# Polyethylene Terephthalate (PET) Film, Sheet, and Strip from India and Taiwan

Investigation Nos. 701-TA-415 and 731-TA-933-934 (Third Review)

**Publication 5117** **September 2020**

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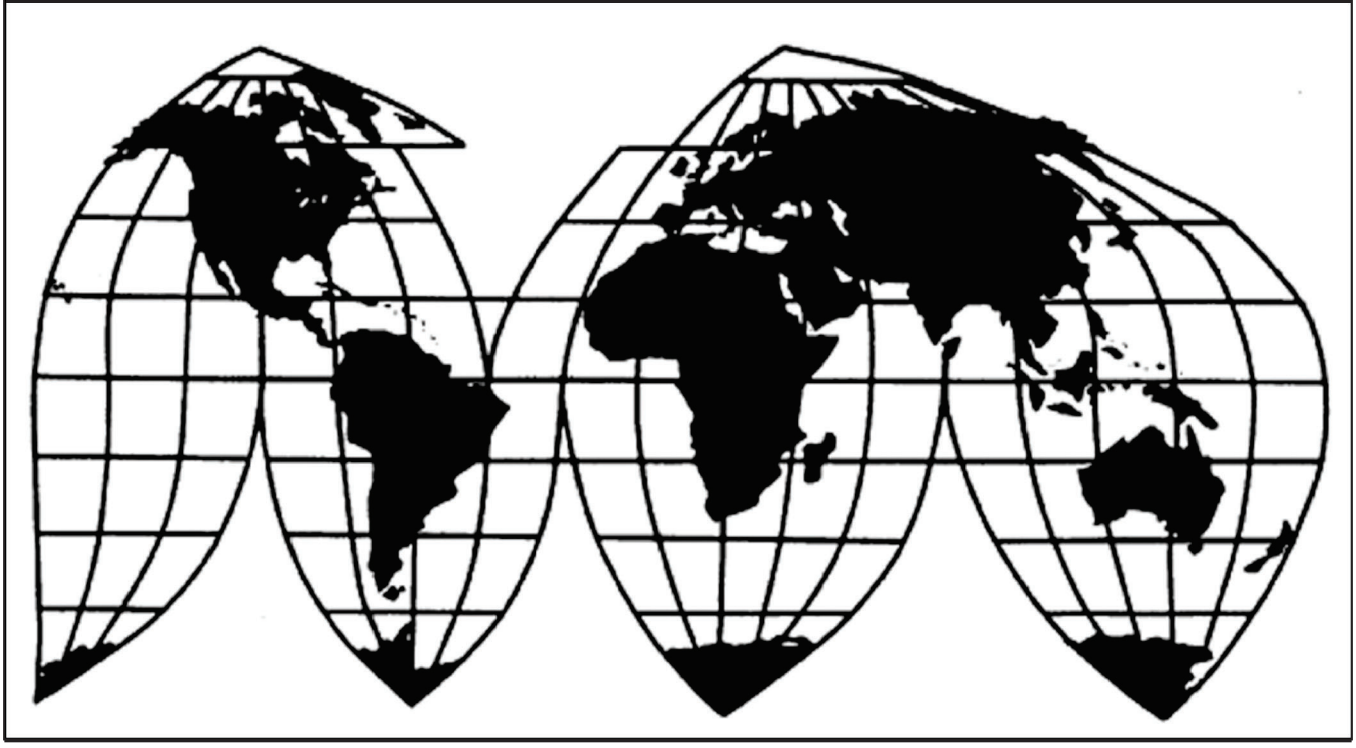

**Washington, DC 20436**

# U.S. International Trade Commission

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**UNITED STATES INTERNATIONAL TRADE COMMISSION**

Investigation Nos. 701-TA-415 and 731-TA-933-934 (Third Review)

Polyethylene Terephthalate (PET) Film, Sheet, and Strip from India and Taiwan

## DETERMINATIONS

On the basis of the record[1] developed in the subject five-year reviews, the United States International Trade Commission ("Commission") determines, pursuant to the Tariff Act of 1930 ("the Act"), that revocation of the antidumping duty and countervailing duty orders on polyethylene terephthalate film, sheet, and strip from India and Taiwan would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[2]

## BACKGROUND

The Commission instituted these reviews on July 1, 2019 (84 FR 31343) and determined on October 4, 2019 that it would conduct full reviews (84 FR 67960, December 12, 2019). Notice of the scheduling of the Commission's reviews and of a public hearing 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 March 25, 2020 (85 FR 16957). Subsequently, the Commission cancelled its previously scheduled hearing following a request on behalf of the domestic interested parties (85 FR 43602, July 17, 2020).

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

[2] Chair Jason E. Kearns not participating.

## Views of the Commission

Based on the record in these five-year reviews, we determine under section 751(c) of the Tariff Act of 1930, as amended ("the Tariff Act"), that revocation of the countervailing duty order on polyethylene terephthalate film, sheet, and strip ("PET film")[1] from India and the antidumping duty orders on PET film from India and Taiwan would likely lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[2]

## I. Background

On May 17, 2001, DuPont Teijin Films, Mitsubishi Polyester Film, and Toray Plastics (America) filed petitions in the original investigations. In June 2002, the Commission determined that an industry in the United States was materially injured by reason of subsidized imports of PET film from India and by reason of less-than-fair-value ("LTFV") imports of PET film from India and Taiwan.[3] The U.S. Department of Commerce ("Commerce") issued the countervailing duty order on PET film from India on July 1, 2002 and the antidumping duty order on PET film from India on May 16, 2002.[4] It issued the antidumping duty order on PET film from Taiwan on May 20, 2002.[5]

In April 2008, the Commission completed full first reviews and made affirmative determinations.[6] Commerce issued continuations of the countervailing duty and antidumping duty orders on May 8, 2008.[7] In June 2014, the Commission completed its second full reviews

[1] "PET film," unless indicated otherwise, refers to all merchandise within the scope of the orders under review.

