2023	Quantity	***	***	***
Capacity utilization 2021	Ratio	***	***	***
Capacity utilization 2023	Ratio	***	***	***
Inventories to total shipments 2021	Ratio	***	***	***
Inventories to total shipments 2023	Ratio	***	***	***
Home market shipments 2023	Share	***	***	***
Non-US export market shipments 2023	Share	***	***	***
Ability to shift production (firms reporting "yes")	Count	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Responding U.S. producers accounted for the majority of U.S. production of TMFPs in 2023. Responding foreign producer/exporter firms accounted for less than 25 percent of U.S. imports of TMFPs from both China and Vietnam during 2023. For additional data on the number of responding firms and their share of U.S. production and of U.S. imports from each subject country, please refer to Parts I and IV of this report.

Domestic production

Based on available information, U.S. producers of TMFPs have the ability to respond to changes in demand with moderate changes in the quantity of shipments of U.S.-produced TMFPs to the U.S. market. The main contributing factors to this degree of responsiveness of supply is the availability of some unused capacity and inventories. Factors mitigating responsiveness of supply include *** ability to shift shipments from alternate markets and *** to shift production to or from alternate products.

Capacity utilization fell slightly as capacity increased by more than production between 2021 and 2023. Petitioner Genera stated that it has expanded capacity by purchasing machines during the period investigated but it has only been able to use 5 of its 14 machines to produce TMFPs.[11] U.S. producers reported exporting *** percent of their shipments to *** in 2023. No producer reported being able to produce other products on the same equipment as TMFPs. A number of producers reported shortages of inputs and labor constraints impacted their ability to maximize production, and that increased demand for TMFPs because of the COVID-19 pandemic.

[11] Conference transcript, p. 18 (Tiller). Genera is a relatively small producer, however, accounting for *** of domestic practical capacity.

Subject imports from China

Based on available information, producers of TMFPs from China have the ability to respond to changes in demand with moderate changes in the quantity of shipments of TMFPs to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of some unused capacity, some inventories, and some ability to shift shipments from alternate markets. Factors mitigating responsiveness of supply include an inability to shift production to or from alternate products.

Both Chinese production capacity and production decreased between 2021 and 2023 but production fell slightly more than production capacity leading to a slight decrease in capacity utilization. Export markets include various European countries (Denmark, France, Germany, Italy, the Netherlands, Switzerland, Spain, and the UK), Japan, and Australia. The only reported barrier was the current tariff for sales to the U.S. market. No other products were reported to be produced on the same equipment as TMFPs by Chinese producers.

Subject imports from Vietnam

Based on available information, producers of TMFPs from Vietnam have the ability to respond to changes in demand with large changes in the quantity of shipments of TMFPs to the U.S. market. The main contributing factor to this degree of responsiveness of supply is a considerable amount of unused capacity. Factors mitigating responsiveness of supply include limited inventories, limited ability to shift shipments from alternate markets, and a limited ability to shift production to or from alternate products.

*** in 2021. ***. No barriers to shifting between markets were reported. No other products were reported to be produced on the same equipment as TMFPs.

Imports from nonsubject sources

Nonsubject imports associated with HTS statistical reporting numbers 4823.70.0020 and 4823.70.0040 accounted for 27.7 percent of the value of total U.S. imports in these classifications in 2023.[12] The largest sources of nonsubject imports under these classifications during January 2021-June 2024 were Canada, Mexico, and Taiwan. Combined, these countries accounted for 71.1 percent of imports from nonsubject sources in 2023 for these HTS statistical reporting numbers.

Supply constraints

All U.S. producers and the majority of responding importers (16 of 27) reported that they had not experienced any supply constraints since January 1, 2021. The 11 importers reporting supply constraints noted that they occurred with respect to both U.S.-produced and imported product.[13] Importers reported that they were impacted by market-wide conditions caused by COVID-19 such as increased shipping costs and shipping delays and an unanticipated spike in demand that producers were unprepared to supply, overordering by suppliers, delayed deliveries and declined orders from domestic producers, and customers being put on allocation. Importers further noted that port constraints such as strikes and shutdowns constrained supply from overseas. One importer indicated that U.S. producers did not produce TMFPs with hinged lids and were unable to supply that portion of the market. They also noted a lack of inventories, delivery of less than required amounts, and the ban on the use of PFAS which has reduced demand as customers switch to other alternatives as factors constraining supply.

[12] These HTS statistical reporting numbers also include out-of-scope product and quantities are reported on different bases. Therefore, value has been used to determine shares. Official statistics were adjusted to remove reported out-of-scope imports under the HTS statistical reporting numbers submitted in response to Commission questionnaires.

[13] No importer specified a country which caused the supply constraints. Either "all countries" were reported as the source of the constraint or the source of the imports was not included in the response.

U.S. demand

Based on available information, the overall demand for TMFPs is likely to experience small-to-moderate changes in response to changes in price. The main contributing factors are the somewhat limited range of sustainable substitute products and that TMFPs are usually an item that is a small, necessary cost of doing business so patrons can carry out their purchases.[14] Some of the primary substitutes—expanded polystyrene foam/Styrofoam or plastic containers—are becoming increasingly restricted in certain jurisdictions, which may reduce demand elasticity in those areas.

End uses and cost share

Demand for TMFPs derives from demand for the end uses in which they are used. Most are used for food packaging, although their ability to be molded into desired shapes allows them to be used more broadly, such as in consumer and industrial packaging. For foodservice providers, thermoformed molded fiber products can hold in steam and prevent moisture from escaping – allowing it to handle both wet and hot foods without leaking; it also maintains its structure enabling reheating or freezing without disintegrating.[15] Considering environmental awareness around single-use plastics, molded fiber products have garnered increased attention due to their renewable, recyclable, sustainable, and biodegradable nature. Regulatory actions by cities such as San Francisco have also curbed the use of single-use plastics further increasing demand for TMFPs.

TMFPs are typically provided to the customers of these firms free of charge and represent a small share of the cost of most sales. TMFPs are typically an end-use good and not generally used as part of any other good, though they can be used to hold frozen foods such as pizzas, as part of consumer and industrial packaging, or for holding fresh ingredients like meat at grocery stores.[16]

[14] Some plates and other TMFPs are sold at retail such as Chinet or other brands.
[15] Petition p. 22-23.
[16] Ibid., and conference transcript, p. 139 (Davidson).

Business cycles

Four of 7 U.S. producers and 9 of 25 importers indicated that the market was subject to business cycles. Specifically, some firms reported some cyclicality in demand, including: lower summer demand from schools, higher demand in warmer months due to increased outdoor dining; and higher demand around the fall holidays. One firm noted that wood pulp, which can be used to manufacture TMFPs, followed multi-year commodity cycles.

Demand trends

Most firms reported that U.S. demand for TMFPs steadily increased or fluctuated upward since January 1, 2021 (table II-5). Firms reported that demand increased either because of increased interest in sustainability by customers or local or state bans on single-use plastics. Firms reporting decreased demand indicated that demand was affected by promotions of paper plates, tariffs which increased prices, and reduced consumption.

Table II-5
TMFPs: Count of firms' responses regarding overall domestic and foreign demand, by firm type

Market	Firm type	Steadily increase	Fluctuate higher	No change	Fluctuate lower	Steadily decrease
Domestic demand	U.S. producers	5	1	0	1	0
Domestic demand	Importers	11	7	2	2	3
Foreign demand	U.S. producers	3	0	0	0	0
Foreign demand	Importers	7	3	1	2	1

Source: Compiled from data submitted in response to Commission questionnaires.

Substitute products

A majority of U.S. producers (5 of 7) and responding importers (13 of 24) noted the existence of one of more substitutes for TMFPs. Substitutes for TMFPs reported by these firms include: plastic (plastic bowls, Styrofoam, PS, PET, PP, rigid plastic); paper (paper plates and bowls, paper board); aluminum; and "plant-based fiber." At the conference, a witness stated that expanded polystyrene foam is the least expensive, then PET plastic, and TMFPs are "typically competitive" with PET items, but TMFPs typically have a "bit of a premium."[17] A review of one online retailer's (purchaser ***) prices of foam, plastic, and molded fiber

[17] Conference transcript, pp. 57-58 (Mascarello).

products shows that, on a per-item basis, foam containers are the least expensive without regard to the size of the container. While different items have different characteristics, (as well as different suppliers/producers of the TMFP), molded fiber and plastic products tend to have prices that are somewhat competitive with each other.

Substitutability issues

This section assesses the degree to which U.S.-produced TMFPs and imports of TMFPs from subject countries can be substituted for one another by examining the importance of certain purchasing factors and the comparability of TMFPs from domestic and imported sources based on those factors. Based on available data, staff believes that there is a moderate-to-high degree of substitutability between domestically produced TMFPs and TMFPs imported from subject sources.[18] Factors contributing to this level of substitutability include similar quality, availability, and lead times; little preference for particular country of origin or producers; and similarities between domestically produced TMFPs and TMFPs imported from subject countries. Differences limiting substitutability are mostly based on the lack of availability of certain types of TMFPs from domestic producers, a lack of availability of the types that they produce which leads to differences in lead times between TMFPs sourced from domestic producers or importers of subject merchandise, or minimum order quantities.

Factors affecting purchasing decisions

Purchasers responding to lost sales/lost revenue allegations[19] were asked to identify the main purchasing factors their firm considered in their purchasing decisions for TMFPs. The major purchasing factors identified by firms include quality, price, availability, delivery time, assortment of product available, available capacity at the vendor, relationship with vendor, financial stability of the vendor, and service.

[18] The degree of substitution between domestic and imported TMFPs depends upon the extent of product differentiation between the domestic and imported products and reflects how easily purchasers can switch from domestically produced TMFPs to the TMFPs imported from subject countries (or vice versa) when prices change. The degree of substitution may include such factors as relative prices (discounts/rebates), availability of specific product shapes or characteristics, quality differences (e.g., grade standards, defect rates, etc.), and differences in sales conditions (e.g., lead times between order and delivery dates, reliability of supply, product services, etc.).

[19] This information is compiled from responses by purchasers identified by Petitioner listed in its lost sales/lost revenue allegations noted earlier.

The most frequently cited top-three factors that firms consider in their purchasing decisions for TMFPs were price (10 firms), quality (8 firms), and availability (5 firms), as shown in table II-7. Quality was the most frequently cited first-most important factor (cited by 4 firms) followed by price and availability (3 each). Quality and price were the most frequently cited second-most important factor (4 firms each). Price was the most frequently reported third-most important factor (3 firms).

Table II-7
TMFPs: Count of ranking of factors used in purchasing decisions as reported by purchasers, by factor

Factor	First	Second	Third	Total
Price	3	4	3	10
Quality	4	4	0	8
Availability	3	0	2	5
Assortment	1	1	2	4
Capacity of vendor	2	0	0	2
Delivery	0	1	2	3
Vendor stability/relationship	0	2	0	2
Service	0	0	1	1

Source: Compiled from data submitted in response to Commission questionnaires.

Note: One purchaser included more than one factor as a most important factor; both have been included in the above table as such. One purchaser listed only 2 factors.

Minimum order quantities

Producers, importers, and purchasers were asked whether suppliers of TMFPs typically have minimum order sizes for the TMFPs they buy or sell. Two of 7 U.S. producers and 13 of 27 responding importers indicated that they typically have minimum order requirements. A majority of purchasers responding to the question noted that both producers and importers have minimum order size requirements (table II-8). Detailed responses to this question are presented in table II-9 for domestic producer order quantity requirements and table II-10 for import supplier order requirements.

Table II-8
TMFPs: U.S. producer, importer, and purchaser response regarding the existence of minimum order size requirements

Firm type	Yes	No
U.S. producer	2	5
Purchaser: domestic product	6	4
Importer	13	14
Purchaser: imported product	9	2

Source: Compiled from data submitted in response to Commission questionnaires.

Table II-9
TMFPs: Narrative responses of U.S. producers and purchasers regarding minimum order sizes

Firm	Firm type	Narrative responses regarding minimum order size
***	U.S. producer	***
***	U.S. producer	***
***	Purchaser	***
***	Purchaser	***
***	Purchaser	***
***	Purchaser	***
***	Purchaser	***
***	Purchaser	***

Source: Compiled from data submitted in response to Commission questionnaires.

Table II-10
TMFPs: Narrative responses of importers and purchasers regarding minimum order sizes

Firm type	Firm type	Narrative responses regarding minimum order size
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***

Table continued.

Table II-10 Continued
TMFPs: Narrative responses of importers and purchasers regarding minimum order sizes

Firm type	Firm type	Narrative responses regarding minimum order size
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Comparison of U.S.-produced and imported TMFPs

In order to determine whether U.S.-produced TMFPs can generally be used in the same applications as imports from subject countries, U.S. producers and importers were asked whether the products can always, frequently, sometimes, or never be used interchangeably. All responding U.S. producers reported that product from all sources was always or frequently interchangeable (table II-11). As shown in table II-12, a majority of importers reported that TMFPs from both China and Vietnam were sometimes interchangeable with TMFPs from the United States, but product from China and Vietnam are always or frequently interchangeable with each other.

Table II-11
TMFPs: Count of producers reporting the interchangeability between product produced in the United States and in other countries, by country pair

Country pair	Always	Frequently	Sometimes	Never
U.S. vs. China	6	1	0	0
U.S. vs. Vietnam	6	1	0	0
China vs. Vietnam	6	1	0	0
U.S. vs. other	4	1	0	0
China vs. other	5	0	0	0
Vietnam vs. other	5	0	0	0

Source: Compiled from data submitted in response to Commission questionnaires.

Table II-12
TMFPs: Count of importers reporting the interchangeability between product produced in the United States and in other countries, by country pair

Country pair	Always	Frequently	Sometimes	Never
U.S. vs. China	8	1	12	1
U.S. vs. Vietnam	4	2	7	0
China vs. Vietnam	6	4	2	0
U.S. vs. other	5	1	6	1
China vs. other	6	2	2	0
Vietnam vs. other	6	2	2	0

Source: Compiled from data submitted in response to Commission questionnaires.

Importers noted a number of issues that lead to decreased interchangeability with domestic product. These include: issues with domestic product range and or capability (noted by 6 importers), domestic quality or performance (6 importers), domestic capacity (2 importers), consistently available domestic product (2 importers), as well as domestic ability to offer small runs, product specifications (e.g., shape, dimension, color, chemistry, weight), domestic mold tooling costs,[20] a lack of PLA lamination domestically, and domestic difficulty in custom printing on small runs (1 importer each).

In addition, U.S. producers and importers were asked to assess how often differences other than price were significant in sales of TMFPs from the United States, subject, or nonsubject countries (tables II-13 and II-14). Most U.S. producers reported that there were sometimes or never differences other than price for all country pairs; one U.S. producer reported that there were frequently differences other than price between U.S. TMFPs and those produced in the subject countries and between China and Vietnam. A majority of importers indicated that there are always or frequently factors other than price that were significant in their sales of TMFPs imported from subject countries compared with those produced in the United States. In addition to mentioning factors previously mentioned when discussing issues limiting interchangeability, importers also pointed to differences in lead times, freight costs, tariffs, purchaser-specific requirements regarding durability in demanding environments, certification, the willingness of manufacturers to offer white-label products tailored to a requested order volume, product design, brand, relationships, product appearance, access to distribution, the range of products that are complementary to TMFP products (e.g., aluminum or plastic bowl lids), and a lack of domestic tooling for needed products.

[20] One interested party witness testified that the cost for a production tool domestically was $175,000 to 225,000 per mold, compared with $20,800 per mold in China. Conference transcript, pp 136-137 and 169 (Davidson).

Table II-13
TMFPs: Count of producers reporting the significance of differences between product produced in the United States and in other countries, by country pair

Country pair	Always	Frequently	Sometimes	Never
U.S. vs. China	0	1	2	4
U.S. vs. Vietnam	0	1	2	4
China vs. Vietnam	0	1	2	4
U.S. vs. other	0	0	3	2
China vs. other	0	0	2	3
Vietnam vs. other	0	0	2	3

Source: Compiled from data submitted in response to Commission questionnaires.

Table II-14
TMFPs: Count of importers reporting the significance of differences between product produced in the United States and in other countries, by country pair

Country pair	Always	Frequently	Sometimes	Never
U.S. vs. China	9	8	4	3
U.S. vs. Vietnam	3	6	3	2
China vs. Vietnam	1	4	3	4
U.S. vs. other	3	4	3	3
China vs. other	1	1	4	5
Vietnam vs. other	1	1	4	4

Source: Compiled from data submitted in response to Commission questionnaires.

Part III: U.S. producers' production, shipments, and employment

The Commission analyzes a number of factors in making injury determinations (see 19 U.S.C. §§ 1677(7)(B) and 1677(7)(C)). Information on the subsidies and dumping margins was presented in Part I of this report and information on the volume and pricing of imports of the subject merchandise is presented in Part IV and Part V. Information on the other factors specified is presented in this section and/or Part VI and (except as noted) is based on the questionnaire responses of seven firms that accounted for the majority of U.S. production of TMFPs during 2023.[1]

U.S. producers

The Commission issued a U.S. producer questionnaire to 28 firms based on information contained in the petition and other industry information.[2] Seven firms provided usable data on their operations. Table III-1 lists U.S. producers of TMFPs, their production locations, positions on the petition, and shares of total production.

[1] Petitioners assert that the petitioning firms and represented firms (Genera, Tellus, and Huhtamaki) accounted for *** percent of total U.S. production in 2023. Petitioners' postconference brief, exh. I-1. Petitioners believe that the seven firms represent virtually all US production of TMFPs. Petitioners' postconference brief, p. 20. Staff received questionnaires from *** producers listed in the petition. The remaining firm that did not provide a questionnaire response was ***.

[2] Staff sent U.S. producer questionnaires to the *** additional firms that it was able to find contact info for that were listed in Eco-Products' comments on domestic industry support that was filed with Commerce; six certified they did not produce TMFPs during 2021 to 2023. Despite staff attempts, the remaining *** firms did not submit a response.

Table III-1
TMFPs: U.S. producers, their position on the petition, location of production, and share of reported production, 2023

Shares in percent

Firm	Position on petition	Production location(s)	Share of production	Share of production covered by USW
Dart	***	Mason, MI Lancaster, PA	***	***
Genera	Petitioner	Vonore, TN	***	***
Huhtamaki	***	Waterville, ME Sacramento, CA Hammond, IN Albertville, AL	***	***
Kanbol	***	Auburn, KY	***	***
Pactiv	***	Macon, GA Moorhead, MN City of Industry, CA Plattsburg, NY	***	***
Reynolds	***	Red Bluff, CA	***	***
Tellus	Petitioner	Belle Glade, FL	***	***
All firms	Various	Various	100.0	***

Source: Compiled from data submitted in response to Commission questionnaires.

Note: *** did not have production prior to January-June 2024. Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table III-2 presents information on U.S. producers' ownership, related and/or affiliated firms. *** related to foreign producers of the subject merchandise in nonsubject countries. *** related to U.S. importers of the subject merchandise. In addition, as discussed in greater detail below, four U.S. producers directly import the subject merchandise. ***.

Table III-2
TMFPs: U.S. producers' ownership, related and/or affiliated firms

Reporting firm	Relationship type and related firm	Details of relationship
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Table III-3 presents events in the U.S. industry since January 1, 2021.

Table III-3
TMFP: Events in the U.S. industry since January 1, 2021.

Item	Firm	Event
Acquisition	ASR Group, Florida Crystals, and Tellus Holdings	As of August 30, 2024, ASR and Florida Crystals (based in West Palm Beach, FL) have acquired sole ownership of Tellus Products, LLC (Belle Glade, FL).
New Facility	Kanbol, Inc.	In December 2023, the Governor of Kentucky announced that Kanbol is investing over $10 million in Logan County, creating 40 new jobs and would receive a tax incentive from the state. Kanbol would expand its operations to set up an integrated facility with pulp production and paper products in Logan County, KY.
New Facility	Tanbark Molded Fiber Products	In October 2023, Tanbark Molded Fiber Products launched its new facility in Saco, ME.
Expansion	Genera, Inc.	In December 2023, Genera announced an expansion of its Vonore, TN, Sustainable Biomaterials Campus. The expansion adds more than 150,000 square feet to Genera's existing facility and will house more than 60 robotic thermoforming machines, a fleet of autonomously guided vehicles, and automated packaging lines. It was scheduled to be online the first quarter of 2024.
Acquisition	Genera, Inc. and Zume Inc.	In September 2023, Genera acquired the assets of molded fiber manufacturer and equipment supplier Zume Inc. The purchase includes all Zume assets held in Camarillo, CA, including thermoforming equipment, supporting systems and related auxiliary items.
Closure	Footprint LLC	In March 2023, Footprint LLC ceased operations at its Richburg, SC 109,000-square-foot facility.

Source: Preliminary Conference transcript (Tiller), pp. 11, 14-15; Kamczyc, A., Recycling Today, Huhtamaki announces $100M expansion of Hammond, Indiana, facility, https://www.recyclingtoday.com/news/huhtamaki-invests-100-million-hammond-indiana/#:~:text=The%20investment%20and%20construction%20will,late%202022%20or%20early%202023. retrieved October 22, 2024; Office of the Governor, Kentucky, Gov. Beshear announces $160 million in new business investment, creating 740 full-time jobs for Kentuckians," https://www.kentucky.gov/Pages/Activity-stream.aspx?n=GovernorBeshear&prId=2047, retrieved October 22, 2024; Kentucky Economic Development Finance Authority, "Board Meeting Minutes, December 7, 2023," https://cedky.com/cdn/140_December_2023_Minutes.pdf, retrieved November 5, 2024;Homer, Ted, Fox23, "Sustainable packaging company launches in Saco, https://fox23maine.com/newsletter-daily/sustainable-packaging-company-launches-saco-tanbark-molded-fiber-products, retrieved October 22, 2024; Genera, "Genera announces $340+ million investment in Sustainable Biomaterials Campus," https://generainc.com/genera-announces-340-million-investment-in-sustainable-biomaterials-campus/, retrieved October 22, 2024; Genera, "Genera continues expansion with acquisition of Zume assets," https://generainc.com/genera-continues-expansion-with-acquisition-of-zume-assets/, retrieved October 22, 2024; Petition, Exhibit I-22 and The News & Reporter, "Footprint LLC to close doors: Last day for employees in March 28th," https://www.pmg-sc.com/the_news_and_reporter/article_0a230450-9d8d-11ed-8749-23ece84194ef.html, retrieved October 22, 2024; Genera, "Genera acquires MxG Fiber," https://generainc.com/genera-acquires-mxg-fiber/, retrieved October 22, 2024; Genera, "Ara Partners

acquires Genera," https://generainc.com/ara-partners-acquires-genera/, retrieved October 22, 2024; Preliminary Conference transcript (Serafini), pp. 26.

Producers in the United States were asked to report any change in the character of their operations or organization relating to the production of TMFPs since 2021. All seven U.S. producers indicated in their questionnaire responses that they had experienced such changes. Table III-4 presents the changes identified by these producers.

Table III-4
TMFPs: U.S. producers' reported changes in operations, since January 1, 2021

Item	Firm name and narrative response on changes in operations
Plant openings	***
Plant openings	***
Prolonged shutdowns	***
Production curtailments	***
Production curtailments	***
Production curtailments	***
Expansions	***
Expansions	***
Expansions	***
Expansions	***

Item	Firm name and narrative response on changes in operations
Expansions	***
Expansions	***
Acquisitions	***
Weather-related or force majeure events	***
Other	***

Source: Compiled from data submitted in response to Commission questionnaires.

In addition to these changes, petitioners stated they idled machines during the period for which data were collected. ***.[3]

U.S. production, capacity, and capacity utilization

Table III-5 presents U.S. producers' installed and practical capacity and production on the same equipment. No producer reported out-of-scope production on the same equipment. U.S. producers' installed overall capacity increased during 2021 to 2023 from *** pounds in 2021 to *** pounds in 2023 and was *** percent higher in interim 2024 compared to interim 2023. U.S. producers' practical overall capacity also increased from 2021 to 2023, increasing from *** pounds in 2021 to *** pounds in 2023 and was *** percent higher in interim 2024 compared to interim 2023.

[3] Petitioners' postconference brief, p.3.