[2] Chair Kearns did not participate in the determinations for these reviews.

[3] Confidential Report ("CR") and Public Report ("PR") at I-2–3; *see Polyethylene Terephthalate Film, Sheet, and Strip from India and Taiwan*, Inv. Nos. 701-TA-415 and 731-TA-933-934 (Final), USITC Pub. 3518 (June 2002) ("*Original Determinations*") at 3.

[4] Notice of Final Determination of Sales at Less Than Fair Value: Polyethylene Terephthalate Film, Sheet, and Strip From India, 67 Fed. Reg. 34899 (May 16, 2020), as amended by 67 Fed. Reg. 44175 (July 1, 2002); Notice of Countervailing Duty Order: Polyethylene Terephthalate Film, Sheet, and Strip (PET Film) from India, 67 Fed. Reg. 44179 (July 1, 2002).

[5] Notice of Final Determination of Sales at Less Than Fair Value: Polyethylene Terephthalate Film, Sheet, and Strip (PET Film) from Taiwan, 67 Fed. Reg. 35474 (May 20, 2002), as amended by 67 Fed. Reg. 44174 (July 1, 2002).

[6] Polyethylene Terephthalate Film, Sheet, and Strip from India and Taiwan, Inv. Nos. 701-TA-415 and 731-TA-933-934 (Review), USITC Pub. 3994 (April 2008) ("*First Review Determinations*") at 3.

[7] Continuation of Antidumping Duty Orders on Polyethylene Terephthalate Film, Sheet, and Strip from India and Taiwan, 73 Fed. Reg. 26079 (May 8, 2008); Continuation of Countervailing Duty Order on Polyethylene Terephthalate Film, Sheet, and Strip from India, 73 Fed. Reg. 26080 (May 8, 2008).

and made affirmative determinations.[8] Commerce issued continuations of the countervailing duty and antidumping duty orders on August 6, 2014.[9]

The Commission instituted these third reviews on July 1, 2019.[10] The Commission received a joint response to its notice of institution from domestic PET film producers DuPont Teijin Films; Mitsubishi Polyester Film, Inc.; SKC, Inc.; and Toray Plastics (America), Inc. (collectively, "Domestic Producers"), and individual responses from domestic producers Terphane LLC ("Terphane") and Polyplex USA LLC ("Polyplex USA") as well as Jindal Poly Films Ltd. ("Jindal"), a producer and exporter of PET film from India. The Commission determined that the domestic interested party group response to its notice of institution was adequate. With respect to the antidumping and countervailing duty orders on PET film from India, two Commissioners determined that the respondent interested party group response was adequate, and one Commissioner determined that the respondent interested party group response was inadequate but found that changes in the conditions of competition warranted full reviews of these orders. Accordingly, the Commission decided to conduct full reviews concerning the orders of PET film from India.[11] The Commission found that the respondent interested party group response with respect to the order on PET film from Taiwan was inadequate. However, the Commission determined to conduct a full review concerning this order to promote administrative efficiency in light of its decision to conduct full reviews with respect to the orders on PET film from India.[12]

The Commission received prehearing and posthearing briefs from Domestic Producers and Terphane in support of continuation of the orders.[13] (Domestic Producers and Terphane will be referred to collectively as "domestic parties.") Polyplex USA filed a letter in lieu of a posthearing brief in support of continuation of the orders and responded to Commission

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[8] *Polyethylene Terephthalate Film, Sheet, and Strip from India and Taiwan*, Inv. Nos. 701-TA-415 and 731-TA-933-934 (Second Review), USITC Pub. 4479 (July 2014) ("Se*cond Review Determinations*") at 3.

[9] Polyethylene Terephthalate Film, Sheet and Strip From India and Taiwan: Continuation of Antidumping and Countervailing Duty Orders, 79 Fed. Reg. 45762 (Aug. 6, 2014).

[10] Polyethylene Terephthalate Film, Sheet, and Strip from India and Taiwan: Institution of Five-Year Reviews, 84 Fed. Reg. 31343 (July 1, 2019).

[11] Notice of Commission Determinations to Conduct Full Five-Year Reviews, 84 Fed. Reg. 67960 (Dec. 12, 2019).

[12] Notice of Commission Determinations to Conduct Full Five-Year Reviews, 84 Fed. Reg. 67960 (Dec. 12, 2019).

[13] Domestic Producers Prehearing Brief, EDIS Doc. 713855 (July 2, 2020); Domestic Producers Posthearing Brief, EDIS Doc. 715460 (July 23, 2020); Terphane Prehearing Brief, EDIS Doc. 713847 (July 2, 2020); Terphane Posthearing Brief, EDIS Doc. 715421 (July 23, 2020).

questions.[14] Respondent Jindal filed a prehearing brief in opposition to continuation of the orders.[15] No respondent party sought to participate in a hearing or filed a posthearing brief.

Domestic Producers and Polyplex USA jointly filed a request to cancel the hearing.[16] Finding good cause to grant this request, the Commission cancelled the hearing originally scheduled for these reviews and issued written questions to the parties, to which Domestic Producers and Polyplex USA responded in their posthearing submissions.[17]

U.S. industry data are based on the questionnaire responses of 10 U.S. producers of PET film that are believed to account for 100 percent of domestic production in 2019.[18] U.S. import data and related information are based on official import statistics of Commerce and the questionnaire responses of 21 U.S. importers of PET film that accounted for 34.2 percent of total U.S. imports of PET film, 43.8 percent of subject imports from India, 74.8 percent of subject imports from Taiwan, and 59.2 percent of total subject imports in 2018, based on staff's adjustment of official import data.[19] Foreign industry data and related information are based on the questionnaire responses of four producers and exporters of subject merchandise in India, accounting for *** percent of total PET film production in India in 2019;[20] the questionnaire response of one producer and exporter of subject merchandise in Taiwan, accounting for *** percent of PET film production in Taiwan in 2019;[21] and other data compiled by the staff.[22]

## II. Domestic Like Product and Industry

### A. Domestic Like Product

In making its determination under section 751(c) of the Tariff Act, the Commission defines the "domestic like product" and the "industry."[23] The Tariff Act defines "domestic like product" as "a product which is like, or in the absence of like, most similar in characteristics and

[14] Polyplex Response to Commission Questions, EDIS Doc. 715482 (July 23, 2020).
[15] Jindal Prehearing Brief, EDIS Doc. 713835 (July 2, 2020).
[16] CR/PR at App. B.
[17] PET Film From India and Taiwan: Cancellation of Hearing for Third Full Five-Year Reviews, 85 Fed. Reg. 43602 (July 17, 2020).
[18] CR/PR at III-1.
[19] CR/PR at IV-1 & n.3 (explaining staff methodology for calculating coverage).
[20] CR/PR at IV-16–17.
[21] CR/PR at IV-24–25.
[22] CR/PR at Table I-2.
[23] 19 U.S.C. § 1677(4)(A).

uses with, the article subject to an investigation under this subtitle."[24] The Commission's practice in five-year reviews is to examine the domestic like product definition from the original investigation and consider whether the record indicates any reason to revisit the prior findings.[25]

Commerce has defined the imported merchandise within the scope of the orders under review as follows:

> all gauges of raw, pretreated, or primed PET Film, whether extruded or coextruded. Excluded are metallized films and other finished films that have had at least one of their surfaces modified by the application of a performance-enhancing resinous or inorganic layer of more than 0.00001 inches thick.[26]

The scope has not changed since the original investigations. Commerce conducted one scope review with respect to PET film from Taiwan and determined that amorphous PET film that is not biaxially oriented is not within the scope of the antidumping duty order.[27] In a previous scope review with respect to PET film from India, Commerce determined that tracing and drafting film are outside the scope of the order.[28]

In the original determinations, the Commission defined a single domestic like product consisting of all PET film, not including equivalent PET film, corresponding to Commerce's

[24] 19 U.S.C. § 1677(10); *see*, *e.g., Cleo Inc. v. United States*, 501 F.3d 1291, 1299 (Fed. Cir. 2007); *NEC Corp. v. Department of Commerce*, 36 F. Supp. 2d 380, 383 (Ct. Int'l Trade 1998); *Nippon Steel Corp. v. United States*, 19 CIT 450, 455 (1995); *Timken Co. v. United States*, 913 F. Supp. 580, 584 (Ct. Int'l Trade 1996); *Torrington Co. v. United States*, 747 F. Supp. 744, 748-49 (Ct. Int'l Trade 1990), *aff'd*, 938 F.2d 1278 (Fed. Cir. 1991); *see also* S. Rep. No. 249, 96th Cong., 1st Sess. 90-91 (1979).

[25] *See*, *e.g.*, *Internal Combustion Industrial Forklift Trucks from Japan*, Inv. No. 731-TA-377 (Second Review), USITC Pub. 3831 at 8-9 (Dec. 2005); *Crawfish Tail Meat from China*, Inv. No. 731-TA-752 (Review), USITC Pub. 3614 at 4 (July 2003); *Steel Concrete Reinforcing Bar from Turkey*, Inv. No. 731-TA-745 (Review), USITC Pub. 3577 at 4 (Feb. 2003).

[26] Polyethylene Terephthalate Film, Sheet and Strip From India and Taiwan: Final Results of the Expedited Third Sunset Reviews of the Antidumping Duty Orders, 84 Fed. Reg. 59355, 59356 (Nov. 4, 2019); Issues and Decisions Memorandum: Final Results of Expedited Third Sunset Reviews of the Antidumping and Countervailing Duty Orders on Polyethylene Terephthalate Film, Sheet, and Strip from India and Taiwan (Oct. 29, 2019); Issues and Decisions Memorandum for the Final Results of Expedited Third Sunset Review of the Countervailing Duty Order on Polyethylene Terephthalate Film, Sheet, and Strip from India (Oct. 29, 2019).

[27] *Notice of Scope Rulings*, 76 Fed. Reg. 31301 (May 31, 2011). *See also* CR/PR at I-15-16.

[28] *Notice of Scope Rulings*, 70 Fed. Reg. 24533 (May 10, 2005).

scope.[29] In both prior reviews, in the absence of any contrary argument, the Commission again defined a single domestic like product coextensive with Commerce's scope.[30]

In the current reviews, Domestic Producers and Terphane assert that the Commission should again define a single domestic like product coextensive with the scope.[31] In its response to the notice of institution, Jindal asserted that thick films, which it described as films with thickness of more than 50 microns, should be "excluded" from coverage.[32] In its comments on questionnaires, Jindal requested that the Commission collect data on four distinct product categories: thin PET film, thick PET film, PET sheet, and PET strip.[33] While Jindal provided some basis for its data collection requests, it did not purport to conduct a domestic like product analysis, and did not subsequently raise any like product arguments in its prehearing brief. We therefore consider this argument to be abandoned.[34]

The record of these reviews indicates that the characteristics and uses of domestically produced PET film have not changed materially since the prior proceedings.[35] In light of this, we find there is no reason to revisit the issue of domestic like product and consequently again define the domestic like product as consisting of all PET film, not including equivalent PET film, corresponding to the scope of the orders.

### B. Domestic Industry

Section 771(4)(A) of the Tariff Act defines the relevant industry 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."[36] 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.

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[29] *Original Determinations*, USITC Pub. 3518 at 6.

[30] *First Review Determinations*, USITC Pub. 3994 at 6; *Second Review Determinations*, USITC Pub. 4479 at 6.

[31] Domestic Producers Prehearing Brief at 4; Terphane Prehearing Brief at 9.

[32] Jindal Response to Notice of Institution, EDIS Doc. 683776 (July 31, 2019) at 10.