Table III-5
TMFPs: U.S. producers' installed and practical capacity, production, and utilization on the same equipment as subject production, by period

Capacity and production in 1,000 pounds; utilization in percent

Item	Measure	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Installed overall	Capacity	***	***	***	***	***
Installed overall	Production	***	***	***	***	***
Installed overall	Utilization	***	***	***	***	***
Practical overall	Capacity	***	***	***	***	***
Practical overall	Production	***	***	***	***	***
Practical overall	Utilization	***	***	***	***	***
Practical TMFPs	Capacity	***	***	***	***	***
Practical TMFPs	Production	***	***	***	***	***
Practical TMFPs	Utilization	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table III-6 presents U.S. producers' reported narratives regarding practical capacity constraints.

Table III-6
TMFPs: U.S. producers' reported constraints to practical overall capacity, since January 1, 2021

Item	Firm name and narrative response on constraints to practical overall capacity
Production bottlenecks	***
Production bottlenecks	***
Existing labor force	***
Existing labor force	***
Existing labor force	***
Logistics/ transportation	***
Other constraints	***
Other constraints	***

Source: Compiled from data submitted in response to Commission questionnaires.

Table III-7 and figure III-1 present data on U.S. producers' production, capacity, and capacity utilization. U.S. producers' practical capacity increased in each year during 2021 to 2023, increasing *** percent over the period as ***.[4] Additionally, three firms entered the U.S. industry during 2022 to June 2024: ***. Capacity was *** percent higher in interim 2024 than in interim 2023, which was largely driven by ***.[5] Production fluctuated over the period, increasing by *** percent from 2021 to 2022 and decreasing by *** percent from 2022 to 2023, increasing overall by *** percent during 2021 to 2023.[6] [7] Production was also *** percent higher in interim 2024 than in interim 2023. All responding U.S. producers operating at the time reported an increase in production from 2021 to 2022, and all but *** reported a decrease from 2022 to 2023. As a result, U.S. producers' average capacity utilization also fluctuated year to year, ending *** percentage points lower in 2023 than in 2021 and was *** percent lower in interim 2024 compared to interim 2023.

[4] Email from ***, November 7, 2024.
[5] ***.
[6] ***. Email from ***, November 7, 2024. ***. Email from ***, November 7, 2024.
[7] ***. Email from ***, November 6, 2024.

Table III-7
TMFPs: U.S. producers' output: by firm and period

Practical capacity

Capacity in 1,000 pounds

Firm	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Dart	***	***	***	***	***
Genera	***	***	***	***	***
Huhtamaki	***	***	***	***	***
Kanbol	***	***	***	***	***
Pactiv	***	***	***	***	***
Reynolds	***	***	***	***	***
Tellus	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table III-7 Continued
TMFPs: U.S. producers' output, by firm and period

Production

Production in 1,000 pounds

Firm	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Dart	***	***	***	***	***
Genera	***	***	***	***	***
Huhtamaki	***	***	***	***	***
Kanbol	***	***	***	***	***
Pactiv	***	***	***	***	***
Reynolds	***	***	***	***	***
Tellus	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table III-7 Continued
TMFPs: U.S. producers' output, by firm and period

Capacity utilization

Capacity utilization in percent

Firm	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Dart	***	***	***	***	***
Genera	***	***	***	***	***
Huhtamaki	***	***	***	***	***
Kanbol	***	***	***	***	***
Pactiv	***	***	***	***	***
Reynolds	***	***	***	***	***
Tellus	***	***	***	***	***
All firms	***	***	***	***	***

Note: Capacity utilization ratio represents the ratio of the U.S. producer's production to its production capacity.

Table continued.

Table III-7 Continued
TMFPs: U.S. producers' output, by firm and period

Share of production

Share of production in percent

Firm	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Dart	***	***	***	***	***
Genera	***	***	***	***	***
Huhtamaki	***	***	***	***	***
Kanbol	***	***	***	***	***
Pactiv	***	***	***	***	***
Reynolds	***	***	***	***	***
Tellus	***	***	***	***	***
All firms	100.0	100.0	100.0	100.0	100.0

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Figure III-1
TMFPs: U.S. producers' capacity, production, and capacity utilization, by period

* * * * * * *

Source: Compiled from data submitted in response to Commission questionnaires.

Alternative products

No responding U.S. producer reported production of other products using the same equipment to produce TMFPs.

U.S. producers' U.S. shipments and exports

Table III-8 presents U.S. producers' U.S. shipments, export shipments, and total shipments. U.S. shipments accounted for nearly all U.S. producers' total shipments from 2021 to 2023, accounting for over *** percent of total shipments in each year and the interim periods.[8] The quantity of their U.S. shipments increased irregularly, overall increasing by *** percent during 2021 to 2023 but was *** percent lower in interim 2024 compared to interim 2023. The decrease reflects ***.[9] The value of U.S. producers' U.S. shipments increased in each year during 2021 to 2023, ending *** percent higher in 2023 than in 2021 but was *** percent lower in interim 2024 compared to interim 2023.

The average unit value of U.S. producers' U.S. shipments increased in each year from 2021 to 2023 as value increased at a faster rate than quantity.[10] Overall, the average unit value of U.S. producers' U.S. shipments increased by *** percent from 2021 to 2023 but was *** percent lower in interim 2024 compared to interim 2023. The unit values of all responding firms' U.S. shipments increased from 2021 to 2023, and all firms, except ***, reported an increase from 2022 to 2023.

By quantity, export shipments accounted for less than *** percent of total shipments in each year during 2021 to 2023 and the interim periods, and only *** out of seven firms reported any export shipments. The quantity of their export shipments decreased irregularly during 2021 to 2023, decreasing overall by *** percent but was *** percent higher in interim 2024 compared to interim 2023. The value of U.S. producers' export shipments also fluctuated from 2021 to 2023, overall increasing by *** percent and was *** percent higher in interim 2024 compared to interim 2023. The unit value of their export shipments increased in each year, ending 2023 *** percent higher than 2021.[11] The unit value of their export shipments was *** percent lower in interim 2024 compared to interim 2023.

[8] *** reported internal consumption nor transfers to related firms.
[9] Huhtamaki reported ***. Additionally, Pactiv reported ***. Email from ***, November 7, 2024.
[10] ***. Email from ***, November 12, 2024.
[11] Unit value of export shipments increased as ***.

Table III-8
TMFPs: U.S. producers' total shipments, by destination and period

Quantity in 1,000 pounds; value in 1,000 dollars; unit values in dollars per pound; shares in percent

Item	Measure	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
U.S. shipments	Quantity	***	***	***	***	***
Export shipments	Quantity	***	***	***	***	***
Total shipments	Quantity	***	***	***	***	***
U.S. shipments	Value	***	***	***	***	***
Export shipments	Value	***	***	***	***	***
Total shipments	Value	***	***	***	***	***
U.S. shipments	Unit value	***	***	***	***	***
Export shipments	Unit value	***	***	***	***	***
Total shipments	Unit value	***	***	***	***	***
U.S. shipments	Share of quantity	***	***	***	***	***
Export shipments	Share of quantity	***	***	***	***	***
Total shipments	Share of quantity	100.0	100.0	100.0	100.0	100.0
U.S. shipments	Share of value	***	***	***	***	***
Export shipments	Share of value	***	***	***	***	***
Total shipments	Share of value	100.0	100.0	100.0	100.0	100.0

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

U.S. producers' inventories

Table III-9 presents U.S. producers' end-of-period inventories and the ratio of these inventories to U.S. producers' production, U.S. shipments, and total shipments. U.S. producers' end-of-period inventories largely increased between 2021 and 2023, increasing by *** percent from 2021 to 2022 then decreasing by *** percent from 2022 to 2023, ending *** percent higher in 2023 than in 2021.[12] End-of-period inventories were *** percent higher in interim 2024 than in interim 2023. The ratios of U.S. producers' end-of-period inventories to their U.S. production, U.S. shipments, and total shipments each increased overall during 2021 to 2023, ending 2023 *** percentage points, *** percentage points, and *** percentage points higher, respectively. Similarly, ratios of U.S. producers' end-of-period inventories to their U.S. production, U.S. shipments, and total shipments each were higher in interim 2024 compared to interim 2023, ending *** percentage points, *** percentage points, and *** percentage points higher, respectively.

[12] Huhtamaki reported ***. Email from ***, November 7, 2024.

Table III-9
TMFPs: U.S. producers' inventories and their ratio to select items, by period

Quantity in 1,000 pounds; inventory ratios in percent

Item	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
End-of-period inventory quantity	***	***	***	***	***
Inventory ratio to U.S. production	***	***	***	***	***
Inventory ratio to U.S. shipments	***	***	***	***	***
Inventory ratio to total shipments	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

U.S. producers' imports from subject sources

U.S. producers' imports of TMFPs are presented in tables III-10, III-11, III-12, and III-13.

*** imported TMFPs from subject sources during 2021 to June 2024. ***.

Table III-10
TMFPs: * U.S. production, U.S. imports from subject sources, and ratio of subject imports to production, by period**

Quantity in 1,000 pounds

Item	Measure	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
U.S. production	Quantity	***	***	***	***	***
Imports from China	Quantity	***	***	***	***	***
Imports from China to U.S. production	Ratio	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table III-11
TMFPs: * U.S. production, U.S. imports from subject sources, and ratio of subject imports to production, by period**

Quantity in 1,000 pounds

Item	Measure	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
U.S. production	Quantity	***	***	***	***	***
Imports from China	Quantity	***	***	***	***	***
Imports from China to U.S. production	Ratio	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table III-12
TMFPs: * U.S. production, U.S. imports from subject sources, and ratio of subject imports to production, by period**

Quantity in 1,000 pounds

Item	Measure	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
U.S. production	Quantity	***	***	***	***	***
Imports from China	Quantity	***	***	***	***	***
Imports from Vietnam	Quantity	***	***	***	***	***
Imports from subject sources	Quantity	***	***	***	***	***
Imports from China to U.S. production	Ratio	***	***	***	***	***
Imports from Vietnam to U.S. production	Ratio	***	***	***	***	***
Imports from subject sources to U.S. production	Ratio	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table III-13
TMFPs: * U.S. production, U.S. imports from subject sources, and ratio of subject imports to production, by period**

Quantity in 1,000 pounds

Item	Measure	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
U.S. production	Quantity	***	***	***	***	***
Imports from China	Quantity	***	***	***	***	***
Imports from China to U.S. production	Ratio	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table III-14 presents a summary of U.S. producers' reason for imports.

Table III-14
TMFPs: U.S. producers' reasons for importing

Item	Narrative response on reasons for importing
*** reason for importing	***
*** reason for importing	***
*** reason for importing	***
*** reason for importing	***

Source: Compiled from data submitted in response to Commission questionnaires.

U.S. producers' purchases of imports from subject sources

No responding U.S. producer reported purchases of TMFPs from any subject import source during 2021 to 2023 nor the interim periods.[13]

[13] U.S. producer ***.

U.S. employment, wages, and productivity

Table III-15 shows U.S. producers' employment-related data. The number of production and related workers ("PRWs") increased by 21.7 percent from 2021 to 2023 and was 7.7 percent higher in interim 2024 than in interim 2023.[14] Productivity decreased by *** percent from 2021 to 2023 and was *** percent lower in interim 2024 than in interim 2023. Unit labor costs and total hours worked, conversely, increased in every year from 2021 to 2023, ending *** percent and *** percent higher, respectively. Unit labor costs and total hours worked were both *** percent higher in interim 2024 than in interim 2023. Hour worked per PRW, wages paid, and hourly wages all increased overall from 2021 to 2023.

Table III-15
TMFPs: U.S. producers' employment related information, by period

Item	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Production and related workers (PRWs) (number)	1,306	1,457	1,589	1,465	1,578
Total hours worked (1,000 hours)	2,052	2,461	2,553	1,502	1,635
Hours worked per PRW (hours)	1,571	1,689	1,607	1,025	1,036
Wages paid ($1,000)	***	***	***	***	***
Hourly wages (dollars per hour)	***	***	***	***	***
Productivity (pounds per hour)	***	***	***	***	***
Unit labor costs (dollars per pound)	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

[14] All U.S. producers reported increased number of PRWs between 2021 and 2023 and interim periods, with the exception of ***.

Part IV: U.S. imports, apparent U.S. consumption, and market shares

U.S. importers

The Commission issued importer questionnaires to 128 firms believed to be importers of TMFPs, as well as to all U.S. producers of TMFPs.[1] Usable questionnaire responses were received from 30 companies, representing *** percent of total imports in 2023 under HTS numbers 4823.70.0020 and 4823.70.0040, which are both "basket" categories.[2] [3] Coverage ratios for firms responding to the Commission's questionnaire are calculated based on 2023 data as follows:[4]

- *** percent of imports from China
- *** percent of imports from Vietnam
- *** percent of subject imports
- *** percent of imports from nonsubject sources.

Table IV-1 lists all responding U.S. importers of TMFPs their locations, and their shares of U.S. imports from relevant import sources, in 2023.

[1] The Commission issued questionnaires to those firms identified in the petitions, industry information, staff research, and proprietary, Census-edited Customs' import records.

[2] Staff believes the coverage figure is understated and the questionnaire responses represent an even larger majority of imports from China and Vietnam. Staff received importer questionnaires from *** according to proprietary, Census-edited Customs' import records.

[3] Nine firms submitted responses to the U.S. Importers' Questionnaire certifying that they did not import subject merchandise during the period.

[4] Import coverage was calculated as the ratio the value of U.S. imports reported in USITC questionnaire responses relative to the value of adjusted official U.S. import statistics. The numerator included both U.S. imports under primary and other HTS numbers as reported by responding U.S. importers in the USITC data collection and the denominator started with the value of U.S. imports according to official U.S. import statistics under the primary HTS numbers but made three adjustments: (1) to deduct data U.S. importers reported to the USITC as out-of-scope import classified for Customs purposes under the primary HTS numbers, (2) to dedicate data reported within proprietary, Census-edited Customs import records in the primary HTS numbers for firms that certified to the USITC that they do not import any TMFPs, and (2) to add in the imports reported by U.S. importers of TMFPs under other HTS numbers.

Table IV-1
TMFPs: U.S. importers, their headquarters, and share of total imports within a given source by firm, 2023

Share in percent

Firm	Headquarters	China	Vietnam	Subject sources	Nonsubject sources	All import sources
AmerCareRoyal	Exton, PA	***	***	***	***	***
Anchor	Ballwin, MO	***	***	***	***	***
Banyan	Melville, NY	***	***	***	***	***
Berk	Warren, OH	***	***	***	***	***
Better Earth	Clarkston, GA	***	***	***	***	***
CKF	Hantsport, NS (Canada)	***	***	***	***	***
Corapak	City Of Industry, CA	***	***	***	***	***
Dart	Mason, MI	***	***	***	***	***
Eco Guardian	Raleigh, NC	***	***	***	***	***
Eco Kloud	Fremont, CA	***	***	***	***	***
Eco-Products	Charlotte, NC	***	***	***	***	***
Gassant	Miami, FL	***	***	***	***	***
Greenway	Sheridan, WY	***	***	***	***	***
Huhtamaki	De Soto, KS	***	***	***	***	***
Imperial	Jersey City, NJ	***	***	***	***	***
InnoPak	Delaware, OH	***	***	***	***	***
KD Distributing	Mound, MN	***	***	***	***	***
Meristem	Roswell, GA	***	***	***	***	***
Nowpak	South San Francisco, CA	***	***	***	***	***
Pactiv	Lake Forest, IL	***	***	***	***	***
Republic	Mcqueeney, TX	***	***	***	***	***
Reynolds	Lake Forest, IL	***	***	***	***	***
RMT Global	Southlake, TX	***	***	***	***	***
Source One	Miami Beach, FL	***	***	***	***	***
Super Win	Flushing, NY	***	***	***	***	***
Team Three	Chesterfield, MO	***	***	***	***	***
Teh Tung	Santa Fe Springs, CA	***	***	***	***	***
Tzumi	New York, NY	***	***	***	***	***
Wellcare	Randolph, NJ	***	***	***	***	***
World Centric	Rohnert Park, CA	***	***	***	***	***
All firms		100.0	100.0	100.0	100.0	100.0

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as “---“.

U.S. imports

Table IV-2 presents data for U.S. imports of TMFPs from China and Vietnam and all other sources. Subject imports, by quantity, accounted for the vast majority of total imports in every year from 2021 to 2023, accounting for over 88.8 percent of total imports throughout the period. Among the subject sources, China accounted for the largest share of total imports in 2021 and 2023 and the interim periods, accounting for between *** percent and *** percent of total imports during 2021 to 2023 and the interim periods. From 2021 to 2022, the quantity of subject imports increased by 53.8 percent, then decreased by 10.6 percent from 2022 to 2023, overall increasing by 37.5 percent during 2021 to 2023. Moving in a similar direction, the value of subject imports increased by 84.5 percent from 2021 to 2022 and decreased by 38.7 percent from 2022 to 2023, overall increasing by 13.1 percent during 2021 to 2023. The quantity and value of subject imports were 11.7 percent and 9.5 percent higher, respectively, in interim 2024 than in interim 2023. The unit value of subject imports decreased overall by 17.8 percent from 2021 to 2023 and was 2.0 percent lower in interim 2023 than in interim 2024.

Table IV-2
TMFPs: U.S. imports by source and period

Quantity in 1,000 pounds; value in 1,000 dollars; unit values in dollars per pound; share and ratios in percent; ratios represent the ratio to U.S. production

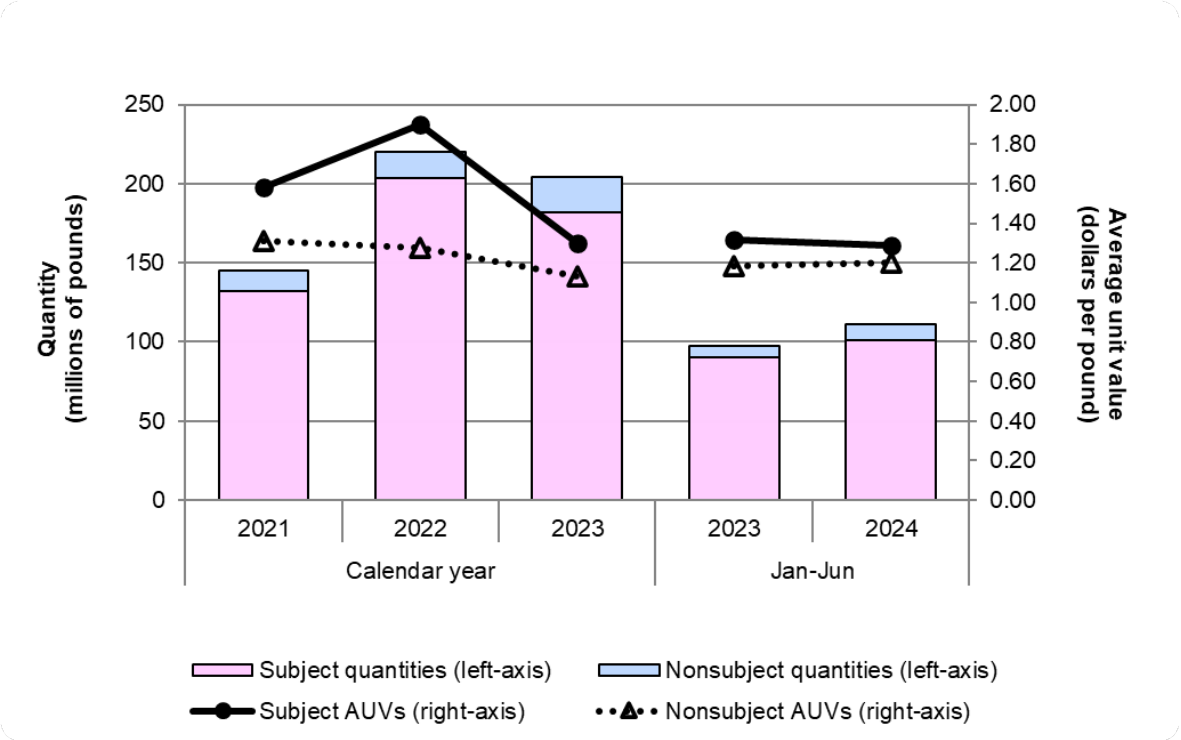
Source	Measure	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
China	Quantity	***	***	***	***	***
Vietnam	Quantity	***	***	***	***	***
Subject sources	Quantity	132,146	203,255	181,709	90,292	100,890
Nonsubject sources	Quantity	13,055	17,234	22,891	6,877	9,945
All import sources	Quantity	145,201	220,489	204,600	97,169	110,835
China	Value	***	***	***	***	***
Vietnam	Value	***	***	***	***	***
Subject sources	Value	209,171	385,863	236,478	118,752	130,014
Nonsubject sources	Value	17,123	22,001	25,971	8,157	11,950
All import sources	Value	226,294	407,864	262,449	126,909	141,964
China	Unit value	***	***	***	***	***
Vietnam	Unit value	***	***	***	***	***
Subject sources	Unit value	1.58	1.90	1.30	1.32	1.29
Nonsubject sources	Unit value	1.31	1.28	1.13	1.19	1.20
All import sources	Unit value	1.56	1.85	1.28	1.31	1.28
China	Share of quantity	***	***	***	***	***
Vietnam	Share of quantity	***	***	***	***	***
Subject sources	Share of quantity	91.0	92.2	88.8	92.9	91.0
Nonsubject sources	Share of quantity	9.0	7.8	11.2	7.1	9.0
All import sources	Share of quantity	100.0	100.0	100.0	100.0	100.0
China	Share of value	***	***	***	***	***
Vietnam	Share of value	***	***	***	***	***
Subject sources	Share of value	92.4	94.6	90.1	93.6	91.6
Nonsubject sources	Share of value	7.6	5.4	9.9	6.4	8.4
All import sources	Share of value	100.0	100.0	100.0	100.0	100.0
China	Ratio	***	***	***	***	***
Vietnam	Ratio	***	***	***	***	***
Subject sources	Ratio	***	***	***	***	***
Nonsubject sources	Ratio	***	***	***	***	***
All import sources	Ratio	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as “---“.

Note: Share of quantity is the share of U.S. imports by quantity; share of value is the share of U.S. imports by value; ratio are U.S. imports to production.

Figure IV-1
TMFPs: U.S. import quantities and average unit values, by source and period



Source: Compiled from data submitted in response to Commission questionnaires.

Quantity of imports from China increased by *** percent from 2021 to 2022 and decreased by *** percent from 2022 to 2023, ending 2023 *** percent higher than 2021.[5] [6] Imports from China, by quantity, was *** percent higher in interim 2024 than in interim

[5] ***. Email from ***, November 7, 2024. ***. Email from ***, November 8, 2024. ***. Email from ***, November 6, 2024.

[6] Twenty of 25 firms with U.S. imports from China in 2022, had increased imports from China between 2021 and 2022, while 15 of 26 firms did so between 2022 and 2023.

2023. [7] Imports from Vietnam, by quantity, increased in each year, increasing overall by *** percent during 2021 to 2023 but was *** percent lower in interim 2024 than in interim 2023.[8] [9] The quantity of imports from nonsubject sources also increased every year from 2021 to 2023, ending *** percent higher in 2023 compared to 2021, which was driven by ***.[10] Imports from nonsubject sources, by quantity, were *** percent higher in interim 2024 than in interim 2023.[11]

The value of imports from China fluctuated, increasing *** percent during 2021 to 2022 and decreasing by *** percent from 2022 to 2023, overall increasing by *** percent during 2021 to 2023.[12] The value of imports from China was *** percent higher in interim

[7] ***. Email from ***, November 7, 2024.

[8] ***. Email from ***, November 6, 2024. ***. Email from ***, November 8, 2024.

[9] All five firms with U.S. imports from Vietnam in 2022 had increased imports from Vietnam between 2021 and 2022, while two of five firms did so between 2022 and 2023.

[10] ***. Email from ***, November 8, 2024.

[11] ***. Email from ***, November 6, 2024.

[12] According to ***. Email from ***, November 8, 2024.

2024 than in interim 2023.[13] Imports from Vietnam, by value, increased in each year, overall increasing by *** percent during 2021 to 2023 but was *** percent lower in interim 2024 than in interim 2023. The value of nonsubject imports increased every year, overall increasing by 51.7 percent and was 46.5 percent higher in interim 2024 than in interim 2023.

The unit value of imports from China fluctuated year to year, increasing by *** percent from 2021 to 2022, but decreasing by *** percent from 2022 to 2023, for an overall decrease of *** percent during 2021 to 2023. The unit value of imports from China was *** percent lower in interim 2024 than in interim 2023. The unit value of imports from Vietnam decreased in each year, overall decreasing by *** percent during 2021 to 2023. Similarly, the unit value of imports from nonsubject sources also decreased in each year, ending 2023 13.5 percent lower than in 2021. The unit value of imports from Vietnam and nonsubject sources was *** percent and 1.3 percent higher, respectively, in interim 2024 than in interim 2023.