[33] Jindal Comments on Draft Questionnaires, EDIS Doc. 705513 at 105.

[34] *See Carbon and Certain Alloy Steel Wire Rod from Brazil, Indonesia, Mexico, Moldova, and Trinidad & Tobago*, Inv. Nos. 701-TA-417 and 731-TA-953, 957–959, and 961 (Third Review), USITC Pub. 5100 at 11 n.41 (Aug. 2020).

[35] *See* CR/PR at I-18–25.

[36] 19 U.S.C. § 1677(4)(A). The definitions in 19 U.S.C. § 1677 are applicable to the entire subtitle containing the antidumping and countervailing duty laws, including 19 U.S.C. §§ 1675 and 1675a. *See* 19 U.S.C. § 1677.

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 or which are themselves importers.[37] Exclusion of such a producer is within the Commission's discretion based upon the facts presented in each investigation.[38]

In the original investigations, there were no related party issues and the Commission defined a single domestic industry consisting of all domestic producers of PET film.[39] In the first reviews, the Commission adopted the same definition after finding that appropriate circumstances did not exist to exclude either of the two related party producers from the domestic industry.[40] In the second reviews, the Commission again defined the domestic industry as all U.S. producers of PET film after finding that appropriate circumstances did not exist to exclude from the domestic industry any of the three domestic producers that could be considered related parties.[41]

In the current reviews, *** is subject to possible exclusion under the related parties provision because it imported subject merchandise from India during the period for which data were collected and has common ownership with ***, an exporter of subject merchandise.[42]

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[37] *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).

[38] 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); *see also Torrington Co. v. United States*, 790 F. Supp. at 1168.

[39] *Original Determinations*, USITC Pub. 3518 at 6.

[40] *First Review Determinations*, USITC Pub. 3994 at 6–8.

[41] *Second Review Determinations*, USITC Pub. 4479 at 7–9.

[42] CR/PR at Tables I-7, III-7, IV-9. While domestic producer *** is affiliated with ***, a producer of subject merchandise in India, CR/PR at Table I-7, *** did not export subject merchandise to the

Terphane, the sole party that briefed the issue, contends that the domestic industry should be defined as all domestic producers of PET film.[43]

*** accounted for *** percent of U.S. production of PET film in 2019.[44] It *** continuing the orders under review.[45] Its subject imports from India were *** pounds in 2017, *** pounds in 2018, and *** pounds in 2019.[46] It states that its subject imports ***.[47] Its ratio of subject imports to domestic production was *** percent in 2017, *** percent in 2018, and *** percent in 2019.[48]

The record indicates that *** principal interest is in domestic production, as its ratio of subject imports to U.S. production was small throughout the period for which data were collected.[49] Moreover, no party has argued that *** should be excluded from the domestic industry. We therefore determine that appropriate circumstances do not exist to exclude *** from the domestic industry.

We consequently define the domestic industry as all U.S. producers of PET film.

## III. Cumulation

### A. Legal Standard

With respect to five-year reviews, section 752(a) of the Tariff Act provides as follows:

> the Commission may cumulatively assess the volume and effect of imports of the subject merchandise from all countries with respect to which reviews under section 1675(b) or (c) of this title were initiated on the same day, if such imports would be likely to compete with each other and with domestic like products in the United States market. The Commission shall not cumulatively assess the volume and effects of imports of the subject merchandise in a case in which it determines that such imports are likely to have no discernible adverse impact on the domestic industry.[50]

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United States during the period for which data were sought. *** Foreign Producers Questionnaire, EDIS Doc. 710984, response to question II-11. Hence *** is not a related party.

In five-year reviews, the Commission requests domestic industry and importer and foreign producer data for the three most recently completed calendar years rather than for the full five-year period of review in order to alleviate the reporting burden for domestic and respondent parties.

[43] Terphane Prehearing Brief at 10–12.

[44] CR/PR at Table I-6.

[45] CR/PR at Table I-6.

[46] CR/PR at Table III-7.

[47] CR/PR at Table III-7.

[48] CR/PR at Table III-7.

[49] CR/PR at Table III-7.

[50] 19 U.S.C. § 1675a(a)(7).

Cumulation therefore is discretionary in five-year reviews, unlike original investigations, which are governed by section 771(7)(G)(i) of the Tariff Act.[51] The Commission may exercise its discretion to cumulate, however, only if the reviews are initiated on the same day, the Commission determines that the subject imports are likely to compete with each other and the domestic like product in the U.S. market, and imports from each such subject country are not likely to have no discernible adverse impact on the domestic industry in the event of revocation. Our focus in five-year reviews is not only on present conditions of competition, but also on likely conditions of competition in the reasonably foreseeable future.

In the original investigations, the Commission found that there was a reasonable overlap of competition between subject imports from India and Taiwan and between imports from each subject country and the domestic like product, and consequently cumulated subject imports from India and Taiwan.[52] In the first and second reviews, the Commission found that subject imports from India or Taiwan were not likely to have no discernible adverse impact on the domestic industry in the event of revocation of the orders.[53] In both prior reviews the Commission also found that there would likely be a reasonable overlap in competition between subject imports from each country and the domestic like product, as well as between subject imports from India and Taiwan, should the orders be revoked.[54] The Commission did not find any likely differences in conditions of competition between subject imports from India and Taiwan upon revocation.[55] Accordingly, the Commission exercised its discretion to cumulate subject imports from India and Taiwan in both the first and second reviews.[56]

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[51] 19 U.S.C. § 1677(7)(G)(i); *see also*, *e.g.*, *Nucor Corp. v. United States*, 601 F.3d 1291, 1293 (Fed. Cir. 2010) (Commission may reasonably consider likely differing conditions of competition in deciding whether to cumulate subject imports in five-year reviews); *Allegheny Ludlum Corp. v. United States*, 475 F. Supp. 2d 1370, 1378 (Ct. Int'l Trade 2006) (recognizing the wide latitude the Commission has in selecting the types of factors it considers relevant in deciding whether to exercise discretion to cumulate subject imports in five-year reviews); *Nucor Corp. v. United States*, 569 F. Supp. 2d 1328, 1337-38 (Ct. Int'l Trade 2008).