The ratio of imports from China and Vietnam to U.S. production both increased from 2021 to 2023, increasing by *** percentage points and *** percentage points from 2021 to 2023, respectively. The ratio of imports from nonsubject sources to U.S. production increased by *** percentage points from 2021 to 2023. The ratio of imports from China and nonsubject imports to U.S. production was *** percentage points and *** percentage points, respectively, higher in interim 2024 than in interim 2023, while imports from Vietnam was *** percentage points lower in interim 2024 than in interim 2023.

Table IV-3 presents data on the changes in import quantity, value, and unit value between comparison periods.

[13] ***. Email from ***, November 8, 2024.

Table IV-3
TMFPs: Changes in import quantity, values, and unit values between comparison periods

Changes (Δ) in percent

Source	Measure	2021-23	2020-21	2022-23	Jan-Jun 2022-23
China	%Δ Quantity	▲***	▲***	▼***	▲***
Vietnam	%Δ Quantity	▲***	▲***	▲***	▼***
Subject sources	%Δ Quantity	▲37.5	▲53.8	▼(10.6)	▲11.7
Nonsubject sources	%Δ Quantity	▲75.3	▲32.0	▲32.8	▲44.6
All import sources	%Δ Quantity	▲40.9	▲51.9	▼(7.2)	▲14.1
China	%Δ Value	▲***	▲***	▼***	▲***
Vietnam	%Δ Value	▲***	▲***	▲***	▼***
Subject sources	%Δ Value	▲13.1	▲84.5	▼(38.7)	▲9.5
Nonsubject sources	%Δ Value	▲51.7	▲28.5	▲18.0	▲46.5
All import sources	%Δ Value	▲16.0	▲80.2	▼(35.7)	▲11.9
China	%Δ Unit value	▼***	▲***	▼***	▼***
Vietnam	%Δ Unit value	▼***	▼***	▼***	▲***
Subject sources	%Δ Unit value	▼(17.8)	▲19.9	▼(31.4)	▼(2.0)
Nonsubject sources	%Δ Unit value	▼(13.5)	▼(2.7)	▼(11.1)	▲1.3
All import sources	%Δ Unit value	▼(17.7)	▲18.7	▼(30.7)	▼(1.9)

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Percent changes shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Negligibility

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.[14] Negligible imports are generally defined in the Act, as amended, as imports from a country of merchandise corresponding to a domestic like product where such imports account for less than 3 percent of the volume of all such merchandise imported into the United States in the most recent 12-month period for which data are available that precedes the filing of the petition or the initiation of the investigation. However, if there are imports of such merchandise from a number of countries subject to investigations initiated on the same day that individually account for less than 3 percent of the total volume of the subject merchandise, and if the imports from those countries collectively account for more than 7 percent of the volume of all such merchandise imported into the United States during the applicable 12-month period, then

[14] Sections 703(a)(1), 705(b)(1), 733(a)(1), and 735(b)(1) of the Act (19 U.S.C. §§ 1671b(a)(1), 1671d(b)(1), 1673b(a)(1), and 1673d(b)(1)).

imports from such countries are deemed not to be negligible.[15] Imports from China and Vietnam accounted for *** percent and *** percent of total imports of TMFPs, by quantity, respectively, between October 2023 and September 2024. Table IV-4 presents data on U.S. imports in the twelve months preceding the filing of the petitions.

Table IV-4
TMFPs: U.S. imports in the twelve months period preceding the filing of the petitions, October 2023 through September 2024

Quantity in 1,000 pounds; share of quantity in percent

Source of imports	Quantity	Share of quantity
China	***	***
Vietnam	***	***
Subject sources	***	***
Nonsubject sources	***	***
All import sources	***	100.0

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Cumulation considerations

In assessing whether imports should be cumulated, the Commission determines whether U.S. imports from the subject countries compete with each other and with the domestic like product and has generally considered four factors: (1) fungibility, (2) presence of sales or offers to sell in the same geographical markets, (3) common or similar channels of distribution, and (4) simultaneous presence in the market. Information regarding channels of distribution, market areas, and interchangeability appear in Part II. Additional information concerning fungibility, geographical markets, and simultaneous presence in the market is presented below.

[15] Section 771 (24) of the Act (19 U.S.C § 1677(24)).

Fungibility

Table IV-5 and figure IV-2 present data on U.S. producers' and U.S. importers' U.S. shipments of TMFPs by product type in 2023. Each source had U.S. shipments of each product type, with the exception of ***. The majority of U.S. producers' U.S. shipments were other TMFPs types, which ***.[16] The largest share of U.S. shipments of imports from China were clamshell TMFPs while tray and bowl TMFPs make up the majority of U.S. shipments of imports from Vietnam. The majority of U.S. shipments of TMFPs imports from nonsubject sources were bowls.

Table IV-5
TMFPs: U.S. producers' and U.S. importers' U.S. shipments, by source and by product type, 2023

Quantity in 1,000 pounds

Source	Round plate	Clamshell	Bowl	Tray	Lids	Other	All items
U.S. producers	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***
Vietnam	***	***	***	***	***	***	***
Subject sources	***	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***	***
All import sources	***	***	***	***	***	***	***
All sources	***	***	***	***	***	***	***

Table continued.

Table IV-5 Continued
TMFPs: U.S. producers' and U.S. importers' U.S. shipments, by source and by product type, 2023

Share across in percent

Source	Round plate	Clamshell	Bowl	Tray	Lids	Other	All items
U.S. producers	***	***	***	***	***	***	100.0
China	***	***	***	***	***	***	100.0
Vietnam	***	***	***	***	***	***	100.0
Subject sources	***	***	***	***	***	***	100.0
Nonsubject sources	***	***	***	***	***	***	100.0
All import sources	***	***	***	***	***	***	100.0
All sources	***	***	***	***	***	***	100.0

Table continued.

[16] *** U.S. Producers' questionnaire, question II-10.

Table IV-5 Continued
TMFPs: U.S. producers' and U.S. importers' U.S. shipments, by source and by product type, 2023

Share down in percent

Source	Round plate	Clamshell	Bowl	Tray	Lids	Other	All items
U.S. producers	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***
Vietnam	***	***	***	***	***	***	***
Subject sources	***	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***	***
All import sources	***	***	***	***	***	***	***
All sources	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as “---“.

Figure IV-2
TMFPs: U.S. producers' and U.S. importers' U.S. shipments, by source and by product type, 2023

* * * * * * *

Source: Compiled from data submitted in response to Commission questionnaires.

Table IV-6 and figure IV-3 present data on U.S. producers' and U.S. importers' U.S. shipments of TMFPs by appearance in 2023. The majority of U.S. producers' U.S. shipments were plain unbleached TMFPs. Similarly, the largest share of U.S. shipments of imports from China and Vietnam were plain unbleached TMFPs. The majority of U.S. shipments of TMFPs imports from nonsubject sources were plain unbleached.

U.S. producers' account for the majority of plain bleached, unbleached and other TMFPs, which includes ***.[17]

Table IV-6
TMFPs: U.S. producers' and U.S. importers' U.S. shipments, by source and by appearance, 2023

Quantity in 1,000 pounds

Source	Plain bleached	Plain unbleached	Other	All appearances
U.S. producers	***	***	***	***
China	***	***	***	***
Vietnam	***	***	***	***
Subject sources	***	***	***	***
Nonsubject sources	***	***	***	***
All import sources	***	***	***	***
All sources	***	***	***	***

Table continued.

Table IV-6 Continued
TMFPs: U.S. producers' and U.S. importers' U.S. shipments, by source and by appearance, 2023

Share across in percent

Source	Plain bleached	Plain unbleached	Other	All appearances
U.S. producers	***	***	***	100.0
China	***	***	***	100.0
Vietnam	***	***	***	100.0
Subject sources	***	***	***	100.0
Nonsubject sources	***	***	***	100.0
All import sources	***	***	***	100.0
All sources	***	***	***	100.0

Table continued.

[17] *** importer questionnaire.

Table IV-6 Continued
TMFPs: U.S. producers' and U.S. importers' U.S. shipments, by source and by appearance, 2023

Share down in percent

Source	Plain bleached	Plain unbleached	Other	All appearances
U.S. producers	***	***	***	***
China	***	***	***	***
Vietnam	***	***	***	***
Subject sources	***	***	***	***
Nonsubject sources	***	***	***	***
All import sources	***	***	***	***
All sources	100.0	100.0	100.0	100.0

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as “---“.

Figure IV-3
TMFPs: U.S. producers' and U.S. importers' U.S. shipments, by source and by product type, 2023

* * * * * * *

Source: Compiled from data submitted in response to Commission questionnaires.

Geographical markets

U.S. imports of TMFPs and other molded fiber products from China and Vietnam entered the United States through ports in every region. The largest share of imports of TMFPs and other molded fiber products from China entered the United States through ports located in the West while the largest share of imports from Vietnam entered though ports located in the South. Imports of TMFPs and other molded fiber products from nonsubject sources entered the United States through ports located in the East, North, West, and South at similar shares. Table IV-7 presents data on imports by border of entry.

Table IV-7
Molded fiber products: U.S. imports, by source and by border of entry, 2023

Value in 1,000 dollars

Source	East	North	South	West	All borders
China	143,598	42,464	28,395	163,068	377,525
Vietnam	4,183	5,995	8,742	6,387	25,307
Subject sources	147,781	48,459	37,137	169,455	402,831
Nonsubject sources	58,177	48,401	56,566	47,215	210,359
All import sources	205,957	96,860	93,703	216,670	613,190

Table continued.

Table IV-7 Continued
Molded fiber products: U.S. imports, by source and by border of entry, 2023

Share across in percent

Source	East	North	South	West	All borders
China	38.0	11.2	7.5	43.2	100.0
Vietnam	16.5	23.7	34.5	25.2	100.0
Subject sources	36.7	12.0	9.2	42.1	100.0
Nonsubject sources	27.7	23.0	26.9	22.4	100.0
All import sources	33.6	15.8	15.3	35.3	100.0

Table continued.

Table IV-7 Continued
Molded fiber products: U.S. imports, by source and by border of entry, 2023

Share down in percent

Source	East	North	South	West	All borders
China	69.7	43.8	30.3	75.3	61.6
Vietnam	2.0	6.2	9.3	2.9	4.1
Subject sources	71.8	50.0	39.6	78.2	65.7
Nonsubject sources	28.2	50.0	60.4	21.8	34.3
All import sources	100.0	100.0	100.0	100.0	100.0

Source: Compiled from official U.S. imports statistics of the U.S. Department of Commerce Census Bureau using HTS statistical reporting numbers 4823.70.0020 and 4823.70.0040, accessed October 22, 2024. Official imports data are based on the imports for consumption data series, and value data reflect landed, duty-paid values.

Note: Official U.S. imports statistics was compiled based on value, quantity data for the HTS statistical reporting numbers 4823.70.0020 and 4823.70.0040, were of mixed units of measure. These statistical reporting numbers include both TMFPs and other out-of-scope molded fiber products such as egg cartons.

Presence in the market

U.S. imports of TMFPs and other molded fiber products from China were present in every month between January 2021 and June 2024. U.S. imports of TMFPs and other molded fiber products from Vietnam were present in 41 of 42 months between January 2021 and June 2024. Table IV-8 and figures IV-4 and IV-5 present monthly data for imports of TMFPs and other molded fiber products between January 2021 and June 2024.

Table IV-8
Molded fiber products: U.S. imports, by month and source: Quantity of U.S. imports, by source and month

Value in 1,000 dollars

Year	Month	China	Vietnam	Subject sources	Nonsubject sources	All import sources
2021	January	22,767	---	22,767	11,246	34,013
2021	February	20,669	3	20,672	9,524	30,196
2021	March	19,449	77	19,527	11,787	31,314
2021	April	19,881	251	20,132	12,333	32,465
2021	May	18,552	173	18,725	11,430	30,155
2021	June	19,336	201	19,537	11,822	31,359
2021	July	19,919	891	20,810	11,172	31,982
2021	August	24,240	268	24,508	11,161	35,669
2021	September	22,699	1,456	24,156	10,909	35,065
2021	October	22,805	1,235	24,039	12,937	36,976
2021	November	24,181	1,668	25,849	12,558	38,407
2021	December	29,411	2,022	31,434	12,507	43,941
2022	January	27,550	958	28,508	13,997	42,505
2022	February	26,801	1,118	27,919	13,214	41,134
2022	March	28,875	1,271	30,146	17,363	47,509
2022	April	35,115	884	35,999	14,968	50,967
2022	May	40,916	1,291	42,207	15,997	58,203
2022	June	37,227	2,531	39,758	16,033	55,791
2022	July	42,716	1,889	44,605	15,060	59,665
2022	August	40,645	2,612	43,257	17,999	61,255
2022	September	34,361	1,491	35,852	17,126	52,978
2022	October	32,148	3,962	36,110	19,340	55,450
2022	November	34,979	2,072	37,051	20,054	57,105
2022	December	34,497	1,937	36,433	17,979	54,413

Table continued.

Table IV-8 Continued
Molded fiber products: U.S. imports, by month and source: Quantity of U.S. imports, by source and month

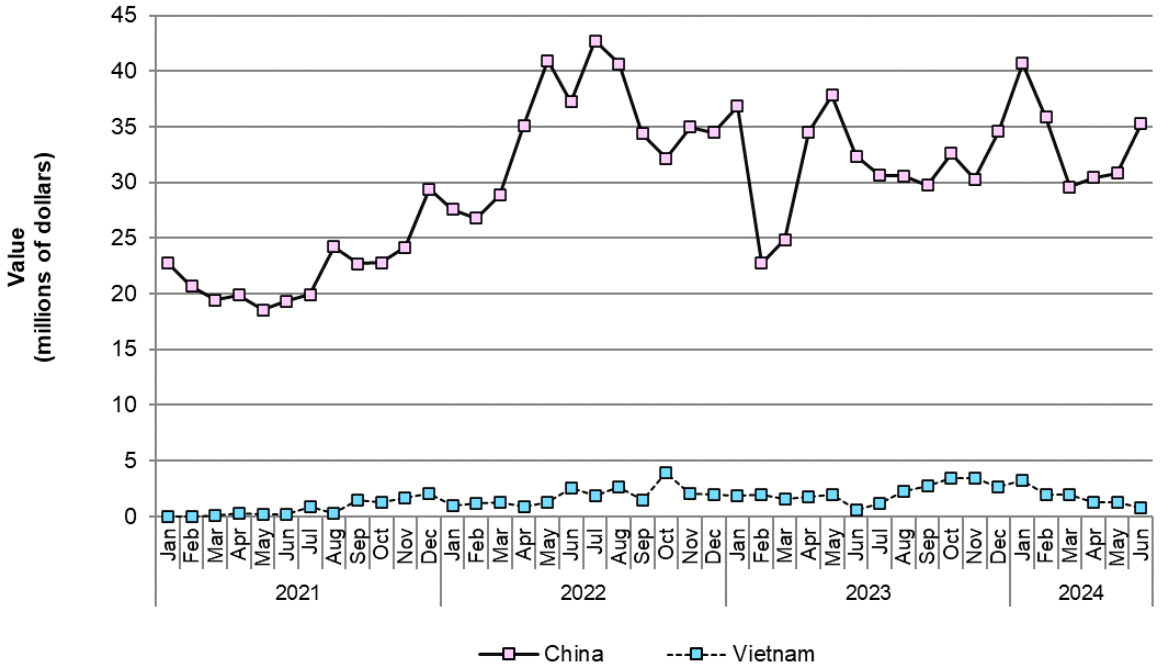
Value in 1,000 dollars

Year	Month	China	Vietnam	Subject sources	Nonsubject sources	All import sources
2023	January	36,854	1,818	38,671	19,184	57,856
2023	February	22,747	1,913	24,660	16,603	41,263
2023	March	24,884	1,571	26,454	18,087	44,541
2023	April	34,504	1,730	36,234	17,047	53,281
2023	May	37,840	1,988	39,828	16,280	56,108
2023	June	32,354	597	32,951	16,664	49,615
2023	July	30,616	1,186	31,802	16,125	47,927
2023	August	30,561	2,246	32,807	17,429	50,236
2023	September	29,730	2,699	32,429	17,527	49,956
2023	October	32,595	3,464	36,059	19,304	55,363
2023	November	30,267	3,452	33,719	18,110	51,828
2023	December	34,574	2,644	37,217	17,999	55,216
2024	January	40,691	3,241	43,932	19,622	63,554
2024	February	35,879	1,938	37,817	17,721	55,538
2024	March	29,602	1,921	31,523	20,720	52,243
2024	April	30,455	1,282	31,738	23,335	55,072
2024	May	30,821	1,232	32,052	23,340	55,392
2024	June	35,258	794	36,052	17,185	53,237

Source: Compiled from official U.S. imports statistics of the U.S. Department of Commerce Census Bureau using HTS statistical reporting numbers 4823.70.0020 and 4823.70.0040, accessed October 22, 2024. Official imports data are based on the imports for consumption data series, and value data reflect landed, duty-paid values.

Note: Zeroes, null values, and undefined calculations are suppressed and shown as "---". Official U.S. imports statistics was compiled based on value, quantity data for the HTS statistical reporting numbers 4823.70.0020 and 4823.70.0040, were of mixed units of measure. These statistical reporting numbers include both TMFPs and other out-of-scope molded fiber products such as egg cartons.

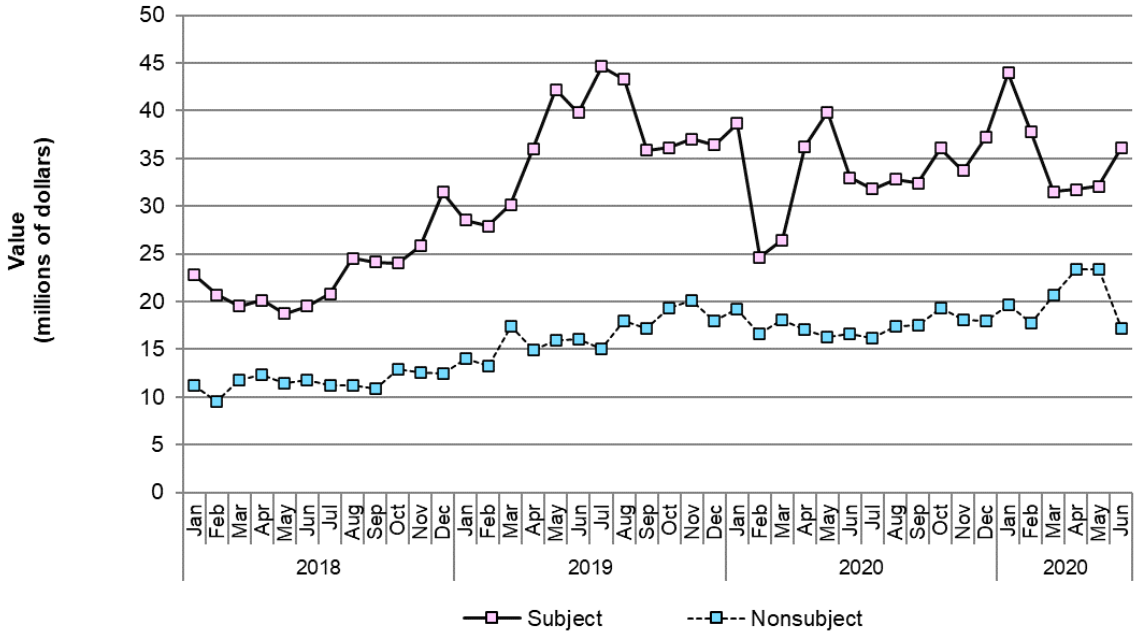
Figure IV-4
Molded fiber products: U.S. imports from individual subject sources, by month



Source: Compiled from official U.S. imports statistics of the U.S. Department of Commerce Census Bureau using HTS statistical reporting numbers 4823.70.0020 and 4823.70.0040, accessed October 22, 2024. Official imports data are based on the imports for consumption data series, and value data reflect landed, duty-paid values.

Note: Official U.S. imports statistics was compiled based on value, quantity data for the HTS statistical reporting numbers 4823.70.0020 and 4823.70.0040, were of mixed units of measure. These statistical reporting numbers include both TMFPs and other out-of-scope molded fiber products such as egg cartons.

Figure IV-5
Molded fiber products: U.S. imports from aggregated subject and nonsubject sources, by month



Source: Compiled from official U.S. imports statistics of the U.S. Department of Commerce Census Bureau using HTS statistical reporting numbers 4823.70.0020 and 4823.70.0040, accessed October 22, 2024. Official imports data are based on the imports for consumption data series, and value data reflect landed, duty-paid values.

Note: Official U.S. imports statistics was compiled based on value, quantity data for the HTS statistical reporting numbers 4823.70.0020 and 4823.70.0040, were of mixed units of measure. These statistical reporting numbers include both TMFPs and other out-of-scope molded fiber products such as egg cartons.

Apparent U.S. consumption and market shares

Quantity

Table IV-9 and figure IV-6 present data on apparent U.S. consumption and U.S. market shares, by quantity, for TMFPs. Apparent U.S. consumption increased year to year between 2021 and 2023, ending *** percent higher. The increase in apparent U.S. consumption during this period largely reflects the fluctuating increase in U.S. producers' U.S. shipments from 2021 to 2023 and the yearly increases in subject and nonsubject imports during 2021 to 2023.[18] Apparent U.S. consumption was *** higher in interim 2024 than in interim 2023, reflecting increases in imports from China and nonsubject sources.

[18] For more detailed discussion on the trends in U.S. producers' U.S. shipments, see Part III and for more detailed discussion on trends in subject and nonsubject imports, see the section above entitled "U.S. imports."

Table IV-9
TMFPs: Apparent U.S. consumption and market shares based on quantity, by source and period

Quantity in 1,000 pounds; Shares in percent

Source	Measure	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
U.S. producers	Quantity	***	***	***	***	***
China	Quantity	***	***	***	***	***
Vietnam	Quantity	***	***	***	***	***
Subject sources	Quantity	151,703	170,663	182,798	89,323	103,455
Nonsubject sources	Quantity	11,811	16,134	18,941	8,620	10,153
All import sources	Quantity	163,514	186,797	201,739	97,943	113,608
All sources	Quantity	***	***	***	***	***
U.S. producers	Share	***	***	***	***	***
China	Share	***	***	***	***	***
Vietnam	Share	***	***	***	***	***
Subject sources	Share	***	***	***	***	***
Nonsubject sources	Share	***	***	***	***	***
All import sources	Share	***	***	***	***	***
All sources	Share	100.0	100.0	100.0	100.0	100.0

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as “---“.Import sources are based on U.S. shipments of imports.

Figure IV-6
TMFPs: Apparent U.S. consumption based on quantity, by source and period

* * * * * * *

Source: Compiled from data submitted in response to Commission questionnaires

U.S. producers' market share decreased in each year between 2021 and 2023, overall decreasing by *** percentage points during 2021 to 2023 and was *** percentage points lower in interim 2024 than in interim 2023. The market share of U.S. shipments of imports from China fluctuated, increasing by *** percentage points from 2021 to 2022, decreasing by *** percentage points from 2022 to 2023, overall increasing by *** percentage points, and was *** percentage points higher in interim 2024 than in interim 2023. The market share of U.S. shipments of imports from Vietnam increased in each year during 2021 to 2023, overall increasing by *** percentage points during 2021 to 2023 but was *** percentage points lower in interim 2024 than in interim 2023. Overall, the market share of U.S. shipments of subject imports increased in each year, ending *** percentage points higher in 2023 than in 2021 and was *** percentage points higher in interim 2024 than in interim 2023. The market share of imports from nonsubject sources also increased in each year, overall increasing by *** percentage points and was *** percentage points higher in interim 2024 compared to interim 2023.

Value

Table IV-10 and figure IV-7 present data on apparent U.S. consumption and U.S. market shares, by value, for TMFPs. Apparent U.S. consumption increased in each year, increasing overall by *** percent during 2021 and 2023. The increase in the value of apparent U.S. consumption during 2021 to 2023 largely reflects the increase in U.S. producers' U.S. shipments and the increase in U.S. shipments of subject imports during that period. Apparent U.S. consumption was *** percent lower in interim 2024 compared to interim 2023 similarly reflecting the decline in U.S. producers' U.S. shipments during the interim period.

Table IV-10
TMFPs: Apparent U.S. consumption and market shares based on value, by source and period

Value in 1,000 dollars; shares in percent

Source	Measure	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
U.S. producers	Value	***	***	***	***	***
China	Value	***	***	***	***	***
Vietnam	Value	***	***	***	***	***
Subject sources	Value	325,182	424,741	396,629	204,346	209,489
Nonsubject sources	Value	19,761	29,938	33,267	13,600	17,361
All import sources	Value	344,943	454,679	429,896	217,946	226,850
All sources	Value	***	***	***	***	***
U.S. producers	Share	***	***	***	***	***
China	Share	***	***	***	***	***
Vietnam	Share	***	***	***	***	***
Subject sources	Share	***	***	***	***	***
Nonsubject sources	Share	***	***	***	***	***
All import sources	Share	***	***	***	***	***
All sources	Share	100.0	100.0	100.0	100.0	100.0

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---". Import sources are based on U.S. shipments of imports.

Figure IV-7
TMFPs: Apparent U.S. consumption based on value, by source and period

* * * * * * *

Source: Compiled from data submitted in response to Commission questionnaires

U.S. producers' market share fluctuated year to year, decreasing from 2021 to 2022 then increasing from 2022 to 2023, ending *** percentage points lower in 2023 than in 2021, and was *** percentage points lower in interim 2024 than in interim 2023. The market share of U.S. shipments of imports from China fluctuated year to year, increasing by *** percentage points from 2021 to 2022, decreasing by *** percentage points from 2022 to 2023, decreasing overall by *** percentage points during 2021 to 2023, and was *** percentage points higher in interim 2024 than in interim 2023. The market share of U.S. shipments of imports from Vietnam increased in each year, overall increasing by *** percentage points and was *** percentage points lower in interim 2024 compared to interim 2023. Overall, the market share of U.S. shipments of subject imports fluctuated year to year, ending *** percentage points higher in 2023 than in 2021 and was *** percentage points higher in interim 2024 compared to interim 2023. The market share of U.S. shipments of imports from nonsubject sources increased by *** percentage points from 2021 to 2023 and was also *** percentage points higher in interim 2024 compared to interim 2023.

Part V: Pricing data

Factors affecting prices

Raw material costs

The major raw material in the production of TMFPs is fibrous pulp from plant products. The weight of the fiber used to produce TMFPs varies based on the specification of the item being produced, and different producers may produce the same item with different weights.[1] Domestic producers either purchase pulp or produce their own from plant products such as grasses, wheat straw, or sugarcane (bagasse);[2] but TMFPs could also be made using pulp from bamboo, wood, recycled fibers, hemp, rice straw, or other byproducts or wastes.[3] Different blends of plant biomass can produce different characteristics of the thermoformed molded fiber products and the type of pulp used, and whether it is purchased or grown by the TMFP producer, may be selected based on economic decisions and the desire to keep the TMFP plant capacity filled.[4] Other ancillary raw materials used in the production of TMFPs include items like coatings or chemicals. Raw materials accounted for *** percent of the cost of goods sold in 2021 and decreased irregularly to *** percent in 2023.

Transportation costs to the U.S. market

Transportation costs for TMFPs shipped from subject countries to the United States averaged 10.6 percent for China and 9.1 percent for Vietnam during 2023. These estimates were derived from official import data and represent the transportation and other charges on imports in two HTS statistical reporting numbers that include other out-of-scope product.[5]

[1] Respondent's postconference brief, p. 17.
[2] Conference transcript, pp. 23 (Serafini), 113 (Tiller), and 175 (Davidson).
[3] Petition, p. 11.
[4] Conference transcript, p. 79 (Tiller).
[5] The estimated transportation costs were obtained by subtracting the customs value from the c.i.f. value of the imports for 2023 and then dividing by the customs value based on the HTS statistical reporting numbers 4823.70.0020 and 4823.70.0040.

U.S. inland transportation costs

Five of 7 responding U.S. producers and 25 of 29 responding importers reported that they typically arrange transportation to their customers. U.S. producers reported that their U.S. inland transportation costs ranged from 2.6 to 7.0 percent while importers reported costs averaging 8.2 percent, with 16 importers noting costs were below 10 percent, and 11 noting costs of between 10 and 20 percent.

Pricing practices

Pricing methods

U.S. producers and importers reported setting prices using transaction-by-transaction negotiations, contracts, and price lists (table V-1). One importer (***) reported using a cost-plus pricing methodology.

Table V-1
TMFPs: Count of U.S. producers' and importers' reported price setting methods

Method	U.S. producers	Importers
Transaction-by-transaction	4	13
Contract	4	16
Set price list	6	18
Other	0	1
Responding firms	7	29

Source: Compiled from data submitted in response to Commission questionnaires.

Note: The sum of responses down may not add up to the total number of responding firms as each firm was instructed to check all applicable price setting methods employed.

U.S. producers and importers reported selling the around half of their TMFPs via long-term contracts (table V-2). The next largest share was sold via short-term contracts for the U.S. producers and on the spot market for the importers.

Table V-2
TMFPs: U.S. producers' and importers' shares of commercial U.S. shipments by type of sale, 2023

Share in percent

Type of sale	U.S. producers	Subject importers
Long-term contracts	46.7	50.7
Annual contracts	5.2	12.2
Short-term contracts	32.4	2.7
Spot sales	15.8	34.4
Total	100.0	100.0

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Because of rounding, figures may not add to the totals shown.

U.S. producers reported that their contracts fixed prices or both prices and quantities. All four responding producers did not allow for price renegotiations in long-term and/or annual contracts, and two of three do not allow for them in short-term contracts. Three of four producers index long-term contract to raw material prices, as do one of two using annual contracts, but short-term contract prices were not noted to be indexed to raw material prices for the two responding producers using them. In contrast, a slight majority of responding importers reported that all contract pricing could be re-negotiated for all contract lengths. All 15 responding importers noted that contracts fixed prices, with slightly fewer fixing quantities in addition prices than the number that just fix prices. A majority of importers do not index prices to raw material cost, no matter the contract length.

Sales terms and discounts

Four of 7 responding U.S. producers and 19 of 29 responding importers typically quote prices on a delivered basis. Fourteen of 29 importers also reported typically quoting prices on an f.o.b. basis. Five of seven U.S. producers reported they offer discounts of some sort: four offer total volume discounts, three offer quantity discounts, and one offers "temporary discount funding for consumer promotions at retail customers." Most responding importers (16 of 28) reported they have no discount policy, though 9 reported offering quantity discounts, 8 reported offering total volume discounts, and 5 reported offering other discounts.

Price data

The Commission requested U.S. producers and importers to provide quarterly data for the total quantity and f.o.b. value of the following TMFP products shipped to unrelated U.S. customers during January 2021 to June 2024.

Product 1.-- 8.75”-9.25” round molded fiber plate, of any color or weight, without compartments.

Product 2.-- 9” x 9” molded fiber “clamshell” container, with an attached hinged lid, of any color or weight, with or without compartments.

Product 3.-- 6” x 6” molded fiber “clamshell” container, with an attached hinged lid, of any color or weight, with or without compartments.

Product 4.—8”-8.75” x 5.6”-6.5” rectangular molded fiber tray, of any color or weight, with or without compartments.

All 7 U.S. producers and 25 importers provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.[6] Pricing data reported by these firms accounted for approximately *** percent of the value of U.S. producers’ commercial U.S. shipments of TMFPs, *** percent of the value of U.S. commercial U.S. shipments of products imported from China, and *** percent of the value of U.S. commercial U.S. shipments of products imported from Vietnam.[7] Price data for products 1-4 are presented in tables V-3 to V-6 and figures V-1 to V-4.

[6] Per-unit pricing data are calculated from total quantity and total value data provided by U.S. producers and importers. The precision and variation of these figures may be affected by rounding, limited quantities, and producer or importer estimates.

[7] Pricing coverage is based on U.S. shipments reported in questionnaires. Coverage is calculated based on value since trade data were collected by weight whereas price data were collected by 1,000s of pieces.

Table V-3
TMFPs: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 and margins of underselling/(overselling), by source and quarter

Price in dollars per 1,000 pieces, quantity in 1,000 pieces, margin in percent.

Period	U.S. price	U.S. quantity	China price	China quantity	China margin	Vietnam price	Vietnam quantity	Vietnam margin
2021 Q1	***	***	79.76	82,571	***	***	***	***
2021 Q2	***	***	75.12	95,173	***	***	***	***
2021 Q3	***	***	80.16	157,311	***	***	***	***
2021 Q4	***	***	85.03	144,387	***	***	***	***
2022 Q1	***	***	94.23	165,862	***	***	***	***
2022 Q2	***	***	101.29	156,916	***	***	***	***
2022 Q3	***	***	103.17	186,189	***	***	***	***
2022 Q4	***	***	96.89	188,964	***	***	***	***
2023 Q1	***	***	98.33	154,953	***	***	***	***
2023 Q2	***	***	88.50	171,570	***	***	***	***
2023 Q3	***	***	82.83	182,888	***	***	***	***
2023 Q4	***	***	75.99	174,956	***	***	***	***
2024 Q1	***	***	68.30	207,250	***	***	***	***
2024 Q2	***	***	67.85	205,468	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Product 1: 8.75”-9.25” round molded fiber plate, of any color or weight, without compartments.
Note: ***.

Table V-4
TMFPs: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 and margins of underselling/(overselling), by source and quarter

Price in dollars per 1,000 pieces, quantity in 1,000 pieces, margin in percent.

Period	U.S. price	U.S. quantity	China price	China quantity	China margin	Vietnam price	Vietnam quantity	Vietnam margin
2021 Q1	***	***	192.06	71,933	***	***	***	***
2021 Q2	***	***	186.82	70,824	***	***	***	***
2021 Q3	***	***	213.27	76,684	***	***	***	***
2021 Q4	***	***	214.98	67,468	***	***	***	***
2022 Q1	***	***	222.83	79,934	***	***	***	***
2022 Q2	***	***	245.83	70,216	***	***	***	***
2022 Q3	***	***	254.43	72,328	***	***	***	***
2022 Q4	***	***	252.11	60,441	***	***	***	***
2023 Q1	***	***	241.62	46,125	***	***	***	***
2023 Q2	***	***	215.77	54,655	***	***	***	***
2023 Q3	***	***	201.52	56,765	***	***	***	***
2023 Q4	***	***	186.47	55,865	***	***	***	***
2024 Q1	***	***	156.92	69,173	***	***	***	***
2024 Q2	***	***	173.36	61,401	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Product 2: 9” x 9” molded fiber “clamshell” container, with an attached hinged lid, of any color or weight, with or without compartments.
Note: ***.

Table V-5
TMFPs: Weighted-average f.o.b. prices and quantities of domestic and imported product 3 and margins of underselling/(overselling), by source and quarter

Price in dollars per 1,000 pieces, quantity in 1,000 pieces, margin in percent.

Period	U.S. price	U.S. quantity	China price	China quantity	China margin	Vietnam price	Vietnam quantity	Vietnam margin
2021 Q1	***	***	93.76	54,170	***	***	***	***
2021 Q2	***	***	95.49	55,652	***	***	***	***
2021 Q3	***	***	100.35	54,722	***	***	***	***
2021 Q4	***	***	104.54	48,549	***	***	***	***
2022 Q1	***	***	113.75	62,742	***	***	***	***
2022 Q2	***	***	115.01	62,894	***	***	***	***
2022 Q3	***	***	119.43	60,007	***	***	***	***
2022 Q4	***	***	118.05	52,938	***	***	***	***
2023 Q1	***	***	119.50	46,860	***	***	***	***
2023 Q2	***	***	108.93	59,087	***	***	***	***
2023 Q3	***	***	101.25	57,226	***	***	***	***
2023 Q4	***	***	97.94	59,347	***	***	***	***
2024 Q1	***	***	83.62	61,473	***	***	***	***
2024 Q2	***	***	83.44	65,579	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Product 3: 6” x 6” molded fiber “clamshell” container, with an attached hinged lid, of any color or weight, with or without compartments.

Table V-6
TMFPs: Weighted-average f.o.b. prices and quantities of domestic and imported product 4 and margins of underselling/(overselling), by source and quarter

Price in dollars per 1,000 pieces, quantity in 1,000 pieces, margin in percent.

Period	U.S. price	U.S. quantity	China price	China quantity	China margin	Vietnam price	Vietnam quantity	Vietnam margin
2021 Q1	***	***	76.38	3,386	***	***	***	***
2021 Q2	***	***	72.38	4,084	***	***	***	***
2021 Q3	***	***	109.90	2,432	***	***	***	***
2021 Q4	***	***	88.47	2,993	***	***	***	***
2022 Q1	***	***	124.12	1,978	***	***	***	***
2022 Q2	***	***	70.95	2,487	***	***	***	***
2022 Q3	***	***	105.10	2,370	***	***	***	***
2022 Q4	***	***	108.52	1,377	***	***	***	***
2023 Q1	***	***	105.88	1,273	***	***	***	***
2023 Q2	***	***	86.03	1,770	***	***	***	***
2023 Q3	***	***	79.38	3,609	***	***	***	***
2023 Q4	***	***	84.77	3,594	***	***	***	***
2024 Q1	***	***	104.60	2,986	***	***	***	***
2024 Q2	***	***	72.48	3,963	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Product 4: 8”-8.75” x 5.6”-6.5” rectangular molded fiber tray, of any color or weight, with or without compartments.
Note: ***.
Note: Data reported by ***.

Figure V-1
TMFPs: Weighted-average f.o.b. prices and quantities of domestic and imported product 1, by source and quarter

Price of product 1

* * * * * * *

Volume of product 1

* * * * * * *

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Product 1: 8.75”-9.25” round molded fiber plate, of any color or weight, without compartments.

Figure V-2
TMFPs: Weighted-average f.o.b. prices and quantities of domestic and imported product 2, by source and quarter

Price of product 2

* * * * * * *

Volume of product 2

* * * * * * *

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Product 2: 9” x 9” molded fiber “clamshell” container, with an attached hinged lid, of any color or weight, with or without compartments.

Figure V-3
TMFPs: Weighted-average f.o.b. prices and quantities of domestic and imported product 3, by source and quarter

Price of product 3

Volume of product 3

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Product 3: 6” x 6” molded fiber “clamshell” container, with an attached hinged lid, of any color or weight, with or without compartments.

Figure V-4
TMFPs: Weighted-average f.o.b. prices and quantities of domestic and imported product 4, by source and quarter

Price of product 4

* * * * * * *

Volume of product 4

* * * * * * *

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Product 4: 8”-8.75” x 5.6”-6.5” rectangular molded fiber tray, of any color or weight, with or without compartments.

Price trends

As seen in figures V-1 through V-4, prices for products 1 to 3 generally increased from the first quarter of 2021 until the second half of 2022 before starting to decline. Petitioners argued that at that point subject imports "flooded the market" which changed pricing levels.[8] Table V-7 summarizes the price trends, by country and by product. As shown in the table, prices increased during January 2021 to June 2024 for three of four domestic price products, ranging from 9.4 to 39.0 percent. Prices for TMFPs imported from China decreased for all four products, with decreases ranging from (5.1) to (14.9) percent. Prices for product from Vietnam decreased for three of the four products with decreases larger than those for product imported from China, and ranging from (17.3) to (35.9) percent. TMFPs imported from Vietnam had much lower volumes than TMFPs produced domestically or imported from China.

Table V-7
TMFPs: Summary of price data, by product and source, January 2021 to June 2024

Quantity in 1,000 pieces, price in dollars per 1,000 pieces

Product	Source	Number of quarters	Quantity of shipments	Low price	High price	First quarter price	Last quarter price	Percent change in price over period
Product 1	United States	14	***	***	***	***	***	22.6
Product 1	China	14	2,274,458	67.85	103.17	79.76	67.85	(14.9)
Product 1	Vietnam	14	***	***	***	***	***	(17.3)
Product 2	US	14	***	***	***	***	***	9.4
Product 2	China	14	913,812	156.92	254.43	192.06	173.36	(9.7)
Product 2	Vietnam	14	***	***	***	***	***	(35.9)
Product 3	US	14	***	***	***	***	***	39.0
Product 3	China	14	801,246	83.44	119.50	93.76	83.44	(11.0)
Product 3	Vietnam	14	***	***	***	***	***	1.8
Product 4	US	14	***	***	***	***	***	(7.7)
Product 4	China	14	38,302	70.95	124.12	76.38	72.48	(5.1)
Product 4	Vietnam	14	***	***	***	***	***	(28.4)

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Percent change column is percentage change from the first quarter in which there is data in 2021 to last quarter in which there is data in the among the last four quarters in the period. Percentage changes are not presented for series without data meeting these criteria.

[8] Petitioners' postconference brief, exh. 1, p. 12.

Price comparisons

As shown in tables V-8 to V-10, prices for product imported from subject countries were below those for U.S.-produced product in 77 of 112 instances (*** TMFPs); margins of underselling ranged from *** to *** percent, averaging *** percent. In the remaining 35 instances (*** TMFPs), prices for product from subject countries were between *** and *** percent above prices for the domestic product, averaging *** percent. Underselling mostly occurred for products 2, 3, and 4, and overselling occurred primarily in product 1 (table V-8). Product 1 imported from China oversold domestic product in all but the last quarter and was the highest volume pricing product. This contributed to the larger proportion of volumes of imported product underselling domestic product despite fewer quarters of underselling. Overall, imports from China undersold domestic product in 29 of 56 quarters (table V-9). Product from Vietnam undersold domestic product in 48 of 56 available quarters. The highest incidence of underselling occurred later in the period (table V-10). Imported product undersold domestic product in more quarters of comparison than oversold domestic product in each year. In 2022, however, the frequency of underselling was the lowest. In 2023 and interim 2024, imported product undersold domestic product in at last three-fourths of comparisons.

Table V-8
TMFPs: Instances of underselling and overselling and the range and average of margins, by product

Quantity in 1,000 pieces; margin in percent

Product	Type	Number of quarters	Quantity	Average margin	Min margin	Max margin
Product 1	Underselling	8	***	***	***	***
Product 2	Underselling	24	***	***	***	***
Product 3	Underselling	25	***	***	***	***
Product 4	Underselling	20	***	***	***	***
Total, all products	Underselling	77	***	***	***	***
Product 1	Overselling	20	***	***	***	***
Product 2	Overselling	4	***	***	***	***
Product 3	Overselling	3	***	***	***	***
Product 4	Overselling	8	***	***	***	***
Total, all products	Overselling	35	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Note: These data include only quarters in which there is a comparison between the U.S. and subject product.

Table V-9
TMFPs: Instances of underselling and overselling and the range and average of margins, by source

Quantity in 1,000 pieces; margin in percent

Source	Type	Number of quarters	Quantity	Average margin	Min margin	Max margin
China	Underselling	29	1,499,206	9.1	0.2	26.8
Vietnam	Underselling	48	***	***	***	***
All subject sources	Underselling	77	***	***	***	***
China	Overselling	27	2,528,612	(29.9)	(1.0)	(72.0)
Vietnam	Overselling	8	***	***	***	***
All subject sources	Overselling	35	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Note: These data include only quarters in which there is a comparison between the U.S. and subject product.

Table V-10
TMFPs: Instances of underselling and overselling and the range and average of margins, by year

Quantity in 1,000 pieces; margin in percent

Year	Type	Number of quarters	Quantity	Average margin	Min margin	Max margin
2021	Underselling	21	***	***	***	***
2022	Underselling	17	***	***	***	***
2023	Underselling	25	***	***	***	***
2024	Underselling	14	***	***	***	***
Total, all years	Underselling	77	***	***	***	***
2021	Overselling	11	***	***	***	***
2022	Overselling	15	***	***	***	***
2023	Overselling	7	***	***	***	***
2024	Overselling	2	***	***	***	***
Total, all years	Overselling	35	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Note: These data include only quarters in which there is a comparison between the U.S. and subject product.

Lost sales and lost revenue

The Commission requested that U.S. producers of TMFPs report purchasers with which they experienced instances of lost sales or revenue due to competition from imports of TMFPs from subject countries during January 2021 to June 2024. Three of six responding U.S. producers reported that they had to reduce prices and one of six reported it had to roll back announced price increases due to subject imports. Four of six responding firms reported that they had lost sales to subject imports. Three U.S. producers submitted lost sales and lost revenue allegations. The three responding U.S. producers identified 25 firms with which they lost sales or revenue (2 consisting of a lost sales allegation, 6 consisting of lost revenue allegations, and 20 consisting of both types of allegations). Most allegations specified that the sales or revenues were lost with respect to China, but three specified China and Vietnam.

Staff contacted 23 purchasers and received usable responses from 12 purchasers.[9] Responding purchasers reported purchasing or importing 205 million pounds of TMFPs during January 2021 to June 2024 (table V-11).

During 2023, responding firms purchased or imported 14.6 percent of their TMFPs from U.S. producers, 84.7 percent from subject sources, and 0.7 percent from "unknown source" countries on a quantity basis. The share of purchases and imports from subject sources decreased from 87.0 percent of total purchases and imports in 2021 to 84.7 percent in 2023.

[9] In addition, one firm which received a purchaser questionnaire responded with an importer questionnaire instead.

Table V-11
TMFPs: Purchasers' reported purchases and imports, by firm and source

Quantity in 1,000 pounds, share in percent

Purchaser	Domestic quantity	Subject quantity	All other quantity	Change in domestic share	Change in subject country share
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All firms	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Note: All other includes all other sources and unknown sources. Change is the percentage point change in the share of the firm's total purchases of domestic and/or subject country imports between first and last years.

Purchasers were asked about changes in their purchasing patterns from different sources since 2021 (table V-12). Of the responding purchasers, 5 reported decreasing purchases from domestic producers (2 fluctuating but ending lower and 3 steadily decreasing), 1 reported steadily increasing purchases, and 4 reported no change. Explanations for decreasing purchases of domestic product included: cost, material, and color; supplier went out of business; "no product available from the USA. The {t}raditional USA factories are also importing as well;" pricing pressure, and "moved purchases to Chinese supplier." The explanation given for increasing purchases of domestic product was, "Better supply on domestic supply; pandemic shortages and availability." Two purchasers noted reasons for reporting no changes in their domestic purchases: "repeat annuity purchases" and "We have started purchasing from a US provider as of mid-year and expect this to increase substantially."

Seven purchasers reported decreasing purchases from China and four reported increasing purchases. Three purchasers gave reasons for increasing purchases from China including pricing pressure, a new menu product, and a customer sales increase. Among the purchasers reporting decreasing purchases from China, they noted changes in demand, the loss

of a customer, worse supply, business demand, and that sales have decreased since 2021 which was characterized by pandemic-related demand. No reasons were given for changes in purchases from Vietnam.

Table V-12
TMFPs: Count of purchasers' responses regarding changes in purchase patterns from U.S., subject, and nonsubject countries

Source of purchases	Steadily increase	Fluctuate higher	No change	Fluctuate lower	Steadily decrease	Did not purchase
United States	1	0	4	2	3	0
China	3	1	1	2	5	0
Vietnam	1	0	2	0	0	2
Nonsubject sources	0	0	2	0	1	2
Sources unknown	0	0	3	2	0	0

Source: Compiled from data submitted in response to Commission questionnaires.

Of the 12 responding purchasers, 10 reported that, since 2021, they had purchased imported TMFPs from China instead of U.S.-produced product, but none of the 8 responding purchasers had purchased TMFPs from Vietnam instead of U.S.-produced product. Nine of the ten purchasers that bought Chinese-origin product reported that subject import prices were lower than U.S.-produced product, and eight reported that price was a primary reason for the decision to purchase imported product rather than U.S.-produced product. These three purchasers estimated the quantity of TMFPs from subject countries purchased instead of domestic product; quantities ranged from *** pounds[10] of TMFPs to *** pounds of TMFPs (tables V-13 and V-14). Purchasers that purchased TMFPs from subject countries instead of domestic product for reasons other than price identified the reasons as domestic lack of available specifications, lead times, lack of domestic capacity, and lack of tooling availability domestically.

Half (3 of 6) of the responding purchasers reported that U.S. producers had reduced prices in order to compete with lower-priced imports from China and neither of the two responding purchasers indicated that domestic prices decreased to compete with imports from Vietnam (table V-15). On average, the three purchasers noted price reductions averaging 18.7 percent. Purchaser *** stated that price reductions have "been done multiple times but {it does} not have the exact timing as it is typically in response to unfavorable pricing we see via websites such as webstaurantstore.com and others." Purchaser *** stated that the decrease was from a price proposal in *** to a price proposal in ***.

[10] Purchasers were asked to provide data in pounds rather than pieces to align with the method of data collection in Parts III and IV of this report.