[52] *Original Determinations*, USITC Pub. 3518 at 8.

[53] *First Review Determinations*, USITC Pub. 3994 at 9; *Second Review Determinations*, USITC Pub. 4479 at 11.

[54] *First Review Determinations*, USITC Pub. 3994 at 12; *Second Review Determinations*, USITC Pub. 4479 at 14.

[55] *First Review Determinations*, USITC Pub. 3994 at 12-13; *Second Review Determinations*, USITC Pub. 4479 at 14.

[56] *First Review Determinations*, USITC Pub. 3994 at 13; *Second Review Determinations*, USITC Pub. 4479 at 14.

In these reviews, the statutory threshold for cumulation is satisfied because all reviews were initiated on the same day, July 1, 2019.[57] In addition, we consider the following issues in deciding whether to exercise our discretion to cumulate the subject imports: (1) whether imports from any of the subject countries are precluded from cumulation because they are likely to have no discernible adverse impact on the domestic industry; (2) whether there is a likelihood of a reasonable overlap of competition among subject imports from the subject countries and the domestic like product; and (3) whether subject imports are likely to compete in the U.S. market under different conditions of competition.

Domestic Producers and Terphane argue that the Commission should cumulate subject imports from India and Taiwan.[58] Jindal did not directly address the issue of cumulation in its prehearing brief.

### B. Likelihood of No Discernible Adverse Impact

The statute precludes cumulation if the Commission finds that subject imports from a country are likely to have no discernible adverse impact on the domestic industry.[59] Neither the statute nor the Uruguay Round Agreements Act ("URAA") Statement of Administrative Action ("SAA") provides specific guidance on what factors the Commission is to consider in determining that imports "are likely to have no discernible adverse impact" on the domestic industry.[60] With respect to this provision, the Commission generally considers the likely volume of subject imports and the likely impact of those imports on the domestic industry within a reasonably foreseeable time if the orders are revoked. Our analysis for each of the subject countries takes into account, among other things, the nature of the product and the behavior of subject imports in the original investigations. We consider the data pertinent to each subject country below.

*India*. In the original investigations, U.S. shipments of subject imports from India increased from *** pounds in 1999 to *** pounds in 2001; their market share by quantity in 2001 was *** percent. During the first reviews, shipments of subject imports from India decreased from *** pounds in 2002 to *** pounds in 2006; market penetration by quantity in 2006 was *** percent. In the second reviews, U.S. shipments of subject imports from India

[57] *See* Initiation of Five-Year (Sunset) Reviews, 84 Fed. Reg. 31304 (July 1, 2019).
[58] Domestic Producers Prehearing Brief at 7; Terphane Prehearing Brief at 21–22.
[59] 19 U.S.C. § 1675a(a)(7).
[60] SAA, H.R. Rep. No. 103-316, vol. I at 887 (1994).

ranged from a low of *** pounds in 2010 to a high of *** pounds in 2011; market penetration by quantity in 2013 was *** percent.[61]

In these reviews, the quantity of subject imports from India was 9.7 million pounds in 2017, 4.1 million pounds in 2018, and 2.4 million pounds in 2019.[62] The share of the quantity of apparent U.S. consumption accounted for by U.S. shipments of subject imports from India ranged from 1.5 percent in 2017 to 0.4 percent in 2019.[63]

Four producers of subject merchandise in India, accounting for *** percent of PET film production in India in 2019, responded to the Commission questionnaires in these reviews.[64] These producers' production capacity in India was *** pounds in 2017, *** pounds in 2018, and *** pounds in 2019.[65] Their capacity utilization was *** percent in 2017, *** percent in 2018, and *** percent in 2019.[66] The IHS Chemical Economics Handbook reports a considerably larger capacity for the PET film industry in India, *** pounds, in 2018.[67]

Reporting Indian producers' global exports of PET film fluctuated during the period for which data were collected, increasing from *** pounds in 2017 to *** pounds in 2018 and decreasing to *** pounds in 2019. On an annual basis, exports constituted between *** and *** percent of these producers' total shipments. Reporting Indian producers' export shipments to the United States decreased from *** pounds in 2017 to *** pounds in 2018 and *** pounds in 2019, ranging between *** and *** percent of total shipments.[68] Available Global Trade Atlas ("GTA") data indicate that in 2019, India was the third-largest global exporter of PET plates, sheets, film, foil, and strip of plastics.[69] PET film from India is subject to antidumping duty orders in Korea, Indonesia, and Brazil, and is subject to countervailing duty orders in Turkey and Brazil.[70]

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[61] *Second Review Determinations*, USITC Pub. 4479 at 10–11; Confidential Staff Report (Second Review), INV-MM-057 (June 11, 2014) at Table I-1; CR/PR at Table I-2.

[62] CR/PR at Table IV-1.

[63] CR/PR at Table I-9.

[64] CR/PR at IV-16–17. The responding producers estimate that there are *** current producers of PET film in India. CR/PR at IV-16–17. The IHS Chemical Economics Handbook lists ten producers. CR/PR at Table IV-8.

[65] CR/PR at Table IV-11.

[66] CR/PR at Table IV-11.

[67] CR/PR at Table IV-8. The PET film product reported by IHS is narrower than the scope of the orders under review. By comparison, apparent U.S. consumption was 631.2 million pounds in 2018 and 613.8 million pounds in 2019. CR/PR at Table C-1.

[68] CR/PR at Table IV-11.

[69] CR/PR at Table IV-23. GTA data concern a product grouping that includes both in-scope and out-of-scope products.

[70] CR/PR at IV-34.