Table V-13
TMFPs: Purchasers' responses to purchasing subject imports instead of domestic product, by firm

Quantity in 1,000 pounds

Purchaser	Purchased subject imports instead of domestic	Imports priced lower	Choice based on price	Quantity	Explanation
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All firms	Yes--10; No--2	Yes--9; No--1	Yes--8; No--2	***	n/a

Source: Compiled from data submitted in response to Commission questionnaires.

Table V-14
TMFPs: Purchasers' responses to purchasing subject imports instead of domestic product, by source

Quantity in 1,000 pounds

Source	Count of purchasers reporting subject instead of domestic	Count of purchasers reporting that imports were priced lower	Count of purchasers reporting that price was a primary reason for shift	Quantity
China	10	9	8	***
Vietnam	---	---	---	***
Subject sources	10	9	8	***

Source: Compiled from data submitted in response to Commission questionnaires.

Table V-15
TMFPs: Purchasers' responses to U.S. producer price reductions, by firm

Purchaser	Reported producers lowered prices due to any subject country imports	Estimated reduction in U.S. prices (percent)
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
All firms	Yes--3; No--4	18.7

Source: Compiled from data submitted in response to Commission questionnaires.

Part VI: Financial experience of U.S. producers

Background[1]

Seven U.S producers (Dart, Genera, Huhtamaki, Kanbol, Pactiv, Reynolds, and Tellus) reported financial results on their U.S. TMFP operations. Huhtamaki, Pactiv, and Reynolds are part of publicly traded companies,[2] while the remaining U.S. producers are privately held. The financial results reported to the Commission are based on information from accounting systems designed to generate/report overall financial results on the basis of IFRS and U.S. GAAP.[3]

Figure VI-1 presents each responding firm's share of the total reported net sales quantity in 2023.

Figure VI-1
TMFPs: U.S. producers' share of net sales quantity in 2023, by firm

* * * * * * *

Source: Compiled from data submitted in response to Commission questionnaires.

Note: *** did not have sales prior to January-June 2024 and is therefore not included in figure VI-1.

[1] The following abbreviations are used in the tables and/or text of this section: generally accepted accounting principles ("GAAP"), international financial reporting standards ("IFRS"), fiscal year ("FY"), net sales ("NS"), cost of goods sold ("COGS"), selling, general, and administrative expenses ("SG&A expenses"), average unit values ("AUVs"), research and development expenses ("R&D expenses"), and return on assets ("ROA").

[2] Huhtamaki includes U.S. TMFP operations in its North America business segment. Huhtamaki 2023 Annual Report, p. 10. Pactiv Evergreen (the parent company of Pactiv) includes its U.S. TMFP operations in its Foodservice business segment. Pactiv Evergreen 2023 10-k, p. 1. Reynolds includes U.S. TMFP operations in its Hefty Tableware business segment. Reynolds 2023 10-K, p. 6.

[3] *** U.S. producer to report its financial results on the basis of IFRS; the other U.S. producers reported their financial results on the basis of U.S. GAAP. *** U.S. producer questionnaires, section III.2.B.4. All U.S. producers reported their annual financial results on a calendar year basis.

New entrants Dart, Genera, and Kanbol reported activity related to start-up and sales during parts of the period; company-specific start-up activity reflecting distinct phases,[4] [5] and in some instances extensions/delays.[6] Having entered the market several years prior to the beginning of the period, Tellus replaced its original TMFP manufacturing equipment during the period.[7] The remaining U.S. producers (Huhtamaki, Pactiv, and Reynolds) are longer-term manufactures.

Operations on TMFPs

Table VI-1 and table VI-2 present income-and-loss data for the U.S. producers' TMFPs and corresponding changes in AUVs, respectively.[8] Appendix E presents selected company-specific financial information. Note: As it relates to the financial results of new entrants

[4] ***. Email with attachment from ***, November 1, 2024.

[5] ***. Email with attachment from ***, October 28, 2024.

[6] ***. Email from ***, October 31, 2024.

[7] Tellus began construction of its Belle Glade, Florida facility in 2018, beginning operations with equipment purchased from a third party. Tellus subsequently developed its own molding machines, which were installed during 2021-23. Conference transcript, pp. 69-70. ***. Email with attachment from ***, November 5, 2024.

[8] The Commission's variance analysis is more meaningful when product mix remains the same throughout the period. While the impact of changes in TMFP product mix appears limited (see *Net sales* section below), the start-up nature of some operations during the period impact comparability of unit costs/expenses. As a result and because its utility appears limited, a variance analysis is not presented.

specifically, the Commission's general practice, as reflected in the staff report, is to exclude reported costs/expenses from the industry's financial results when no corresponding sales are reported.[9]

Table VI-1
TMFPs: U.S. producers' results of operations, by item and period

Quantity in 1,000 pounds; value in 1,000 dollars; ratios in percent

Item	Measure	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Total net sales	Quantity	***	***	***	***	***
Total net sales	Value	***	***	***	***	***
COGS: Raw materials	Value	***	***	***	***	***
COGS: Direct labor	Value	***	***	***	***	***
COGS: Other factory	Value	***	***	***	***	***
COGS: Total	Value	***	***	***	***	***
Gross profit or (loss)	Value	***	***	***	***	***
SG&A expenses	Value	***	***	***	***	***
Operating income or (loss)	Value	***	***	***	***	***
Interest expense	Value	***	***	***	***	***
All other expenses	Value	***	***	***	***	***
All other income	Value	***	***	***	***	***
Net income or (loss)	Value	***	***	***	***	***
Depreciation/amortization expense included above	Value	***	***	***	***	***
Estimated cash flow from operations	Value	***	***	***	***	***
COGS: Raw materials	Ratio to NS	***	***	***	***	***
COGS: Direct labor	Ratio to NS	***	***	***	***	***
COGS: Other factory	Ratio to NS	***	***	***	***	***
COGS: Total	Ratio to NS	***	***	***	***	***
Gross profit or (loss)	Ratio to NS	***	***	***	***	***
SG&A expenses	Ratio to NS	***	***	***	***	***
Operating income or (loss)	Ratio to NS	***	***	***	***	***
Net income or (loss)	Ratio to NS	***	***	***	***	***

Table continued.

[9] For financial reporting purposes there are valid instances (e.g., during start-up operations) when no sales are reported and only costs/expenses incurred. The Commission, however, generally limits the financial results evaluated to periods when at least some level of sales have been generated that can be matched against relevant costs/expenses. This approach attempts to maximize instances when the matching principle is reflected in the financial results evaluated by the Commission and minimize instances when it is not. Note: The matching principle is an accounting principle that requires businesses to record expenses in the same period as the revenues they generate. It is a key part of GAAP and accrual basis accounting.

Table VI-1 Continued
TMFPs: U.S. producers' results of operations, by item and period

Shares in percent; unit values in dollars per pound; count in number of firms reporting

Item	Measure	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
COGS: Raw materials	Share of COGS	***	***	***	***	***
COGS: Direct labor	Share of COGS	***	***	***	***	***
COGS: Other factory	Share of COGS	***	***	***	***	***
COGS: Total	Share of COGS	***	***	***	***	***
Total net sales	Unit value	***	***	***	***	***
COGS: Raw materials	Unit value	***	***	***	***	***
COGS: Direct labor	Unit value	***	***	***	***	***
COGS: Other factory	Unit value	***	***	***	***	***
COGS: Total	Unit value	***	***	***	***	***
Gross profit or (loss)	Unit value	***	***	***	***	***
SG&A expenses	Unit value	***	***	***	***	***
Operating income or (loss)	Unit value	***	***	***	***	***
Net income or (loss)	Unit value	***	***	***	***	***
Operating losses	Count	***	***	***	***	***
Net losses	Count	***	***	***	***	***
Data	Count	4	5	6	5	7

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table VI-2
TMFPs: Changes in AUVs between comparison periods

Changes in percent

Item	2021-23	2021-22	2022-23	Jan-Jun 2023-24
Total net sales	***	***	***	***
COGS: Raw materials	***	***	***	***
COGS: Direct labor	***	***	***	***
COGS: Other factory	***	***	***	***
COGS: Total	***	***	***	***

Table continued.

Table VI-2 Continued
TMFPs: Changes in AUVs between comparison periods

Changes in dollars per pound

Item	2021-23	2021-22	2022-23	Jan-Jun 2023-24
Total net sales	***	***	***	***
COGS: Raw materials	***	***	***	***
COGS: Direct labor	***	***	***	***
COGS: Other factory	***	***	***	***
COGS: Total	***	***	***	***
Gross profit or (loss)	***	***	***	***
SG&A expenses	***	***	***	***
Operating income or (loss)	***	***	***	***
Net income or (loss)	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Period changes preceded by a "▲" represent an increase, while period changes preceded by a "▼" represent a decrease.

Net sales

The U.S. industry's TMFP net sales primarily reflect U.S. commercial sales, ranging from *** percent of total net sales (2021) to *** percent (January-June 2023). The remainder of total net sales is accounted for by transfer sales to related firms, ranging from *** percent of total net sales (January-March 2023) to *** percent (2021).[10] Given the predominance of U.S. commercial sales, a single line item for sales is presented in the relevant tables above.

Quantity

The U.S. industry's total TMFP net sales volume increased in 2022 and 2023 and was lower in January-June 2024 compared to January-June 2023. As shown in table E-1, the company-specific pattern of net sales volume was directionally mixed for established U.S. producers (i.e., those reporting net sales throughout the period) ***: *** net sales volume declining throughout the period, *** increasing, *** increasing during the full-year period followed by a decline between the interim periods, *** increasing in 2022, declining in 2023, and lower between the

[10] ***. Email from ***, October 31, 2024.

interim periods. New entrant ***, reported a decline in net sales volume in 2023, and higher net sales volume in January-June 2024 compared to January-June 2023. The other new entrants (***) reported minimal net sales volume: *** in 2023 and January-June 2024; (***) in January-June 2024.

Value

On a company-specific basis, most U.S. producers reported increasing total net sales value during the full-year period; the exception being ***, which, in conjunction with a decline in net sales volume, reported a decline in net sales value in 2023. Between the interim periods, the longer-term established manufacturers (***) all reported lower total net sales values, largely attributable to lower net sales volume and to a lesser extent lower average per-pound net sales value. *** was the exception inasmuch as its average per-pound net sales value was somewhat higher between the interim periods. In contrast, smaller volume U.S. producers reported higher net sales value (***) between the interim periods; (***) reporting their first interim period sales in January-June 2024.[11]

Table E-1 shows that company-specific average per-pound net sales values were in a broadly similar range; differences presumably reflecting factors such as product mix and the wide range of TMFP shapes (standard and customized).[12] [13]

Most U.S. producers reported the same directional pattern of increasing average per-pound net sales value during the full-year period but were more directionally mixed between the interim periods. Without specifying the impact on average per-pound sales value, Genera indicated that its TMFP product mix changed over the period as its capabilities increased in conjunction with machinery additions.[14] Tellus indicated that, while the product mix of underlying shapes/products varied during the period, these changes did not substantially impact average per-pound sales value.[15]

[11] New entrants *** had no sales in January-June 2023.

[12] Conference transcript, pp. 46-47 (Tiller, Mokaddem). Conference transcript, p. 49-50 (Mascarello).

[13] Among the longer-term established U.S. producers *** reported both the lowest company-specific average per pound net sales value and COGS (see table E-1).

[14] Conference transcript, p. 66 (Tiller).

[15] Conference transcript, p. 67 (Dermont).

Cost of goods sold and gross profit or loss

As described in Part I of this report, some U.S. producers (***) are integrated in terms of pulp production.[16] While the integrated producers are numerically greater than non-integrated producers, the U.S. industry's cost structure primarily reflects non-integrated production (***) given that group's large share of total net sales. Regardless of integrated versus non-integrated status, TMFP production itself is generally understood to be similar for all U.S. producers.

U.S. producers reported that inputs are sourced primarily from unrelated third parties; *** U.S. producer reporting that it purchased inputs from related suppliers.[17] [18]

Raw material costs

Total raw material cost is the second largest component of COGS, ranging from *** percent of COGS (January-June 2024) to *** percent (2022). Since the cost structure of the

[16] Genera described its business model as reflecting forward integration from the supply of underlying raw material to manufacturing of fiber based products. Conference transcript, p. 9 (Tiller). A Tellus company official described a similar forward integration strategy: "As an integrated operation, fiber is not the limitation at all. Our plan was to manufacture a sustainable value-added product out of the substantial bagasse supply we have, which is a natural, annually renewable, readily accessible resource, commercially prove it in the market, develop the technology, and then build on that." Conference transcript, p. 21 (Mokaddem). On the sales side Tellus' TMFPs also reportedly served as a platform to further utilize existing resources: "From the standpoint of {co-owner} ASR Group, Tellus provided a product line that we could market to existing customers. From the standpoint of Tellus, the ASR sales force could be used to leverage ASR's extensive market penetration to the benefit of Tellus' food packaging products. Through ASR, Tellus has easy access to customer accounts across the entire United States market." Conference transcript, pp. 23-24 (Serafani).

[17] ***. *** U.S. producer questionnaire, sections III-6 and III-7a. ***. Email with attachment from ***, November 5, 2024. ***. Ibid.

[18] ***.

U.S. industry is dominated by non-integrated producers by virtue of their large share of total net sales, the U.S. industry's share of raw material costs to COGS largely reflects purchased pulp.[19] For the integrated producers raw material costs reflect underlying pulp feedstocks, other raw materials, and associated costs.[20] Integrated producer Tellus uses sugar cane bagasse as its primary pulp feedstock, obtained from the Florida Crystals and the Sugar Cane Growers Cooperative (see also footnote 17).[21] In the case of Genera, the primary pulp feedstock is perennial grass.[22] ***, reporting limited TMFP sales in 2023 and January-June 2024, reported that its pulp feedstock is ***. ***, reporting TMFP sales in January-June 2024 only, reported that its feedstock is ***.[23]

Table E-1 shows that there was a relatively wide range of average per-pound raw material costs.[24] While company-specific costs structures (i.e., integrated versus non-integrated) explains at least some of these differences, underlying capacity utilization levels are

[19] ***. Email from ***, October 31, 2024.

[20] For non-integrated producers raw material costs beyond purchased pulp account for a relatively small share of total raw materials costs (*** percent (***), *** percent (***), *** percent (***)). In contrast, integrated producers reported that their other raw material costs account for a relatively large share of total raw material costs (*** percent (***), *** percent (***), *** percent (***), *** (*** percent)). *** U.S. producer questionnaires, section III-9c. Integrated producers' other raw material costs were identified as follows: ***. Ibid. ***. Email with attachment from ***, November 1, 2024.

[21] Conference transcript, p. 23 (Serafini).

[22] Conference transcript, p. 113 (Tiller).

[23] *** U.S. producer questionnaires, section III-9c (note 1).

[24] As noted by a Genera company official, there are differences in pulp quality/cost depending on manufacturing process and end product. Conference transcript, p. 11 (Tiller). As shown in table E-1, *** reported the *** company-specific average per pound raw material cost. Assuming this reflects factors such as differences in underlying product mix, *** relatively low average per pound raw material cost is generally consistent with its average per pound net sales value, which was also the *** on a company-specific basis. As a group non-integrated producers appear to be broadly similar in terms of their raw material cost reflecting primarily *** (see footnote 20).

also a factor.[25] For example new entrant ***, which reported a notable decline in its average per-pound raw material cost, as well as average per-pound direct labor and other factory costs, generally attributed this pattern to ***.[26] In 2023 *** reported a relatively large increase in its average per-pound raw material cost. In that year, *** capacity utilization declined (reflecting lower production and an increased capacity base). The company's 2023 raw material costs also included ***.[27]

Direct labor cost and other factory costs

Direct labor cost and other factory costs are the smallest and largest components of COGS, respectively: direct labor cost ranging from *** percent of COGS (2023) to *** percent (January-June 2024); other factory costs ranging from *** percent of COGS (2021) to *** percent (2023). The relatively high level of other factory costs as a share of COGS (on an overall and company-specific basis) is generally consistent with the capital-intensive nature of the TMFP manufacturing process.[28]

[25] At the Commission's staff conference and with regard to capacity associated with both pulp manufacturing and thermoforming, a Tellus company official stated ". . . it's a very fair assessment to say that it's very hard to run a pulp mill under its capacity utilization efficiently, in a cost efficient way. So you will see the unit economics of the pulp that that pulp mill is producing improve as its capacity utilization increases." Conference transcript, p. 79 (Dermont).

[26] ***. Email from ***, October 31, 2024.

[27] *** U.S. producer questionnaire, section III-10a-b. ***. Email with attachment from ***, November 1, 2024.

[28] Genera and Tellus company officials confirmed that they consider the overall manufacturing process to be capital intensive. Conference transcript, p. 78 (Tiller, Dermont).

Like average per-pound raw material cost, company-specific average per-pound direct labor and other factory costs cover a relatively wide range (see table E-1). The longer-term established manufacturers (***) generally had lower average per-pound direct labor and other factory costs, which appears to reflect factors such as higher levels of capacity utilization and the absence of start-up costs/expenses and related activity.[29] New entrant ***, whose average per-pound direct labor costs and other factory costs were both elevated compared to the longer-term manufacturers, indicated that sales volume was an important factor explaining its average per-pound costs, as opposed to start-up activity alone.[30] Similarly, *** indicated that the level of sales volume and corresponding capacity utilization was a factor impacting its average per-pound costs.[31]

[29] When asked to indicate whether investment/expansion during the period impacted its costs and financial results, ***. Email from ***, October 31, 2024.

[30] ***. Email with attachment from ***, November 1, 2024. As shown in table E-1, *** calculated average per pound COGS was *** per pound in January-June 2024. In response to a staff follow-up question regarding what its average per pound COGS would be at the expected/higher level of capacity utilization, *** reported that its projected COGS at full capacity would be *** per pound. Petitioner's postconference brief (Response to Staff questions, Exhibit 1, p. 58).

[31] In response to a staff follow-up question regarding what its average per pound COGS would be at the expected/higher level of capacity utilization, *** reported that its projected COGS at full capacity would be *** per pound. Petitioner's postconference brief (Response to Staff questions, Exhibit 1, p. 58). ***.

Tooling/molding costs

The physical tooling/molding for specific TMFP shapes/products are primarily sourced from outside parties, as opposed to in-house.[32] To the extent U.S. producers routinely capitalize tooling/molding costs,[33] as opposed to expense them, the depreciation associated with capitalized tooling/molding costs would generally be reflected in COGS as a component of other factory costs. Whether tooling/molding costs are borne directly by the customer or the manufacturer appears to vary.[34] [35] [36]

Byproduct and scrap revenue

U.S. producers vary in terms of whether they generate byproduct and/or scrap revenue in conjunction with their TMFP operations. *** reported that

[32] Conference transcript, p.67 (Mascarello, Mokaddem). ***.
[33] Ibid.
[34] Conference transcript, pp. 169-170 (Davidson), pp. 171-172 (Elfessy).
[35] ***. Email with attachment from ***, November 5, 2024.
[36] ***. Email with attachment from ***, November 5, 2024.

they do not generate byproduct and/or scrap revenue.[37] *** indicated that it has a prospective source of byproduct revenue but that during the period examined it represented a net cost.[38] *** reported that it generates a relatively small amount of net byproduct revenue, related to its pulp production, which was not included in the financial results reported to the Commission.[39] Similarly, *** stated that it is has minimal scrap sales, indicating that the net amounts are immaterial and not included in TMFP financial results.[40]

COGS and gross profit or loss

The U.S. industry's total COGS increased during the full-year period and was lower in January-June 2024 compared to January-June 2023. While reflecting to some extent the impact of higher average per-pound COGS, the overall increase in total COGS during the full-year period primarily reflects higher net sales volume, increasing in 2022 and 2023. Lower COGS

[37] Email from ***, October 31, 2024. Email with attachment from ***, October 28, 2024. ***. Ibid. Email from ***, October 29, 2024. Email from ***, October 31, 2024.

[38] ***. Email with attachment from ***, November 1, 2024.

[39] ***. Email with attachment from ***, November 1, 2024. ***. Email with attachment from ***, November 5, 2024. USITC auditor preliminary-phase notes.

[40] ***. Email from ***, October 31, 2024.

between the interim periods reflects both lower net sales volume and lower average per-pound COGS.

Notwithstanding the increase in total net sales value during the full-year period, the U.S. industry's total gross profit declined irregularly between 2021 and 2023, the rate at which total COGS increased exceeding that of total net sales. On a company-specific basis U.S. producers reported a mixed directional pattern in terms of their gross results: among the longer-term manufacturers *** reporting irregularly declining gross profit, *** reporting increases throughout the period,[41] *** reporting relatively stable gross profit during the full-year period and a decline between the interim periods; Tellus, established several years prior to the period examined, reported *** of increasing magnitude throughout the period. In general, Tellus attributed the pattern of its financial results to the company's inability to ". . . attain our projected sales volume, despite a growing market."[42] [43] ***, all new entrants during the period, reported *** for the periods they reported sales. *** attributed the level of its average per-pound COGS, and by extension persistent ***, largely to low sales volume as opposed to its status as a new entrant and related start-up costs.[44]

SG&A expenses and operating income or loss

Most U.S. producers have their own sales personnel to market TMFPs. *** for example stated that it has an ***

[41] ***. Email from ***, November 8, 2024.
[42] Conference transcript, p. 22 (Mokaddem).
[43] ***. Email with attachment from ***, November 1, 2024. ***. Ibid.
[44] Email with attachment from ***, November 1, 2024. ***.

***.[45] While the level of detail varied, *** provided similar descriptions.[46] ***, the newest entrant, reported a mixed internal and external marketing/sales approach.[47] *** reported that TMFP marketing and logistics services are handled by a related company.[48]

The increase in the U.S. industry's total SG&A expenses during the full-year period reflects a combination of increases in SG&A expenses reported by most of the established U.S. producers, ***, and the SG&A expenses of new entrants. While the U.S. industry's total SG&A expenses were lower between the interim periods, U.S. producers were directionally mixed with *** accounting for most of the overall decline.

The company-specific SG&A expense ratios (total SG&A expenses divided by total net sales value) of ***, the largest U.S. producers in terms of net sales value, were in a similar and relatively stable range throughout the period. In contrast, the SG&A expense ratios of the other two established U.S. producers (***) were relatively low (in the case of ***)[49] versus high (in the case of ***).[50] The SG&A expense ratios of new entrants *** were notably high.

[45] Email from ***, October 31, 2024.

[46] Email from ***, October 31, 2024. Email with attachment from ***, November 1, 2024. Email from ***, October 29, 2024. Email from ***, October 31, 2024.

[47] ***. Email with attachment from ***, October 28, 2024.

[48] ***. Email with attachment from ***, November 1, 2024.

[49] ***. Email from ***, October 31, 2024. ***. Ibid.

[50] ***. Email with attachment from ***, November 5, 2024.

In conjunction with the overall decline in the U.S. industry's total gross profit, corresponding operating income also declined; increasing SG&A expenses during the full-year period magnifying the impact of declining gross profit. On a company-specific basis and like financial results at the gross level, *** of the established U.S. producers reported operating income throughout the period, ***, which reported operating losses. New entrants, as noted above reported *** throughout the period and by extension ***.

Interest expense, all other expenses, all other income and net income or loss

The U.S. industry's operating income and net income shared the same directional pattern of decline throughout the period. As compared to operating income, the lower level of net income reflects interest expense and other expenses, both varying in terms of their relative importance during the period, which were partially offset by other income. In part reflecting differences in the level at which this information is reported/assigned within each company,[51] U.S. producers were mixed in terms of whether any items (interest expense, other expenses, other income) were reported.

The relatively large increase in the U.S. industry's other expenses in 2022 is largely accounted for by *** in that year.[52] In 2023 the U.S. industry's other expenses include a *** reported by ***.[53] *** also

[51] ***. Email from ***, October 31, 2024. ***. Email from ***, October 31, 2024.

[52] ***. *** U.S. producer questionnaire, section III-10a-b. *** (see also footnote 7). Email with attachment from ***, November 1, 2024. ***. Email with attachment from ***, November 5, 2024.

[53] ***. *** U.S. producer questionnaire, section III-10a-b (as revised).

accounted for the relatively large level of other income in 2022, reflecting *** in that year.[54] [55]

Capital expenditures, R&D expenses, total net assets and ROA

Table VI-3 presents the U.S. industry's total capital expenditures, R&D expenses, net assets, and ROA related to operations on TMFPs.[56] Appendix E presents company-specific data for the above-noted items, as well as corresponding narrative regarding the nature, focus, and significance of capital expenditures, R&D expenses, and any notable changes in net asset levels.

Table VI-3
TMFPs: U.S. producers' capital expenditures, R&D expenses, total net assets, and ROA, by item and period

Value in 1,000 dollars; ratios in percent

Firm	Measure	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Capital expenditures	Value	***	***	***	***	***
R&D expenses	Value	***	***	***	***	***
Total net assets	Value	***	***	***	NA	NA
ROA	Ratio	***	***	***	NA	NA

Source: Compiled from data submitted in response to Commission questionnaires.

Note: For purposes of calculating the U.S. industry's ROA, the net assets denominator was adjusted in each year to eliminate company-specific assets when no financial results were presented for a new entrant.

The number of new entrants during the period, as well as the level of TMFP-related investments, was generally attributed to a growing market[57] with most U.S. producers, both established and new entrants, indicating that capital expenditures were primarily related to expansion/establishment of operations (see table E-3). *** U.S. producer indicating that its capital expenditures were to maintain current operations. The majority of the

[54] ***. *** U.S. producer questionnaire, section III-10a-b (as revised).

[55] ***. Email with attachment from ***, November 5, 2024.

[56] ROA is calculated here as operating results divided by total assets. With regard to a company's overall operations, staff notes that a total asset value (i.e., the bottom line value on the asset side of a company's balance sheet) reflects an aggregation of a number of current and non-current assets, which, in many instances, are not product specific. The ability of the U.S. producer to assign total asset values to a discrete product line affects the meaningfulness of calculated operating return on net assets.

[57] Conference transcript, p. 68 (Mascarello).

U.S. industry's capital expenditures was accounted by ***; on a cumulative basis *** accounting for *** percent of total capital expenditures, followed by *** (*** percent), and *** (*** percent).

Most U.S. producers reported some level of R&D expenses; ***, which reported *** R&D expenses during the period, were the exceptions. Company-specific descriptions of R&D activity varied, ranging from manufacturing process improvements to new chemistry development (see table E-5). The substantial majority of the U.S. industry's R&D expenses was accounted for by *** (*** percent on a cumulative basis). *** (*** percent) and *** (*** percent) accounted for next largest company-specific shares.

As shown in table VI-3 the U.S. industry's total net assets increased substantially during the period. Consistent with the pattern of capital expenditures and corresponding narrative descriptions, most U.S. producers attributed a large share of the increase in total net assets to expansion-related activity (see table E-8).

Capital and investment

The Commission requested U.S. producers of TMFPs to describe any actual or potential negative effects of imports of TMFPs from China and Vietnam on their firms' growth, investment, ability to raise capital, development and production efforts, or the scale of capital investments. Table VI-4 presents the number of firms reporting an impact in each category. Table VI-5 presents the U.S. producers' narrative descriptions.

Table VI-4
TMFPs: Count of firms indicating actual and anticipated negative effects of imports from subject sources on investment, growth, and development since January 1, 2021, by effect

Number of firms reporting

Effect	Category	Count
Cancellation, postponement, or rejection of expansion projects	Investment	3
Denial or rejection of investment proposal	Investment	1
Reduction in the size of capital investments	Investment	1
Return on specific investments negatively impacted	Investment	3
Other investment effects	Investment	2
Any negative effects on investment	Investment	5
Rejection of bank loans	Growth	1
Lowering of credit rating	Growth	0
Problem related to the issue of stocks or bonds	Growth	1
Ability to service debt	Growth	2
Other growth and development effects	Growth	2
Any negative effects on growth and development	Growth	3
Anticipated negative effects of imports	Future	6

Source: Compiled from data submitted in response to Commission questionnaires.

Table VI-5
TMFPs: U.S. producers' narratives relating to actual and anticipated negative effects of imports on investment, growth, and development, since January 1, 2021, by firm and effect

Item	Firm name and accompanying narrative response
Cancellation, postponement, or rejection of expansion projects	***
Cancellation, postponement, or rejection of expansion projects	***
Cancellation, postponement, or rejection of expansion projects	***
Denial or rejection of investment proposal	***
Reduction in the size of capital investments	***
Return on specific investments negatively impacted	***
Return on specific investments negatively impacted	***

Table continued.

Table VI-5 Continued
TMFPs: U.S. producers' narratives relating to actual and anticipated negative effects of imports on investment, growth, and development, since January 1, 2021, by firm and effect

Item	Firm name and accompanying narrative response
Return on specific investments negatively impacted	***
Other (effects of imports on investment)	***
Other (effects of imports on investment)	***
Rejection of bank loans	***
Problems related to the issue of stocks or bonds	***
Ability to service debt	***
Ability to service debt	***
Other (effects of imports on growth and development)	***
Other (effects of imports on growth and development)	***

Table continued.

Table VI-5 Continued
TMFPs: U.S. producers' narratives relating to actual and anticipated negative effects of imports on investment, growth, and development, since January 1, 2021, by firm and effect

Item	Firm name and accompanying narrative response
Anticipated effects of imports	***
Anticipated effects of imports	***
Anticipated effects of imports	***
Anticipated effects of imports	***
Anticipated effects of imports	***
Anticipated effects of imports	***

Source: Compiled from data submitted in response to Commission questionnaires.

Part VII: Threat considerations and information on nonsubject countries

Section 771(7)(F)(i) of the Act (19 U.S.C. § 1677(7)(F)(i)) provides that—

> *In determining whether an industry in the United States is threatened with material injury by reason of imports (or sales for importation) of the subject merchandise, the Commission shall consider, among other relevant economic factors*[1]*--*
>
> *(I) if a countervailable subsidy is involved, such information as may be presented to it by the administering authority as to the nature of the subsidy (particularly as to whether the countervailable subsidy is a subsidy described in Article 3 or 6.1 of the Subsidies Agreement), and whether imports of the subject merchandise are likely to increase,*
>
> *(II) any existing unused production capacity or imminent, substantial increase in production capacity in the exporting country indicating the likelihood of substantially increased imports of the subject merchandise into the United States, taking into account the availability of other export markets to absorb any additional exports,*
>
> *(III) a significant rate of increase of the volume or market penetration of imports of the subject merchandise indicating the likelihood of substantially increased imports,*
>
> *(IV) whether imports of the subject merchandise are entering at prices that are likely to have a significant depressing or suppressing effect on domestic prices, and are likely to increase demand for further imports,*
>
> *(V) inventories of the subject merchandise,*

[1] Section 771(7)(F)(ii) of the Act (19 U.S.C. § 1677(7)(F)(ii)) provides that "The Commission shall consider {these factors} . . . as a whole in making a determination of whether further dumped or subsidized imports are imminent and whether material injury by reason of imports would occur unless an order is issued or a suspension agreement is accepted under this title. The presence or absence of any factor which the Commission is required to consider . . . shall not necessarily give decisive guidance with respect to the determination. Such a determination may not be made on the basis of mere conjecture or supposition."

(VI) the potential for product-shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products,

(VII) in any investigation under this title which involves imports of both a raw agricultural product (within the meaning of paragraph (4)(E)(iv)) and any product processed from such raw agricultural product, the likelihood that there will be increased imports, by reason of product shifting, if there is an affirmative determination by the Commission under section 705(b)(1) or 735(b)(1) with respect to either the raw agricultural product or the processed agricultural product (but not both),

(VIII) the actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product, and

(IX) any other demonstrable adverse trends that indicate the probability that there is likely to be material injury by reason of imports (or sale for importation) of the subject merchandise (whether or not it is actually being imported at the time).[2]

Information on the nature of the alleged subsidies was presented earlier in this report; information on the volume and pricing of imports of the subject merchandise is presented in Parts IV and V; and information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts is presented in Part VI. Information on inventories of the subject merchandise; foreign producers' operations, including the potential for "product-shifting;" any other threat indicators, if applicable; and any dumping in third-country markets, follows. Also presented in this section of the report is information obtained for consideration by the Commission on nonsubject countries.

[2] Section 771(7)(F)(iii) of the Act (19 U.S.C. § 1677(7)(F)(iii)) further provides that, in antidumping investigations, ". . . the Commission shall consider whether dumping in the markets of foreign countries (as evidenced by dumping findings or antidumping remedies in other WTO member markets against the same class or kind of merchandise manufactured or exported by the same party as under investigation) suggests a threat of material injury to the domestic industry."

Subject countries

The Commission issued foreign producers' or exporters' questionnaires to 81 firms believed to produce and/or export TMFPs from China and Vietnam.[3] Usable responses to the Commission's questionnaire were received from seven firms in total.[4]

Table VII-1 presents the number of producers/exporters in each subject country that responded to the Commission's questionnaire, their exports to the United States as a share of U.S. imports by each subject country in 2023, and their estimated share of total production of TMFPs in each subject country during 2023.

Table VII-1
TMFPs: Number of responding producers/exporters, approximate share of production, and exports to the United States as a share of U.S. imports, by subject foreign industry, 2023

Subject foreign industry	Number of responding firms	Reported share of production (percent)	Exports as a share of U.S. imports from subject country (percent)
China	6	***	***
Vietnam	1	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Note: "Approximate share of production" reflects the responding firms' estimates of their production as a share of total country production of TMFPs in 2023. Since not all firms have perfect knowledge of the industry in their home market, different firms might use different denominators in estimating their firm's share of the total requested. For countries in which more than one firm responded, the average denominator for reasonably reported estimates is used in the share presented.

Note: "Exports as a share of U.S. imports" reflects a comparison of export data reported by firms in response to the Commission's foreign producer/exporter questionnaire with import data reported by firms in response to the Commission's U.S. importer questionnaire. Staff believes using import data from questionnaires is a more reliable estimate than using official imports due to the basket categories and multiple units of measurements.***.

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table VII-2 presents information on the TMFPs operations of the responding producers in China and Vietnam and table VII-3 presents summary information on responding resellers of subject TMFPs. Table VII-4 presents summary data on foreign producers by source.

[3] These firms were identified through a review of information submitted in the petition and presented in third-party sources.

[4] Out of the seven responding firms, two are resellers that exported TMFPs to the United States. One firm, *** submitted a foreign producer questionnaire but provided incomplete data and are not included in this report. Three firms certified they did not produce or export TMFPs in China nor Vietnam during 2021 to 2023.

Table VII-2
TMFPs: Summary data on responding subject foreign producers in 2023, by firm

Subject foreign industry: Producer	Production (1,000 pounds)	Share of reported production (percent)	Exports to the United States (1,000 pounds)	Share of reported exports to the United States (percent)	Total shipments (1,000 pounds)	Share of firm's total shipments exported to the United States (percent)
China: Rypax China	***	***	***	***	***	***
China: Shandong Tranlin Straw	***	***	***	***	***	***
China: Wenzhou Keyi	***	***	***	***	***	***
China: Wenzhou Sanxing	***	***	***	***	***	***
Vietnam: Rypax Vietnam	***	***	***	***	***	***
All individual producers	***	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table VII-3
TMFPs: Summary data for subject foreign resellers in 2023, by firm

Subject foreign industry: Resellers	Resales exported to the United States (1,000 pounds)	Share of resales exported to the United States (percent)
China: Shenzhen Jujin	***	***
China: Shandong Teanhe Hongsheng	***	***
All individual resellers	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Table VII-4
TMFPs: Summary data for subject foreign producers in 2023, by firm

Subject foreign industry	Production (1,000 pounds)	Share of reported production (percent)	Exports to the United States (1,000 pounds)	Share of reported exports to the United States (percent)	Total shipments (1,000 pounds)	Share of firm's total shipments exported to the United States (percent)
China	***	***	***	***	***	***
Vietnam	***	***	***	***	***	***
All subject foreign industries	***	100.0	***	100.0	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table VII-5 presents events in the subject countries' industries since January 1, 2023.

Table VII-5
TMFP: Important industry events in China since 2021

Item	Firm: Event
Memorandum of Understanding (MoU)	G-COVE Technology Group Co Ltd, Sichuan Vanov New Materials Co Ltd (Babo), and Sarawak Timber Industry Development Corp (STIDC): In July 2024, Sichuan Vanov New Materials Co Ltd (Babo) and G-Cove Technologies Co Ltd signed a memorandum of understanding (MoU) with Sarawak Timber Industry Development Corp (STIDC) in China for proposed bamboo processing projects. Babo and G-Cove Technologies would invest in manufacturing facilities to produce bamboo fiber and pulp in Tanjung Manis, central Sarawak, Malaysia and Demak, Indonesia. Shanghai-based G-Cove Technologies manufactures molded boxes for food, medical packaging and industrial uses that uses bamboo pulp produced by Babo. The estimated total investment for the development of the proposed projects is about $400 million.
Facility Upgrade	FirstPak: In August 2024, ABB announced that its robots were used to upgrade FirstPak's facility in Laibin, China, which handles around 40,000 tons of sugarcane pulp every year, with 35,000 tons turned into finished products. ABB has provided more than 200 high performance robots for material handling, picking and palletizing.
Plant Upgrade	LuzhouPack: In March 2024, LuzhouPack's production automation upgrade increased annual capacity to over 120,000 tons (Nanxiong, China).
New Production Line	LuzhouPack: In February 2022, LuzhouPack launched a new PFAS-FREE production line (Nanxiong, China).

Source: Aubrey, Samuel, Borneo Post online, MoU signed to conduct feasibility study for proposed bamboo-related products mill in Sarawak," https://www.theborneopost.com/2024/05/28/mou-signed-to-conduct-feasibility-study-for-proposed-bamboo-related-products-mill-in-sarawak/, retrieved October 22, 2024;Wong, Jack, The Star, https://www.thestar.com.my/business/business-news/2024/07/01/china-firms-in-bamboo-ventures, retrieved October 22, 2024; ABB, "FirstPak works with ABB to transform sustainability of take-out packaging," https://new.abb.com/news/detail/118098/cstmr-firstpak-works-with-

abb-to-transform-sustainability-of-take-out-packaging, retrieved October 22, 2024; LuzhouPack, "Milestone of Luzhou Pack," https://luzhoupack.com/pages/about-us, retrieved October 22, 2024.

Changes in operations

Subject producers were asked to report any change in the character of their operations or organization relating to the production of TMFPs since January 1, 2021. One of the five responding foreign producers indicated in its questionnaire that it had experienced such changes. Tables VII-6 and VII-7 presents the changes identified by this producer. No responding foreign producer reported anticipated changes in operations.

Table VII-6
TMFPs: Count of reported changes in operations since January 1, 2021, by subject foreign producing country and type of change in operation

Count in number of firms reporting

Item	China	Vietnam	Subject producers
Plant openings	0	0	0
Plant closings	1	0	1
Prolonged shutdowns	0	0	0
Production curtailments	0	0	0
Relocations	0	0	0
Expansions	0	0	0
Acquisitions	0	0	0
Consolidations	0	0	0
Weather-related or force majeure events	0	0	0
Other	0	0	0
Any change	1	0	1

Source: Compiled from data submitted in response to Commission questionnaires.

Table VII-7
TMFPs: Reported changes in operations in subject foreign industries since January 1, 2021, by reported change category and firm

Item	Firm name (subject foreign industry) and accompanying narrative response regarding changes in operations
Plant closings	***

Source: Compiled from data submitted in response to Commission questionnaires.

Installed and practical overall capacity

Table VII-8 presents data on subject producers' installed capacity, practical overall capacity, and practical TMFP capacity and production on the same equipment.

*** of the responding foreign producers reported any production of alternate products using the same equipment and/or machinery as used to produce in-scope TMFPs. As such, capacity, and production were identical for overall production and TMFPs production.

Installed overall capacity increased by *** percent from 2021 to 2022, decreased by *** percent from 2022 to 2023, decreasing overall by *** percent during 2021 to 2023, and was *** percent higher in interim 2024 compared to interim 2023. ***, were the only firms to report changes to installed overall capacity, although neither reported any changes in their operations. ***.

Table VII-8
TMFPs: Producers' in subject foreign industries installed and practical capacity and production on the same equipment as subject production, by period

Capacity and production in 1,000 pounds; utilization in percent

Item	Measure	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Installed overall	Capacity	***	***	***	***	***
Installed overall	Production	***	***	***	***	***
Installed overall	Utilization	***	***	***	***	***
Practical overall	Capacity	***	***	***	***	***
Practical overall	Production	***	***	***	***	***
Practical overall	Utilization	***	***	***	***	***
Practical TMFPs	Capacity	***	***	***	***	***
Practical TMFPs	Production	***	***	***	***	***
Practical TMFPs	Utilization	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Constraints on capacity

Tables VII-9 and presents subject foreign producers' reported capacity constraints since January 1, 2021. Four of the seven responding foreign producers reported constraints to practical overall capacity.

Table VII-9
TMFPs: Producers' in subject foreign industries reported constraints to practical overall capacity, since January 1, 2021

Item	Firm name (subject foreign industry) and narrative response on constraints to practical overall capacity
Existing labor force	***
Existing labor force	***
Existing labor force	***
Fuel or energy	***
Logistics/transportation	***
Other constraints	***
Other constraints	***

Source: Compiled from data submitted in response to Commission questionnaires.

Operations on TMFPs

Aggregate TMFP operations in the subject foreign industry

Table VII-10 presents information on the aggregate data for all subject foreign industries. Only three of the five producers reported changes to capacity and production. Capacity increased by 3.3 percent from 2021 to 2022, decreased by 6.0 percent from 2022 to 2023, decreasing overall by 2.9 percent during 2021 to 2023; it was 4.6 percent higher in interim 2024 than in interim 2023. Capacity is projected to decrease by 1.1 percent from 2023 to 2024 and increase by 2.3 percent from 2024 to 2025. *** reported changes to its projected capacity and based the projection on "***." Production moved similarly, increasing by 6.9 percent from 2021 to 2022, decreasing by 11.0 percent from 2022 to 2023 but was 2.2 percent higher in interim 2024 than in interim 2023. Production is projected to decrease from 4.1 percent from 2023 to 2024 and increase by 3.0 percent from 2024 to 2025.[5] Capacity utilization of responding producers/exporters also increased by 3.1 percentage points from 2021 to 2022, decreased by 5.0 percentage points from 2022 to 2023, overall decreasing by 1.8 percentage points during 2021 to 2023, and was 2.0 percentage points lower in interim 2024

[5] Only two firms reported changes in projected production.

than in interim 2023. Capacity utilization is projected to decrease by 2.7 percentage points from 2023 to 2024 and increase by 0.6 percentage points from 2024 to 2025.

The responding foreign producers reported the majority of their shipments were home market shipments in each period (between *** percent and *** percent of total shipments across the periods) except interim 2023 when it accounted for *** percent of total shipments. Internal consumption accounted for the majority of home market shipments in 2021 and 2022 and interim 2023 at a decreasing rate until commercial shipments represented the slight majority of home market shipments in 2023 and interim 2024. Subject producers' exports to the United States as a share of their total shipments were between *** and *** percent for each year and the interim periods (with the interim 2024 period representing the period with the highest share at *** percent). The share of subject producers' exports to the United States as a share of their total shipments is projected to decrease to *** percent from 2023 to 2024 and is projected to further decrease to *** percent in 2025.

Subject producers' exports to the United States decreased irregularly by *** percent from 2021 to 2023 but were *** percent higher in interim 2024 than in interim 2023. Compared to 2023, exports to the United States are projected to increase by *** percent in 2024 before decreasing by *** percent from 2024 to 2025, largely driven by ***.

Exports to all other markets decreased irregularly, overall decreasing by *** percent from 2021 to 2023 and were *** percent lower in interim 2024 than in interim 2023. Exports to all other markets were projected to decrease by *** percent from 2023 to 2024 and increase by *** percent from 2024 to 2025, reflecting ***.

Table VII-10
TMFPs: Data on industry in the subject countries, by item and period

Quantity in 1,000 pounds

Item	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024	Projection 2024	Projection 2025
Capacity	83,215	85,994	80,827	38,901	40,680	79,967	81,827
Production	74,596	79,777	70,962	33,245	33,965	68,024	70,097
End-of-period inventories	***	***	***	***	***	***	***
Internal consumption	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Home market shipments	***	***	***	***	***	***	***
Exports to the United States	***	***	***	***	***	***	***
Exports to all other markets	***	***	***	***	***	***	***
Export shipments	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
Resales exported to the United States	***	***	***	***	***	***	***
Total exports to the United States	***	***	***	***	***	***	***

Table continued.

Table VII-10 Continued
TMFPs: Data on industry in the subject countries, by period

Shares and ratios in percent

Item	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024	Projection 2024	Projection 2025
Capacity utilization ratio	89.6	92.8	87.8	85.5	83.5	85.1	85.7
Inventory ratio to production	***	***	***	***	***	***	***
Inventory ratio to total shipments	***	***	***	***	***	***	***
Internal consumption share	***	***	***	***	***	***	***
Commercial home market shipments share	***	***	***	***	***	***	***
Home market shipments share	***	***	***	***	***	***	***
Exports to the United States share	***	***	***	***	***	***	***
Exports to all other markets share	***	***	***	***	***	***	***
Export shipments share	***	***	***	***	***	***	***
Total shipments share	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Share of total exports to the United States by producers	***	***	***	***	***	***	***
Share of total exports to the United States by resellers	***	***	***	***	***	***	***
Combined total shipments exported to the United States	***	***	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Adjusted total shipments exported to the United States include the sum of exports by both producers and resellers.

Practical TMFP capacity and production by subject foreign industry

Table VII-11 presents information on subject producers' production, capacity, and capacity utilization by subject country. As previously noted, from 2021 to 2023, the five responding subject producers collectively reported a *** percent decrease in practical capacity. Practical capacity was *** percent higher in interim 2024 than interim 2023. As noted, the responding foreign producers' production collectively decreased *** percent from 2021 to 2023 with production *** percent higher in interim 2024 than in interim 2023. Resultingly, practical capacity utilization decreased irregularly by *** percentage points from 2021 to 2023 (increasing from *** percent in 2021 to *** percent in 2022, then decreasing

to *** percent in 2023). Practical capacity utilization was *** percentage points higher in interim 2023 than interim 2024 (*** percent compared to *** percent).

From 2021 to 2023, practical TMFP capacity reported by the four Chinese producers decreased irregularly by *** percent, but was *** percent higher in interim 2024 than in interim 2023. From 2023, the producers in China projected that capacity would decrease by *** percent in 2024 but increase by *** percent in 2025. The Chinese producers' production decreased by *** percent from 2021 to 2023, but was *** percent higher in interim 2024 compared to interim 2023. The Chinese producers projected that TMFP production would decrease *** percent in 2024 compared to 2023 and increase *** percent in 2025. Practical capacity utilization decreased irregularly by *** percentage points from 2021 to 2023 and was *** percentage points lower in interim 2024 as compared to interim 2023. Practical capacity utilization is projected to be *** percentage points lower in 2024 compared to 2023 but *** percentage points higher in 2025 compared to 2024.

From 2022 to 2023, practical TMFP capacity reported by Vietnamese producer Rypax Vietnam, ***, increased by *** percent and was *** percent higher in interim 2024 compared to interim 2023. Rypax Vietnam projected that practical capacity would *** in 2024 and 2025 as compared to 2023. Rypax Vietnam's production increased by *** percent from 2022 to 2023 and was *** percent higher in interim 2024 as compared to interim 2023. Rypax Vietnam projected that TMFP production would remain constant in 2024 and 2025 as compared to 2023. Rypax Vietnam's practical capacity utilization increased *** percentage points from 2022 to 2023 but was *** percentage points lower in interim 2024 as compared to interim 2023. Rypax Vietnam projected its practical capacity utilization would be the same as 2023, holding steady at *** percent in 2024 and 2025.

Table VII-11
TMFPs: Subject foreign industries' output, by subject foreign industry and period

Practical capacity

Capacity in 1,000 pounds

Subject foreign industry	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024	Projection 2024	Projection 2025
China	***	***	***	***	***	***	***
Vietnam	***	***	***	***	***	***	***
All subject foreign industries	83,215	85,994	80,827	38,901	40,680	79,967	81,827

Table continued.

Table VII-11 Continued
TMFPs: Subject foreign industries' output, by subject foreign industry and period

Production

Quantity in 1,000 pounds

Subject foreign industry	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024	Projection 2024	Projection 2025
China	***	***	***	***	***	***	***
Vietnam	***	***	***	***	***	***	***
All subject foreign industries	74,596	79,777	70,962	33,245	33,965	68,024	70,097

Table continued.

Table VII-11 Continued
TMFPs: Subject foreign industries' output, by subject foreign industry and period

Capacity utilization

Ratios in percent

Subject foreign industry	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024	Projection 2024	Projection 2025
China	***	***	***	***	***	***	***
Vietnam	***	***	***	***	***	***	***
All subject foreign industries	89.6	92.8	87.8	85.5	83.5	85.1	85.7

Table continued.