In the current reviews, subject imports from India undersold the domestic like product in nine of 55 quarterly comparisons.[71] Subject imports from India undersold the domestic like product in 132 of 157 comparisons in the original investigations, 30 of 41 comparisons in the first reviews, and 22 of 42 comparisons in the second reviews.[72]

Based on the foregoing, including information indicating that the PET film industry in India is large and exports considerable quantities of merchandise, we find that if the antidumping and countervailing duty orders on subject imports from India are revoked that such imports are not likely to have no discernible adverse impact on the domestic industry.

*Taiwan*. In the original investigations, shipments of subject imports from Taiwan increased from *** pounds in 1999 to *** pounds in 2000, then declined to *** pounds in 2001; Taiwan's share of the US. market by quantity in 2001 was *** percent. During the first reviews, subject import shipments from Taiwan ranged from *** pounds in 2005 to *** pounds in 2006; Taiwan's share of the US. market by quantity in 2006 was *** percent. In the second reviews, subject imports from Taiwan ranged from *** pounds in 2013 to *** pounds in 2009; Taiwan's share of the US. market by quantity in 2013 was *** percent.[73]

In these reviews, the quantity of subject imports from Taiwan was 6.8 million pounds in 2017, 10.7 million pounds in 2018, and 9.7 million pounds in 2019.[74] The share of apparent U.S. consumption accounted for by these subject imports was 1.1 percent in 2017, 1.7 percent in 2018, and 1.6 percent in 2019.[75]

The Commission received information on the PET film industry from one subject producer in Taiwan, Nan Ya, which estimated it accounted for *** percent of that country's PET film production in 2019.[76] Nan Ya's reported capacity was *** pounds in 2017, 2018, and 2019.[77] Its capacity utilization *** from *** percent in 2017 to *** percent in 2018 and *** percent in 2019.[78] The IHS Chemical Economics Handbook reports that capacity for the PET film industry in Taiwan was *** pounds in 2018.[79]

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[71] CR/PR at Table V-9.

[72] CR/PR at Table V-9 note.

[73] *Second Review Determinations*, USITC Pub. 4479 at 11; Confidential Staff Report (Second Review), INV-MM-057 (June 11, 2014) at Table I-1; CR/PR at Table I-2.

[74] CR/PR at Table IV-1.

[75] CR/PR at Table I-9.

[76] CR/PR at IV-24–25. The IHS Chemical Economics Handbook indicates that Nan Ya *** of two producers in Taiwan. CR/PR at Table IV-8.

[77] CR/PR at Table IV-16.

[78] CR/PR at Table IV-16.

[79] CR/PR at Table IV-8. The PET film product reported by IHS is narrower than the scope of the orders under review.

Nan Ya's global exports of PET film *** from *** pounds in 2017 to *** pounds in 2019. On an annual basis, exports constituted between *** and *** percent of its total shipments from 2017 to 2019. Nan Ya's export shipments of PET film to the United States from Taiwan *** from *** pounds in 2017 to *** pounds in 2018 and then *** to *** pounds in 2019. As a share of its total shipments, Nan Ya's export shipments of PET film to the United States ranged from a ***.[80] Available GTA data indicate that in 2019, Taiwan was the sixth-largest global exporter of PET plates, sheets, film, foil, and strip of plastics.[81] PET film from Taiwan is subject to an antidumping duty order in Korea.[82]

In the current reviews, subject imports from Taiwan undersold the domestic like product in one of 24 quarterly comparisons.[83] Subject imports from Taiwan undersold the domestic like product in 51 of 82 comparisons in the original investigations, 59 of 72 comparisons in the first reviews, and 35 of 94 comparisons in the second reviews.[84]

Based on the foregoing, including information indicating that the subject industry in Taiwan is a large global exporter with a heavy export orientation,[85] we find that if the antidumping duty order on subject imports from Taiwan is revoked that such imports are not likely to have no discernible adverse impact on the domestic industry.

### C. Likelihood of a Reasonable Overlap of Competition

The Commission generally has considered four factors intended to provide a framework for determining whether subject imports compete with each other and with the domestic like product.[86] Only a "reasonable overlap" of competition is required.[87] In five-year reviews, the

[80] CR/PR at Table IV-16.

[81] CR/PR at Table IV-23. GTA data concern a product grouping that includes both in-scope and out-of-scope products.

[82] CR/PR at IV-34.

[83] CR/PR at Table V-9.

[84] CR/PR at Table V-9 note.

[85] CR/PR at Tables IV-16 and IV-18.

[86] The four factors generally considered by the Commission in assessing whether imports compete with each other and with the domestic like product are as follows: (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 geographical markets of 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 subject imports are simultaneously present in the market with one another and the domestic like product. *See, e.g., Wieland Werke, AG v. United States*, 718 F. Supp. 50 (Ct. Int'l Trade 1989).

relevant inquiry is whether there likely would be competition even if none currently exists because the subject imports are absent from the U.S. market.[88]

*Fungibility.* In the original investigations, the Commission found that there was at least a moderate level of fungibility between domestic PET film and the subject imports, and between imports from India and Taiwan.[89] In the first and second reviews, the majority of purchasers, importers and U.S. producers reported that domestic and imported products were always or frequently interchangeable. In both reviews, the majority of U.S. producers and importers reported that differences other than price were either never or only sometimes significant in purchasing decisions.[90]

In the current reviews, all responding U.S. producers and the majority of importers reported that the products were always or frequently interchangeable in all comparisons involving the domestic like product, subject imports from India, and subject imports from Taiwan.[91] A majority of responding purchasers indicated that subject imports from Taiwan were frequently interchangeable with the domestic like product and subject imports from India.[92] In comparing the domestic like product and subject imports from India, purchasers were evenly divided in reporting that the products were frequently or sometimes interchangeable.[93] Asked to compare products with respect to 15 purchasing factors, majorities or pluralities of purchasers found the domestic like product and subject imports from India comparable with respect to 11 factors, and the domestic like product and subject imports from Taiwan comparable with respect to 12 factors.[94]