Note: Capacity utilization ratio represents the ratio of the subject producer’s production to its production capacity.

Table VII-11 Continued
TMFPs: Subject foreign industries' output, by subject foreign industry and period

Share of production

Share in percent

Subject foreign industry	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024	Projection 2024	Projection 2025
China	***	***	***	***	***	***	***
Vietnam	***	***	***	***	***	***	***
All subject foreign industries	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as “---“.

TMFP exports, by subject country

Table VII-12 presents information on subject producers’ (and resellers’) exports of TMFP by subject country. Vietnamese producer Rypax Vietnam *** during 2021 to 2023.

Chinese producers and resellers reported that exports to the United States decreased irregularly, decreasing overall by *** percent from 2021 to 2023, and was *** percent lower in interim 2024 than in interim 2023. These firms projected that exports to the United States would decrease by *** percent from 2023 to 2024 and further decrease by *** percent in 2025, reflecting ***, as noted previously. Responding Chinese firms’ total exports decreased irregularly, overall decreasing by *** percent from 2021 to 2023 and total exports were *** percent lower in interim 2024 than in interim 2023. These firms projected that their total exports would be *** percent lower in 2024 than in 2023 and would decrease an additional *** percent in 2025.

The responding firms reported that total exports to the United States as a share of total shipments slightly decreased by *** percentage points from 2021 to 2023 and was *** percentage points lower in interim 2024 than in interim 2023. These firms projected that their exports to the United States as a share of its total shipments would be *** percentage points higher in 2024 compared to 2023 but decrease *** percentage points lower in 2025 compared to 2024. Responding firms’ reported share of total shipments exported increased irregularly, overall increasing by *** percentage points during 2021 to 2023 but was *** percentage points lower in interim 2024 than in interim 2023. They projected their share of total shipments exported would be *** percentage points lower in 2024 compared to 2023 and decrease an additional *** percentage points from 2024 to 2025.

Table VII-12
TMFPs: Subject producers' and resellers' exports, by source and period

Exports to the United States

Quantity in 1,000 pounds

Subject foreign industry	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024	Projection 2024	Projection 2025
China	***	***	***	***	***	***	***
Vietnam	***	***	***	***	***	***	***
All subject foreign industries	***	***	***	***	***	***	***

Table continued.

Table VII-12 Continued
TMFPs: Subject producers' and resellers' exports, by source and period

Share of total shipments exported to the United States

Share in percent

Subject foreign industry	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024	Projection 2024	Projection 2025
China	***	***	***	***	***	***	***
Vietnam	***	***	***	***	***	***	***
All subject foreign industries	***	***	***	***	***	***	***

Table continued.

Table VII-12 Continued
TMFPs: Subject producers' and resellers' exports, by source and period

Total exports

Quantity in 1,000 pounds

Subject foreign industry	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024	Projection 2024	Projection 2025
China	***	***	***	***	***	***	***
Vietnam	***	***	***	***	***	***	***
All subject foreign industries	***	***	***	***	***	***	***

Table continued.

Table VII-12 Continued
TMFPs: Subject producers' and resellers' exports, by source and period

Share of total shipments exported

Share in percent

Subject foreign industry	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024	Projection 2024	Projection 2025
China	***	***	***	***	***	***	***
Vietnam	***	***	***	***	***	***	***
All subject foreign industries	***	***	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Alternative products

The responding producers in China and Vietnam did not report any production of alternative products using the same equipment and/or labor as those used to produce TMFPs during the period of investigation.

Exports

Table VII-13 presents Global Trade Atlas ("GTA") data for exports under HS subheading 4823.70 ("molded or pressed articles of paper pulp"), a category which includes TMFPs, from subject countries to the United States and to all destination markets. The table presents exports from subject exporters to the United States, global exports from subject exporters (exports to all destination markets), and shares of exports exported to the United States, by exporter and period. Exports to the United States collectively reported for the subject foreign industries under this category increased 91.3 percent, by value, from 2021 to 2023. Exports to all destination markets collectively reported for the subject foreign industries under this category increased by 39.6 percent, by value, between 2021 and 2023.

Table VII-13
Molded or pressed articles of paper pulp: Subject exporters' to the United States, by exporter and period

Value in 1,000 dollars

Exporter	Measure	2021	2022	2023
China	Value	92,222	129,223	165,906
Vietnam	Value	6,656	18,645	23,204
Subject exporters	Value	98,878	147,868	189,110

Table continued.

Table VII-13 Continued
Molded or pressed articles of paper pulp: Global exports from subject exporters, by exporter and period

Value in 1,000 dollars

Exporter	Measure	2021	2022	2023
China	Value	334,931	431,603	453,612
Vietnam	Value	13,500	29,979	32,722
Subject exporters	Value	348,431	461,582	486,334

Table continued.

Table VII-13 Continued
Molded or pressed articles of paper pulp: Share of global exports exported to the United States, by exporter and period

Share in percent

Exporter	Measure	2021	2022	2023
China	Share	27.5	29.9	36.6
Vietnam	Share	49.3	62.2	70.9
Subject exporters	Share	28.4	32.0	38.9

Source: Official exports statistics and official global imports statistics from Vietnam (constructed exports) under HS subheading 4823.70 as reported by various national statistical authorities in the Global Trade Atlas Suite database, accessed October 22, 2024. These data may be overstated as the HS subheading may contain products outside the scope of these investigations.

U.S. inventories of imported merchandise

Table VII-14 presents data on U.S. importers' reported inventories of TMFPs. U.S. importers' reported inventories of imports from China increased by *** percent from 2021 to 2023 and were *** percent higher in interim 2024 compared to interim 2023. The ratio of inventories of imports from China to imports from China, U.S. shipments of imports from China, and total shipments of imports from China all increased from 2021 to 2023 by *** percentage points, *** percentage points, and *** percentage points, respectively. The ratio of inventories of imports from China to imports from China, U.S. shipments of imports from China, and total shipments of imports from China were all lower in interim 2024 compared to interim 2023 by *** percentage points, *** percentage points, and *** percentage points, respectively.

U.S. importers' reported inventories of imports from Vietnam increased by *** percent from 2021 to 2023 but were *** percent lower in interim 2024 compared to interim 2023. The ratio of inventories of imports from Vietnam to imports from Vietnam and U.S. shipments of imports from Vietnam both decreased from 2021 to 2023 by *** percentage points and *** percentage points, respectively.[6] The ratio of inventories of imports from Vietnam to imports from Vietnam and U.S. shipments of imports from Vietnam were both lower in interim 2024 compared to interim 2023 by *** percentage points and *** percentage points, respectively.

Overall, U.S. importers' reported inventories of imports from subject sources increased by 82.0 percent from 2021 to 2023 and were nearly constant between interim 2024 compared to interim 2023. The ratio of inventories of imports from subject sources to imports from subject sources, U.S. shipments of imports from subject sources, and total shipments of imports from subject sources all increased by 8.6 percentage points, 11.8 percentage points, and 11.8 percentage points from 2021 to 2023 and were 3.8 percentage points, 4.9 percentage points, and 5.0 percentage points lower in interim 2024 than in interim 2023, respectively.

U.S. importers' reported inventories of imports from nonsubject sources increased by 141.0 percent from 2021 to 2023 and were *** percent higher in interim 2024 compared to interim 2023. The ratio of inventories of imports from nonsubject sources to imports from nonsubject sources increased by 5.7 percentage points from 2021 to 2023 and was *** percentage points higher in interim 2024 than in interim 2023. The ratios of end-of-period inventories of imports from nonsubject sources to U.S. shipments and total shipments of

[6] Responding importers from Vietnam *** any export shipments during 2021 to 2023.

imports from nonsubject sources both increased by 8.5 percentage points from 2021 to 2023 and was *** percentage points and *** percentage points, respectively, higher in interim 2024 than in interim 2023.

Table VII-14
TMFPs: U.S. importers' inventories and their ratio to select items, by source and period

Quantity in 1,000 pounds; ratio in percent

Measure	Source	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Inventories quantity	China	***	***	***	***	***
Ratio to imports	China	***	***	***	***	***
Ratio to U.S. shipments of imports	China	***	***	***	***	***
Ratio to total shipments of imports	China	***	***	***	***	***
Inventories quantity	Vietnam	***	***	***	***	***
Ratio to imports	Vietnam	***	***	***	***	***
Ratio to U.S. shipments of imports	Vietnam	***	***	***	***	***
Ratio to total shipments of imports	Vietnam	***	***	***	***	***
Inventories quantity	Subject	35,166	66,227	63,990	64,433	64,402
Ratio to imports	Subject	26.6	32.6	35.2	35.7	31.9
Ratio to U.S. shipments of imports	Subject	23.2	38.8	35.0	36.1	31.1
Ratio to total shipments of imports	Subject	23.0	38.6	34.8	36.0	30.9
Inventories quantity	Nonsubject	1,991	3,091	4,798	***	6,334
Ratio to imports	Nonsubject	15.3	17.9	21.0	***	31.8
Ratio to U.S. shipments of imports	Nonsubject	16.9	19.2	25.3	***	31.2
Ratio to total shipments of imports	Nonsubject	16.9	19.2	25.3	***	31.1
Inventories quantity	All	***	***	***	***	***
Ratio to imports	All	***	***	***	***	***
Ratio to U.S. shipments of imports	All	***	***	***	***	***
Ratio to total shipments of imports	All	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

U.S. importers' outstanding orders

The Commission requested importers to indicate whether they imported or arranged for the importation of TMFPs from China and Vietnam after June 30, 2024. Their reported data are presented in table VII-15. Of the 30 responding U.S. importers, only three U.S. importers did not report such arranged imports. As shown, responding importers collectively reported *** pounds in arranged imports for July 2024 through June 2025, *** percent of which are from subject sources. Of the *** pounds in reported arranged imports from subject sources, *** percent were reported as being arranged from China.

Table VII-15
TMFPs: U.S. importers' arranged imports, by source and period

Quantity in 1,000 pounds

Source	Jul-Sep 2024	Oct-Dec 2024	Jan-Mar 2025	Apr-Jun 2025	Total
China	***	***	***	***	***
Vietnam	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Third-country trade actions

Based on available information, TMFPs from China and Vietnam have not been subject to antidumping or countervailing duty investigations outside the United States.[7]

Information on nonsubject countries

Table VII-16 presents global export data for molded or pressed articles of paper pulp (HS 4823.70), a category which includes TMFPs. China was the largest exporter in 2023 and accounted for 28.9 percent of total global exports by value; Vietnam accounted for 2.1 percent.

[7] World Trade Organization ("WTO"), "Anti-dumping," https://www.wto.org/english/tratop_e/adp_e/adp_e.htm, retrieved November 5, 2024; and WTO, "Subsidies and Countervailing Measures," https://www.wto.org/english/tratop_e/scm_e/scm_e.htm, retrieved November, 2024.

Table VII-16
Molded or pressed articles of paper pulp: Global exports by exporter and period

Values in dollars; shares in percent

Exporting country	Measure	2021	2022	2023
United States	Value	75,385	90,966	102,579
China	Value	334,931	431,603	453,612
Vietnam	Value	13,500	29,979	32,722
Subject exporters	Value	348,431	461,582	486,334
Germany	Value	103,828	104,387	100,910
Hungary	Value	48,357	52,959	94,796
Netherlands	Value	66,251	69,811	86,305
Canada	Value	68,067	79,199	80,330
Czech Republic	Value	66,396	72,980	75,418
Mexico	Value	50,391	58,717	63,417
Spain	Value	51,614	62,962	61,043
Malaysia	Value	45,980	40,862	49,584
All other exporters	Value	340,305	366,745	369,290
Nonsubject exporters	Value	841,190	908,619	981,094
All reporting exporters	Value	1,265,006	1,461,167	1,570,007
United States	Share	6.0	6.2	6.5
China	Share	26.5	29.5	28.9
Vietnam	Share	1.1	2.1	2.1
Subject exporters	Share	27.5	31.6	31.0
Germany	Share	8.2	7.1	6.4
Hungary	Share	3.8	3.6	6.0
Netherlands	Share	5.2	4.8	5.5
Canada	Share	5.4	5.4	5.1
Czech Republic	Share	5.2	5.0	4.8
Mexico	Share	4.0	4.0	4.0
Spain	Share	4.1	4.3	3.9
Malaysia	Share	3.6	2.8	3.2
All other exporters	Share	26.9	25.1	23.5
Nonsubject exporters	Share	66.5	62.2	62.5

Source: Official export statistics and official global statistics on imports from Vietnam (constructed exports) under HS subheading 4823.70 as reported by various national statistical authorities in the Global Trade Atlas Suite database, accessed October 22, 2024. These data may be overstated as the HS subheading may contain products outside the scope of these investigations.

Note: United States is shown at the top followed by the countries under investigation, all remaining top exporting countries in descending order of 2023 data.

APPENDIX A

FEDERAL REGISTER NOTICES

The Commission makes available notices relevant to its investigations and reviews on its website, www.usitc.gov. In addition, the following tabulation presents, in chronological order, Federal Register notices issued by the Commission and Commerce during the current proceeding.

Citation	Title	Link
89 FR 83051, October 15, 2024	Thermoformed Molded Fiber Products From China and Vietnam; Institution of Antidumping and Countervailing Duty Investigations and Scheduling of Preliminary Phase Investigations	https://www.govinfo.gov/content/pkg/FR-2024-10-15/pdf/2024-23714.pdf
89 FR 87551, November 4, 2024	Thermoformed Molded Fiber Products From the People's Republic of China and the Socialist Republic of Vietnam: Initiation of Less-Than-Fair-Value Investigations	https://www.govinfo.gov/content/pkg/FR-2024-11-04/pdf/2024-25562.pdf
89 FR 87556, November 4, 2024	Thermoformed Molded Fiber Products From the People's Republic of China and the Socialist Republic of Vietnam: Initiation of Countervailing Duty Investigations	https://www.govinfo.gov/content/pkg/FR-2024-11-04/pdf/2024-25561.pdf

APPENDIX B

LIST OF STAFF CONFERENCE WITNESSES

CALENDAR OF PUBLIC PRELIMINARY CONFERENCE

Those listed below appeared as witnesses at the United States International Trade Commission's preliminary conference:

Subject: Thermoformed Molded Fiber Products from China and Vietnam

Inv. Nos.: 701-TA-739-740 and 731-TA-1716-1717 (Preliminary)

Date and Time: October 29, 2024 - 9:30 a.m.

Sessions were held in connection with these preliminary phase investigations in the Main Hearing Room (Room 101), 500 E Street, SW., Washington, DC.

OPENING REMARKS:

In Support of Imposition (**Roop K. Bhatti**, Cassidy Levy Kent (USA) LLP)

In Support of the Imposition of the Antidumping and Countervailing Duty Orders:

Cassidy Levy Kent (USA) LLP
Washington, DC
on behalf of

Genera
Tellus Products, LLC
United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union, AFL-CIO ("USW")
(collectively, the "American Molded Fiber Coalition")

Dr. Kelly Tiller, Founder and Chief Strategy Officer, Genera

Ben Mascarello, Chief Executive Officer, Genera

Asem Mokaddem, President, Tellus Products, LLC

In Support of the Imposition of the
Antidumping and Countervailing Duty Orders (continued):

Andrew B. Dermont, Director of Finance & Strategy, Tellus Products, LLC

Rebecca Serafini, Senior Director of Sales & Marketing, Tellus Products, LLC

Kathryn Wallace, Legislative Representative, USW

Yohai Baisburd)
Roop K. Bhatti) – OF COUNSEL
James R. Cannon, Jr.)

Interested Party

KD Distributing, LLC dba Ultra Green Packaging
Mound, MN

Kristin Davidson, President, KD Distributing, LLC

Source One
Miami Beach, FL

Jonathan Elfassy (remote), Vice President of Sales, Source One

REBUTTAL/CLOSING REMARKS:

In Support of Imposition (**Yohai Baisburd**, Cassidy Levy Kent (USA) LLP)

APPENDIX C

SUMMARY DATA

All U.S. producers

Table C-1
TMFPs: Summary data concerning the U.S. market, by item and period
Quantity=1,000 pounds; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per pound; Period changes=percent--exceptions noted

Item	Reported data: Calendar year 2021	2022	2023	Jan-Jun 2023	2024	Period changes: Comparison years 2021-23	2021-22	2022-23	Jan-Jun 2023-24
U.S. consumption quantity:									
Amount	***	***	***	***	***	▲***	▲***	▲***	▲***
Producers' share (fn1)	***	***	***	***	***	▼***	▼***	▼***	▼***
Importers' share (fn1):									
China	***	***	***	***	***	▲***	▲***	▼***	▲***
Vietnam	***	***	***	***	***	▲***	▲***	▲***	▼***
Subject sources	***	***	***	***	***	▲***	▲***	▲***	▲***
Nonsubject sources	***	***	***	***	***	▲***	▲***	▲***	▲***
All import sources	***	***	***	***	***	▲***	▲***	▲***	▲***
U.S. consumption value:									
Amount	***	***	***	***	***	▲***	▲***	▲***	▼***
Producers' share (fn1)	***	***	***	***	***	▼***	▼***	▲***	▼***
Importers' share (fn1):									
China	***	***	***	***	***	▼***	▲***	▼***	▲***
Vietnam	***	***	***	***	***	▲***	▲***	▲***	▼***
Subject sources	***	***	***	***	***	▲***	▲***	▼***	▲***
Nonsubject sources	***	***	***	***	***	▲***	▲***	▲***	▲***
All import sources	***	***	***	***	***	▲***	▲***	▼***	▲***
U.S. importers' U.S. shipments of imports from:									
China:									
Quantity	***	***	***	***	***	▲***	▲***	▲***	▲***
Value	***	***	***	***	***	▲***	▲***	▼***	▲***
Unit value	***	***	***	***	***	▲***	▲***	▼***	▼***
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▼***	▲***
Vietnam:									
Quantity	***	***	***	***	***	▲***	▲***	▲***	▼***
Value	***	***	***	***	***	▲***	▲***	▲***	▼***
Unit value	***	***	***	***	***	▼***	▲***	▼***	▼***
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▼***	▼***
Subject sources:									
Quantity	151,703	170,663	182,798	89,323	103,455	▲20.5	▲12.5	▲7.1	▲15.8
Value	325,182	424,741	396,629	204,346	209,489	▲22.0	▲30.6	▼(6.6)	▲2.5
Unit value	$2.14	$2.49	$2.17	$2.29	$2.02	▲1.2	▲16.1	▼(12.8)	▼(11.5)
Ending inventory quantity	35,166	66,227	63,990	64,433	64,402	▲82.0	▲88.3	▼(3.4)	▼(0.0)
Nonsubject sources:									
Quantity	11,811	16,134	18,941	8,620	10,153	▲60.4	▲36.6	▲17.4	▲17.8
Value	19,761	29,938	33,267	13,600	17,361	▲68.3	▲51.5	▲11.1	▲27.7
Unit value	$1.67	$1.86	$1.76	$1.58	$1.71	▲5.0	▲10.9	▼(5.3)	▲8.4
Ending inventory quantity	1,991	3,091	4,798	1,348	6,334	▲141.0	▲55.2	▲55.2	▲369.9
All import sources:									
Quantity	163,514	186,797	201,739	97,943	113,608	▲23.4	▲14.2	▲8.0	▲16.0
Value	344,943	454,679	429,896	217,946	226,850	▲24.6	▲31.8	▼(5.5)	▲4.1
Unit value	$2.11	$2.43	$2.13	$2.23	$2.00	▲1.0	▲15.4	▼(12.5)	▼(10.3)
Ending inventory quantity	37,157	69,318	68,788	65,781	70,736	▲85.1	▲86.6	▼(0.8)	▲7.5
U.S. producers':									
Practical capacity quantity	***	***	***	***	***	▲***	▲***	▲***	▲***
Production quantity	***	***	***	***	***	▲***	▲***	▼***	▲***
Capacity utilization (fn1)	***	***	***	***	***	▼***	▲***	▼***	▼***
U.S. shipments:									
Quantity	***	***	***	***	***	▲***	▲***	▼***	▼***
Value	***	***	***	***	***	▲***	▲***	▲***	▼***
Unit value	***	***	***	***	***	▲***	▲***	▲***	▼***
Export shipments:									
Quantity	***	***	***	***	***	▼***	▼***	▲***	▲***
Value	***	***	***	***	***	▲***	▼***	▲***	▲***
Unit value	***	***	***	***	***	▲***	▲***	▲***	▼***
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▼***	▲***
Inventories/total shipments (fn1)	***	***	***	***	***	▲***	▲***	▼***	▲***

Table continued.

Table C-1 Continued
TMFPs: Summary data concerning the U.S. market, by item and period
Quantity=1,000 pounds; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per pound; Period changes=percent--exceptions noted

	Reported data					Period changes			
	Calendar year			Jan-Jun		Comparison years			Jan-Jun
Item	2021	2022	2023	2023	2024	2021-23	2021-22	2022-23	2023-24
Production workers	***	***	***	***	***	▲***	▲***	▲***	▲***
Hours worked (1,000s)	***	***	***	***	***	▲***	▲***	▲***	▲***
Wages paid ($1,000)	***	***	***	***	***	▲***	▲***	▲***	▲***
Hourly wages (dollars per hour)	***	***	***	***	***	▲***	▼***	▲***	▲***
Productivity (pounds per hour)	***	***	***	***	***	▼***	▼***	▼***	▼***
Unit labor costs	***	***	***	***	***	▲***	▲***	▲***	▲***
Net sales:									
Quantity	***	***	***	***	***	▲***	▲***	▲***	▼***
Value	***	***	***	***	***	▲***	▲***	▲***	▼***
Unit value	***	***	***	***	***	▲***	▲***	▲***	▼***
Cost of goods sold (COGS)	***	***	***	***	***	▲***	▲***	▲***	▼***
Gross profit or (loss) (fn2)	***	***	***	***	***	▼***	▼***	▲***	▼***
SG&A expenses	***	***	***	***	***	▲***	▲***	▲***	▼***
Operating income or (loss) (fn2)	***	***	***	***	***	▼***	▼***	▼***	▼***
Net income or (loss) (fn2)	***	***	***	***	***	▼***	▼***	▼***	▼***
Unit COGS	***	***	***	***	***	▲***	▲***	▲***	▼***
Unit SG&A expenses	***	***	***	***	***	▲***	▲***	▲***	▼***
Unit operating income or (loss) (fn2)	***	***	***	***	***	▼***	▼***	▼***	▼***
Unit net income or (loss) (fn2)	***	***	***	***	***	▼***	▼***	▼***	▼***
COGS/sales (fn1)	***	***	***	***	***	▲***	▲***	▼***	▲***
Operating income or (loss)/sales (fn1)	***	***	***	***	***	▼***	▼***	▼***	▼***
Net income or (loss)/sales (fn1)	***	***	***	***	***	▼***	▼***	▼***	▼***
Capital expenditures	***	***	***	***	***	▲***	▲***	▲***	▲***
Research and development expenses	***	***	***	***	***	▲***	▲***	▲***	▲***
Total assets	***	***	***	***	***	▲***	▲***	▲***	***

Source: Compiled from data submitted in response to Commission questionnaires. 508-compliant tables containing these data are contained in parts 3, 4, 6 and 7 of this report.

Note.--Shares and ratios shown as "0.0" percent represent non-zero values less than "0.05" percent (if positive) and greater than "(0.05)" percent (if negative). Zeroes, null values, and undefined calculations are suppressed and shown as "---". Period changes preceded by a "▲" represent an increase, while period changes preceded by a "▼" represent a decrease.

fn1.--Reported data are in percent and period changes are in percentage points.
fn2.--Percent changes only calculated when both comparison values represent profits; The directional change in profitability provided when one or both comparison values represent a loss.

APPENDIX D

U.S. PRODUCERS' AND U.S. IMPORTERS' U.S. SHIPMENTS

Table D-1
TMFPs: U.S. producers' U.S. shipments, by type and appearance, 2023

Quantity in 1,000 pounds; share in percent

Type	Measure	Plain bleached	Plain unbleached	Other	All appearances
Round plate	Quantity	***	***	***	***
Clamshell	Quantity	***	***	***	***
Bowl	Quantity	***	***	***	***
Tray	Quantity	***	***	***	***
Lids	Quantity	***	***	***	***
Other	Quantity	***	***	***	***
All product types	Quantity	***	***	***	***
Round plate	Share across	***	***	***	100.0
Clamshell	Share across	***	***	***	100.0
Bowl	Share across	***	***	***	100.0
Tray	Share across	***	***	***	100.0
Lids	Share across	***	***	***	---
Other	Share across	***	***	***	100.0
All product types	Share across	***	***	***	100.0
Round plate	Share down	***	***	***	***
Clamshell	Share down	***	***	***	***
Bowl	Share down	***	***	***	***
Tray	Share down	***	***	***	***
Lids	Share down	***	***	***	***
Other	Share down	***	***	***	***
All forms	Share down	100.0	100.0	100.0	100.0
Round plate	Share across and down	***	***	***	***
Clamshell	Share across and down	***	***	***	***
Bowl	Share across and down	***	***	***	***
Tray	Share across and down	***	***	***	***
Lids	Share across and down	***	***	***	***
Other	Share across and down	***	***	***	***
All product types	Share across and down	***	***	***	100.0

Table continued.

Table D-1 Continued
TMFPs: U.S. importers' U.S. shipments from China, by type and appearance, 2023

Quantity in 1,000 pounds; share in percent

Type	Measure	Plain bleached	Plain unbleached	Other	All appearances
Round plate	Quantity	***	***	***	***
Clamshell	Quantity	***	***	***	***
Bowl	Quantity	***	***	***	***
Tray	Quantity	***	***	***	***
Lids	Quantity	***	***	***	***
Other	Quantity	***	***	***	***
All product types	Quantity	***	***	***	***
Round plate	Share across	***	***	***	100.0
Clamshell	Share across	***	***	***	100.0
Bowl	Share across	***	***	***	100.0
Tray	Share across	***	***	***	100.0
Lids	Share across	***	***	***	100.0
Other	Share across	***	***	***	100.0
All product types	Share across	***	***	***	100.0
Round plate	Share down	***	***	***	***
Clamshell	Share down	***	***	***	***
Bowl	Share down	***	***	***	***
Tray	Share down	***	***	***	***
Lids	Share down	***	***	***	***
Other	Share down	***	***	***	***
All forms	Share down	100.0	100.0	100.0	100.0
Round plate	Share across and down	***	***	***	***
Clamshell	Share across and down	***	***	***	***
Bowl	Share across and down	***	***	***	***
Tray	Share across and down	***	***	***	***
Lids	Share across and down	***	***	***	***
Other	Share across and down	***	***	***	***
All product types	Share across and down	***	***	***	100.0

Table continued.

Table D-1 Continued
TMFPs: U.S. importers' U.S. shipments from Vietnam, by type and appearance, 2023

Quantity in 1,000 pounds; share in percent

Type	Measure	Plain bleached	Plain unbleached	Other	All appearances
Round plate	Quantity	***	***	***	***
Clamshell	Quantity	***	***	***	***
Bowl	Quantity	***	***	***	***
Tray	Quantity	***	***	***	***
Lids	Quantity	***	***	***	***
Other	Quantity	***	***	***	***
All product types	Quantity	***	***	***	***
Round plate	Share across	***	***	***	100.0
Clamshell	Share across	***	***	***	100.0
Bowl	Share across	***	***	***	100.0
Tray	Share across	***	***	***	100.0
Lids	Share across	***	***	***	100.0
Other	Share across	***	***	***	100.0
All product types	Share across	***	***	***	100.0
Round plate	Share down	***	***	***	***
Clamshell	Share down	***	***	***	***
Bowl	Share down	***	***	***	***
Tray	Share down	***	***	***	***
Lids	Share down	***	***	***	***
Other	Share down	***	***	***	***
All forms	Share down	100.0	100.0	---	100.0
Round plate	Share across and down	***	***	***	***
Clamshell	Share across and down	***	***	***	***
Bowl	Share across and down	***	***	***	***
Tray	Share across and down	***	***	***	***
Lids	Share across and down	***	***	***	***
Other	Share across and down	***	***	***	***
All product types	Share across and down	***	***	***	100.0

Table continued.

Table D-1 Continued
TMFPs: U.S. importers' U.S. shipments from subject sources, by type and appearance, 2023

Quantity in 1,000 pounds; share in percent

Type	Measure	Plain bleached	Plain unbleached	Other	All appearances
Round plate	Quantity	***	***	***	***
Clamshell	Quantity	***	***	***	***
Bowl	Quantity	***	***	***	***
Tray	Quantity	***	***	***	***
Lids	Quantity	***	***	***	***
Other	Quantity	***	***	***	***
All product types	Quantity	***	***	***	***
Round plate	Share across	***	***	***	100.0
Clamshell	Share across	***	***	***	100.0
Bowl	Share across	***	***	***	100.0
Tray	Share across	***	***	***	100.0
Lids	Share across	***	***	***	100.0
Other	Share across	***	***	***	100.0
All product types	Share across	***	***	***	100.0
Round plate	Share down	***	***	***	***
Clamshell	Share down	***	***	***	***
Bowl	Share down	***	***	***	***
Tray	Share down	***	***	***	***
Lids	Share down	***	***	***	***
Other	Share down	***	***	***	***
All forms	Share down	100.0	100.0	100.0	100.0
Round plate	Share across and down	***	***	***	***
Clamshell	Share across and down	***	***	***	***
Bowl	Share across and down	***	***	***	***
Tray	Share across and down	***	***	***	***
Lids	Share across and down	***	***	***	***
Other	Share across and down	***	***	***	***
All product types	Share across and down	***	***	***	100.0

Table continued.

Table D-1 Continued
TMFPs: U.S. importers' U.S. shipments from nonsubject sources, by type and appearance, 2023

Quantity in 1,000 pounds; share in percent

Type	Measure	Plain bleached	Plain unbleached	Other	All appearances
Round plate	Quantity	***	***	***	***
Clamshell	Quantity	***	***	***	***
Bowl	Quantity	***	***	***	***
Tray	Quantity	***	***	***	***
Lids	Quantity	***	***	***	***
Other	Quantity	***	***	***	***
All product types	Quantity	***	***	***	***
Round plate	Share across	***	***	***	100.0
Clamshell	Share across	***	***	***	100.0
Bowl	Share across	***	***	***	100.0
Tray	Share across	***	***	***	100.0
Lids	Share across	***	***	***	100.0
Other	Share across	***	***	***	100.0
All product types	Share across	***	***	***	100.0
Round plate	Share down	***	***	***	***
Clamshell	Share down	***	***	***	***
Bowl	Share down	***	***	***	***
Tray	Share down	***	***	***	***
Lids	Share down	***	***	***	***
Other	Share down	***	***	***	***
All forms	Share down	100.0	100.0	---	100.0
Round plate	Share across and down	***	***	***	***
Clamshell	Share across and down	***	***	***	***
Bowl	Share across and down	***	***	***	***
Tray	Share across and down	***	***	***	***
Lids	Share across and down	***	***	***	***
Other	Share across and down	***	***	***	***
All product types	Share across and down	***	***	***	100.0

Table continued.

Table D-1 Continued
TMFPs: U.S. importers' U.S. shipments from all sources, by type and appearance, 2023

Quantity in 1,000 pounds; share in percent

Type	Measure	Plain bleached	Plain unbleached	Other	All appearances
Round plate	Quantity	***	***	***	***
Clamshell	Quantity	***	***	***	***
Bowl	Quantity	***	***	***	***
Tray	Quantity	***	***	***	***
Lids	Quantity	***	***	***	***
Other	Quantity	***	***	***	***
All product types	Quantity	***	***	***	***
Round plate	Share across	***	***	***	100.0
Clamshell	Share across	***	***	***	100.0
Bowl	Share across	***	***	***	100.0
Tray	Share across	***	***	***	100.0
Lids	Share across	***	***	***	100.0
Other	Share across	***	***	***	100.0
All product types	Share across	***	***	***	100.0
Round plate	Share down	***	***	***	***
Clamshell	Share down	***	***	***	***
Bowl	Share down	***	***	***	***
Tray	Share down	***	***	***	***
Lids	Share down	***	***	***	***
Other	Share down	***	***	***	***
All forms	Share down	100.0	100.0	100.0	100.0
Round plate	Share across and down	***	***	***	***
Clamshell	Share across and down	***	***	***	***
Bowl	Share across and down	***	***	***	***
Tray	Share across and down	***	***	***	***
Lids	Share across and down	***	***	***	***
Other	Share across and down	***	***	***	***
All product types	Share across and down	***	***	***	100.0

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as “---“.

Table D-2
TMFPs: U.S. producers' U.S. shipments by channels of distribution, packaging type, and period

Quantity in 1,000 pounds, share in percent

Channel and packaging type	Measure	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Distributors: Pre-packaged retail	Quantity	***	***	***	***	***
End-Users: Pre-packaged retail	Quantity	***	***	***	***	***
Distributors: Not for retail/bulk	Quantity	***	***	***	***	***
End-Users: Not for retail/bulk	Quantity	***	***	***	***	***
All channels and packaging types	Quantity	***	***	***	***	***
Distributors: Pre-packaged retail	Share	***	***	***	***	***
End-Users: Pre-packaged retail	Share	***	***	***	***	***
Distributors: Not for retail/bulk	Share	***	***	***	***	***
End-Users: Not for retail/bulk	Share	***	***	***	***	***
All channels and packaging types	Share	100.0	100.0	100.0	100.0	100.0

Table continued.

Table D-2 Continued
TMFPs: U.S. importers' U.S. shipments of imports from China by channels of distribution, packaging type, and period

Quantity in 1,000 pounds, share in percent

Channel and packaging type	Measure	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Distributors: Pre-packaged retail	Quantity	***	***	***	***	***
End-Users: Pre-packaged retail	Quantity	***	***	***	***	***
Distributors: Not for retail/bulk	Quantity	***	***	***	***	***
End-Users: Not for retail/bulk	Quantity	***	***	***	***	***
All channels and packaging types	Quantity	***	***	***	***	***
Distributors: Pre-packaged retail	Share	***	***	***	***	***
End-Users: Pre-packaged retail	Share	***	***	***	***	***
Distributors: Not for retail/bulk	Share	***	***	***	***	***
End-Users: Not for retail/bulk	Share	***	***	***	***	***
All channels and packaging types	Share	100.0	100.0	100.0	100.0	100.0

Table continued.

Table D-2 Continued
TMFPs: U.S. importers' U.S. shipments of imports from Vietnam by channels of distribution, packaging type, and period

Quantity in 1,000 pounds, share in percent

Channel and packaging type	Measure	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Distributors: Pre-packaged retail	Quantity	***	***	***	***	***
End-Users: Pre-packaged retail	Quantity	***	***	***	***	***
Distributors: Not for retail/bulk	Quantity	***	***	***	***	***
End-Users: Not for retail/bulk	Quantity	***	***	***	***	***
All channels and packaging types	Quantity	***	***	***	***	***
Distributors: Pre-packaged retail	Share	***	***	***	***	***
End-Users: Pre-packaged retail	Share	***	***	***	***	***
Distributors: Not for retail/bulk	Share	***	***	***	***	***
End-Users: Not for retail/bulk	Share	***	***	***	***	***
All channels and packaging types	Share	100.0	100.0	100.0	100.0	100.0

Table continued.

Table D-2 Continued
TMFPs: U.S. importers' U.S. shipments of imports from subject sources by channels of distribution, packaging type, and period

Quantity in 1,000 pounds, share in percent

Channel and packaging type	Measure	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Distributors: Pre-packaged retail	Quantity	***	***	***	***	***
End-Users: Pre-packaged retail	Quantity	***	***	***	***	***
Distributors: Not for retail/bulk	Quantity	***	***	***	***	***
End-Users: Not for retail/bulk	Quantity	***	***	***	***	***
All channels and packaging types	Quantity	***	***	***	***	***
Distributors: Pre-packaged retail	Share	***	***	***	***	***
End-Users: Pre-packaged retail	Share	***	***	***	***	***
Distributors: Not for retail/bulk	Share	***	***	***	***	***
End-Users: Not for retail/bulk	Share	***	***	***	***	***
All channels and packaging types	Share	100.0	100.0	100.0	100.0	100.0

Table continued.

Table D-2 Continued
TMFPs: U.S. importers' U.S. shipments of imports from nonsubject sources by channels of distribution, packaging type, and period

Quantity in 1,000 pounds, share in percent

Channel and packaging type	Measure	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Distributors: Pre-packaged retail	Quantity	***	***	***	***	***
End-Users: Pre-packaged retail	Quantity	***	***	***	***	***
Distributors: Not for retail/bulk	Quantity	***	***	***	***	***
End-Users: Not for retail/bulk	Quantity	***	***	***	***	***
All channels and packaging types	Quantity	***	***	***	***	***
Distributors: Pre-packaged retail	Share	***	***	***	***	***
End-Users: Pre-packaged retail	Share	***	***	***	***	***
Distributors: Not for retail/bulk	Share	***	***	***	***	***
End-Users: Not for retail/bulk	Share	***	***	***	***	***
All channels and packaging types	Share	100.0	100.0	100.0	100.0	100.0

Table continued.

Table D-2 Continued
TMFPs: U.S. importers' U.S. shipments of imports from all sources by channels of distribution, packaging type, and period

Quantity in 1,000 pounds, share in percent

Channel and packaging type	Measure	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Distributors: Pre-packaged retail	Quantity	***	***	***	***	***
End-Users: Pre-packaged retail	Quantity	***	***	***	***	***
Distributors: Not for retail/bulk	Quantity	***	***	***	***	***
End-Users: Not for retail/bulk	Quantity	***	***	***	***	***
All channels and packaging types	Quantity	***	***	***	***	***
Distributors: Pre-packaged retail	Share	***	***	***	***	***
End-Users: Pre-packaged retail	Share	***	***	***	***	***
Distributors: Not for retail/bulk	Share	***	***	***	***	***
End-Users: Not for retail/bulk	Share	***	***	***	***	***
All channels and packaging types	Share	100.0	100.0	100.0	100.0	100.0

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as “---“.

APPENDIX E

COMPANY-SPECIFIC FINANCIAL DATA

Table E-1
TMFPs: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Net sales quantity

Quantity in 1,000 pounds

Firm	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Dart	***	***	***	***	***
Genera	***	***	***	***	***
Huhtamaki	***	***	***	***	***
Kanbol	***	***	***	***	***
Pactiv	***	***	***	***	***
Reynolds	***	***	***	***	***
Tellus	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table E-1 Continued
TMFPs: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Net sales value

Value in 1,000 dollars

Firm	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Dart	***	***	***	***	***
Genera	***	***	***	***	***
Huhtamaki	***	***	***	***	***
Kanbol	***	***	***	***	***
Pactiv	***	***	***	***	***
Reynolds	***	***	***	***	***
Tellus	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table E-1 Continued
TMFPs: U.S. producers' sales, costs/expenses, and profitability, by firm and period

COGS

Value in 1,000 dollars

Firm	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Dart	***	***	***	***	***
Genera	***	***	***	***	***
Huhtamaki	***	***	***	***	***
Kanbol	***	***	***	***	***
Pactiv	***	***	***	***	***
Reynolds	***	***	***	***	***
Tellus	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table E-1 Continued
TMFPs: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Gross profit or (loss)

Value in 1,000 dollars

Firm	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Dart	***	***	***	***	***
Genera	***	***	***	***	***
Huhtamaki	***	***	***	***	***
Kanbol	***	***	***	***	***
Pactiv	***	***	***	***	***
Reynolds	***	***	***	***	***
Tellus	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table E-1 Continued
TMFPs: U.S. producers' sales, costs/expenses, and profitability, by firm and period

SG&A expenses

Value in 1,000 dollars

Firm	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Dart	***	***	***	***	***
Genera	***	***	***	***	***
Huhtamaki	***	***	***	***	***
Kanbol	***	***	***	***	***
Pactiv	***	***	***	***	***
Reynolds	***	***	***	***	***
Tellus	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table E-1 Continued
TMFPs: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Operating income or (loss)

Value in 1,000 dollars

Firm	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Dart	***	***	***	***	***
Genera	***	***	***	***	***
Huhtamaki	***	***	***	***	***
Kanbol	***	***	***	***	***
Pactiv	***	***	***	***	***
Reynolds	***	***	***	***	***
Tellus	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table E-1 Continued
TMFPs: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Net income or (loss)

Value in 1,000 dollars

Firm	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Dart	***	***	***	***	***
Genera	***	***	***	***	***
Huhtamaki	***	***	***	***	***
Kanbol	***	***	***	***	***
Pactiv	***	***	***	***	***
Reynolds	***	***	***	***	***
Tellus	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table E-1 Continued
TMFPs: U.S. producers' sales, costs/expenses, and profitability, by firm and period

COGS to net sales ratio

Ratio in percent

Firm	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Dart	***	***	***	***	***
Genera	***	***	***	***	***
Huhtamaki	***	***	***	***	***
Kanbol	***	***	***	***	***
Pactiv	***	***	***	***	***
Reynolds	***	***	***	***	***
Tellus	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table E-1 Continued
TMFPs: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Gross profit or (loss) to net sales ratio

Ratio in percent

Firm	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Dart	***	***	***	***	***
Genera	***	***	***	***	***
Huhtamaki	***	***	***	***	***
Kanbol	***	***	***	***	***
Pactiv	***	***	***	***	***
Reynolds	***	***	***	***	***
Tellus	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table E-1 Continued
TMFPs: U.S. producers' sales, costs/expenses, and profitability, by firm and period

SG&A expenses to net sales ratio

Ratio in percent

Firm	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Dart	***	***	***	***	***
Genera	***	***	***	***	***
Huhtamaki	***	***	***	***	***
Kanbol	***	***	***	***	***
Pactiv	***	***	***	***	***
Reynolds	***	***	***	***	***
Tellus	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table E-1 Continued
TMFPs: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Operating income or (loss) to net sales ratio

Ratio in percent

Firm	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Dart	***	***	***	***	***
Genera	***	***	***	***	***
Huhtamaki	***	***	***	***	***
Kanbol	***	***	***	***	***
Pactiv	***	***	***	***	***
Reynolds	***	***	***	***	***
Tellus	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table E-1 Continued
TMFPs: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Net income or (loss) to net sales ratio

Ratio in percent

Firm	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Dart	***	***	***	***	***
Genera	***	***	***	***	***
Huhtamaki	***	***	***	***	***
Kanbol	***	***	***	***	***
Pactiv	***	***	***	***	***
Reynolds	***	***	***	***	***
Tellus	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table E-1 Continued
TMFPs: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Unit net sales value

Unit value in dollars per pound

Firm	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Dart	***	***	***	***	***
Genera	***	***	***	***	***
Huhtamaki	***	***	***	***	***
Kanbol	***	***	***	***	***
Pactiv	***	***	***	***	***
Reynolds	***	***	***	***	***
Tellus	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table E-1 Continued
TMFPs: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Unit raw materials cost

Unit value in dollars per pound

Firm	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Dart	***	***	***	***	***
Genera	***	***	***	***	***
Huhtamaki	***	***	***	***	***
Kanbol	***	***	***	***	***
Pactiv	***	***	***	***	***
Reynolds	***	***	***	***	***
Tellus	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table E-1 Continued
TMFPs: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Unit direct labor cost

Unit value in dollars per pound

Firm	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Dart	***	***	***	***	***
Genera	***	***	***	***	***
Huhtamaki	***	***	***	***	***
Kanbol	***	***	***	***	***
Pactiv	***	***	***	***	***
Reynolds	***	***	***	***	***
Tellus	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table E-1 Continued
TMFPs: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Unit other factory costs

Unit value in dollars per pound

Firm	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Dart	***	***	***	***	***
Genera	***	***	***	***	***
Huhtamaki	***	***	***	***	***
Kanbol	***	***	***	***	***
Pactiv	***	***	***	***	***
Reynolds	***	***	***	***	***
Tellus	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table E-1 Continued
TMFPs: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Unit COGS

Unit value in dollars per pound

Firm	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Dart	***	***	***	***	***
Genera	***	***	***	***	***
Huhtamaki	***	***	***	***	***
Kanbol	***	***	***	***	***
Pactiv	***	***	***	***	***
Reynolds	***	***	***	***	***
Tellus	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table E-1 Continued
TMFPs: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Unit gross profit or (loss)

Unit value in dollars per pound

Firm	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Dart	***	***	***	***	***
Genera	***	***	***	***	***
Huhtamaki	***	***	***	***	***
Kanbol	***	***	***	***	***
Pactiv	***	***	***	***	***
Reynolds	***	***	***	***	***
Tellus	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table E-1 Continued
TMFPs: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Unit SG&A expenses

Unit value in dollars per pound

Firm	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Dart	***	***	***	***	***
Genera	***	***	***	***	***
Huhtamaki	***	***	***	***	***
Kanbol	***	***	***	***	***
Pactiv	***	***	***	***	***
Reynolds	***	***	***	***	***
Tellus	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table E-1 Continued
TMFPs: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Unit operating income or (loss)

Unit value in dollars per pound

Firm	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Dart	***	***	***	***	***
Genera	***	***	***	***	***
Huhtamaki	***	***	***	***	***
Kanbol	***	***	***	***	***
Pactiv	***	***	***	***	***
Reynolds	***	***	***	***	***
Tellus	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table E-1 Continued
TMFPs: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Unit net income or (loss)

Unit value in dollars per pound

Firm	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Dart	***	***	***	***	***
Genera	***	***	***	***	***
Huhtamaki	***	***	***	***	***
Kanbol	***	***	***	***	***
Pactiv	***	***	***	***	***
Reynolds	***	***	***	***	***
Tellus	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table E-1 Continued
TMFPs: U.S. producers' sales, costs/expenses, and profitability, by firm and period

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Note: Consistent with the approach noted in Part VI, financial results of new entrants are presented in this table when sales were reported in conjunction with costs/expenses.

Table E-2
TMFPs: U.S. producers' capital expenditures, by firm and period

Value in 1,000 dollars

Firm	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Dart	***	***	***	***	***
Genera	***	***	***	***	***
Huhtamaki	***	***	***	***	***
Kanbol	***	***	***	***	***
Pactiv	***	***	***	***	***
Reynolds	***	***	***	***	***
Tellus	***	***	***	***	***
All firms	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table E-3
TMFPs: U.S. producers' narrative descriptions of their capital expenditures, by firm

Firm	Narrative on capital expenditures
Dart	***
Genera	***
Huhtamaki	***
Kanbol	***
Pactiv	***
Reynolds	***
Tellus	***

Source: Compiled from data submitted in response to Commission questionnaires.

Table E-4
TMFPs: U.S. producers' R&D expenses, by firm and period
Value in 1,000 dollars

Firm	2021	2022	2023	Jan-Jun 2023	Jan-Jun 2024
Dart	***	***	***	***	***
Genera	***	***	***	***	***
Huhtamaki	***	***	***	***	***
Kanbol	***	***	***	***	***
Pactiv	***	***	***	***	***
Reynolds	***	***	***	***	***
Tellus	***	***	***	***	***
All firms	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table E-5
TMFPs: U.S. producers' narrative descriptions of their R&D expenses, by firm

Firm	Narrative on R&D expenses
Dart	***
Genera	***
Huhtamaki	***
Kanbol	***
Pactiv	***
Reynolds	***
Tellus	***

Source: Compiled from data submitted in response to Commission questionnaires.

Table E-6
TMFPs: U.S. producers' total net assets, by firm and period

Value in 1,000 dollars

Firm	2021	2022	2023
Dart	***	***	***
Genera	***	***	***
Huhtamaki	***	***	***
Kanbol	***	***	***
Pactiv	***	***	***
Reynolds	***	***	***
Tellus	***	***	***
All firms	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Note: ***. Email from ***, October 31, 2024.

Table E-7
TMFPs: U.S. producers' ROA, by firm and period

Ratio in percent

Firm	2021	2022	2023
Dart	***	***	***
Genera	***	***	***
Huhtamaki	***	***	***
Kanbol	***	***	***
Pactiv	***	***	***
Reynolds	***	***	***
Tellus	***	***	***
All firms	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Note: Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Note: Consistent with the approach noted in Part VI, financial results, and by extension ROA, of new entrants are presented when sales were reported in conjunction with costs/expenses.

Note: For purposes of calculating the U.S. industry's ROA, the net assets denominator was adjusted in each year to eliminate company-specific assets when no financial results were presented for a new entrant.

Note: ***. Email from ***, October 31, 2024.

Table E-8
TMFPs: U.S. producers' narrative descriptions of their total net assets, by firm

Firm	Narrative on total assets
Dart	***
Genera	***
Huhtamaki	***
Kanbol	***
Pactiv	***
Reynolds	***
Tellus	***

Source: Compiled from data submitted in response to Commission questionnaires.