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[87] *See Mukand Ltd. v. United States*, 937 F. Supp. 910, 916 (Ct. Int'l Trade 1996); *Wieland Werke,* 718 F. Supp. at 52 ("Completely overlapping markets are not required."); *United States Steel Group v. United States,* 873 F. Supp. 673, 685 (Ct. Int'l Trade 1994), *aff'd*, 96 F.3d 1352 (Fed. Cir. 1996). We note, however, that there have been investigations where the Commission has found an insufficient overlap in competition and has declined to cumulate subject imports. *See, e.g*., *Live Cattle from Canada and Mexico*, Inv. Nos. 701-TA-386 and 731-TA-812-13 (Preliminary), USITC Pub. 3155 at 15 (Feb. 1999), *aff'd sub nom., Ranchers-Cattlemen Action Legal Foundation v. United States*, 74 F. Supp. 2d 1353 (Ct. Int'l Trade 1999); *Static Random Access Memory Semiconductors from the Republic of Korea and Taiwan*, Inv. Nos. 731-TA-761-62 (Final), USITC Pub. 3098 at 13-15 (Apr. 1998).

[88] *See generally*, *Chefline Corp. v. United States*, 219 F. Supp. 2d 1313, 1314 (Ct. Int'l Trade 2002).

[89] *Original Determinations*, USITC Pub. 3518 at 7–8.

[90] *First Review Determinations*, USITC Pub. 3994 at 11; *Second Review Determinations*, USITC Pub. 4479 at 12.

[91] CR/PR at Table II-10.

[92] CR/PR at Table II-10.

[93] CR/PR at Table II-10.

[94] CR/PR at Table II-9.

*Channels of Distribution*. In the original investigations, the Commission found that most sales of domestically produced PET film and subject imports from Taiwan were made to processors specializing in coating PET film for a particular end use. Some sales were also made through distributors, and some sales were made directly to end users. Subject imports from India were sold to end users to a greater extent than subject imports from Taiwan or the domestic product.[95] In the first reviews, the Commission found the majority of domestic producers' U.S. shipments were to end users and processors, although some shipments were also made to distributors. The majority of shipments of subject imports from India were to end users, with the remainder going to processors or distributors. The majority of shipments of subject imports from Taiwan were to processors, with the remainder going to end users or distributors.[96] In the second reviews, the Commission found the majority of U.S. producers' shipments were to end users, as were the majority of shipments of subject imports from India and Taiwan.[97]

In the current reviews, during each year from 2017 to 2019 U.S. producers directed an appreciable proportion of their shipments to converters, end users, and distributors. Each year the majority of shipments of subject imports from India went to converters and an appreciable proportion went to distributors. Each year the majority of shipments of subject imports from Taiwan went to converters and an appreciable proportion went to end users. Consequently, each year from 2017 to 2019 at least *** percent of U.S. shipments of the domestic like product, subject imports from India, and subject imports from Taiwan were directed to converters.[98]

*Geographic Overlap*. In the original investigations and prior reviews, the Commission found that the domestic product and subject imports were sold throughout the U.S. market.[99] The record in the current reviews similarly shows that U.S. producers and importers of subject merchandise from India and Taiwan reported selling PET film to all regions in the contiguous United States.[100]

*Simultaneous Presence in Market.* In the original investigations, the record showed that there were significant volumes of imports of the subject merchandise from both India and

[95] *Original Determinations*, USITC Pub. 3518 at 8.

[96] *First Review Determinations*, USITC Pub. 3994 at 11–12.

[97] *Second Review Determinations*, USITC Pub. 4479 at 13.

[98] CR/PR at Table II-1.

[99] *Original Determinations*, USITC Pub. 3518 at 8; *First Review Determinations*, USITC Pub. 3994 at 12; *Second Review Determinations*, USITC Pub. 4479 at 13.

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

Taiwan throughout the period of investigation.[101] In the first and second reviews, the Commission found that imports from each of the subject countries were present in the U.S. market during the periods of review.[102] In the current reviews, subject imports from both India and Taiwan were present in each month from January 2017 to April 2020.[103] The domestic like product was also present in the U.S. market throughout this period.[104]

*Conclusion*. The record indicates that there would be a likely reasonable overlap in competition between and among the domestic like product and subject imports from India and Taiwan if the orders were revoked. U.S.-produced PET film and subject imports from both sources are fungible. The patterns displayed by the subject imports present in the U.S. market during the period for which data were collected and the evidence from the original investigations and prior reviews indicate that upon revocation the domestic like product and imports from each subject country would likely have similar channels of distribution, geographic overlaps in sales, and simultaneous presence in the U.S. market. Consequently, we find that there likely will be a reasonable overlap in competition between subject imports from each country and the domestic like product as well as between subject imports from each country should the orders under review be revoked.

### D. Likely Conditions of Competition

In determining whether to exercise our discretion to cumulate the subject imports, we assess whether subject imports from the subject countries would compete under similar or different conditions in the U.S. market if the orders under review were revoked. As previously discussed, in the prior reviews the Commission exercised its discretion to cumulate the subject imports from both subject countries.

The record in these reviews does not indicate that there would likely be any significant difference in the conditions of competition between subject imports from each subject country if the orders were revoked. As discussed in section IV.B.3 below, PET film from domestic and subject sources is highly substitutable and price is an important aspect of competition. In light of this and the fact that the industry in both subject countries supplied the U.S. market with PET film in the prior proceedings and current reviews, we find that PET film from both subject

[101] *Original Determinations*, USITC Pub. 3518 at 8.

[102] *First Review Determinations*, USITC Pub. 3994 at 12; *Second Review Determinations*, USITC Pub. 4479 at 13–14.

[103] CR/PR at Tables IV-5, Figures IV-4–5.

[104] *See* CR/PR at Tables V-3–7.

countries would likely compete directly with one another and the domestic like product in the event of revocation.

### E. Conclusion

Based on the foregoing, we find that subject imports from India and Taiwan would not be likely to have no discernible adverse impact on the domestic industry if the orders under review were revoked. We also find a likely reasonable overlap of competition between subject imports from different sources and between the subject imports from each subject country and the domestic like product. Finally, we find that imports from each subject country are likely to compete in the U.S. market under similar conditions of competition should the orders be revoked. We therefore exercise our discretion to cumulate subject imports from India and Taiwan.

## IV. Revocation of the Antidumping and Countervailing Duty Orders Would Likely Lead to Continuation or Recurrence of Material Injury Within a Reasonably Foreseeable Time

### A. Legal Standards

In a five-year review conducted under section 751(c) of the Tariff Act, Commerce will revoke an antidumping or countervailing duty order unless: (1) it makes a determination that dumping or subsidization is likely to continue or recur and (2) the Commission makes a determination that revocation of the antidumping or countervailing duty order "would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time."[105] The SAA states that "under the likelihood standard, the Commission will engage in a counterfactual analysis; it must decide the likely impact in the reasonably foreseeable future of an important change in the status quo – the revocation or termination of a proceeding and the elimination of its restraining effects on volumes and prices of imports."[106] Thus, the likelihood standard is prospective in nature.[107] The U.S. Court of International Trade has found that

[105] 19 U.S.C. § 1675a(a).

[106] SAA at 883-84. The SAA states that "{t}he likelihood of injury standard applies regardless of the nature of the Commission's original determination (material injury, threat of material injury, or material retardation of an industry). Likewise, the standard applies to suspended investigations that were never completed." *Id*. at 883.

[107] While the SAA states that "a separate determination regarding current material injury is not necessary," it indicates that "the Commission may consider relevant factors such as current and likely continued depressed shipment levels and current and likely continued {sic} prices for the domestic like

"likely," as used in the five-year review provisions of the Act, means "probable," and the Commission applies that standard in five-year reviews.[108]

The statute states that "the Commission shall consider that the effects of revocation or termination may not be imminent, but may manifest themselves only over a longer period of time."[109] According to the SAA, a "'reasonably foreseeable time' will vary from case-to-case, but normally will exceed the 'imminent' timeframe applicable in a threat of injury analysis in original investigations."[110]

Although the standard in a five-year review is not the same as the standard applied in an original investigation, it contains some of the same fundamental elements. The statute provides that the Commission is to "consider the likely volume, price effect, and impact of imports of the subject merchandise on the industry if the orders are revoked or the suspended investigation is terminated."[111] It directs the Commission to take into account its prior injury determination, whether any improvement in the state of the industry is related to the order or the suspension agreement under review, whether the industry is vulnerable to material injury if an order is revoked or a suspension agreement is terminated, and any findings by Commerce regarding duty absorption pursuant to 19 U.S.C. § 1675(a)(4).[112] The statute further provides

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product in the U.S. market in making its determination of the likelihood of continuation or recurrence of material injury if the order is revoked." SAA at 884.

[108] *See NMB Singapore Ltd. v. United States*, 288 F. Supp. 2d 1306, 1352 (Ct. Int'l Trade 2003) ("'likely' means probable within the context of 19 U.S.C. § 1675(c) and 19 U.S.C. § 1675a(a)"), *aff'd mem.*, 140 Fed. Appx. 268 (Fed. Cir. 2005); *Nippon Steel Corp. v. United States*, 26 CIT 1416, 1419 (2002) (same); *Usinor Industeel, S.A. v. United States*, 26 CIT 1402, 1404 nn.3, 6 (2002) ("more likely than not" standard is "consistent with the court's opinion;" "the court has not interpreted 'likely' to imply any particular degree of 'certainty'"); *Indorama Chemicals (Thailand) Ltd. v. United States*, 26 CIT 1059, 1070 (2002) ("standard is based on a likelihood of continuation or recurrence of injury, not a certainty"); *Usinor v. United States*, 26 CIT 767, 794 (2002) ("'likely' is tantamount to 'probable,' not merely 'possible'").

[109] 19 U.S.C. § 1675a(a)(5).

[110] SAA at 887. Among the factors that the Commission should consider in this regard are "the fungibility or differentiation within the product in question, the level of substitutability between the imported and domestic products, the channels of distribution used, the methods of contracting (such as spot sales or long-term contracts), and lead times for delivery of goods, as well as other factors that may only manifest themselves in the longer term, such as planned investment and the shifting of production facilities." *Id*.

[111] 19 U.S.C. § 1675a(a)(1).

[112] 19 U.S.C. § 1675a(a)(1). Commerce has not made any duty absorption findings with respect to the orders under review. CR/PR at I-12 n.26.

that the presence or absence of any factor that the Commission is required to consider shall not necessarily give decisive guidance with respect to the Commission's determination.[113]

In evaluating the likely volume of imports of subject merchandise if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider whether the likely volume of imports would be significant either in absolute terms or relative to production or consumption in the United States.[114] In doing so, the Commission must consider "all relevant economic factors," including four enumerated factors: (1) any likely increase in production capacity or existing unused production capacity in the exporting country; (2) existing inventories of the subject merchandise, or likely increases in inventories; (3) the existence of barriers to the importation of the subject merchandise into countries other than the United States; and (4) 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.[115]

In evaluating the likely price effects of subject imports if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider whether there is likely to be significant underselling by the subject imports as compared to the domestic like product and whether the subject imports are likely to enter the United States at prices that otherwise would have a significant depressing or suppressing effect on the price of the domestic like product.[116]

In evaluating the likely impact of imports of subject merchandise if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider all relevant economic factors that are likely to have a bearing on the state of the industry in the United States, including but not limited to the following: (1) likely declines in output, sales, market share, profits, productivity, return on investments, and utilization of capacity; (2) likely negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment; and (3) likely negative effects on the existing development and production efforts of the industry, including efforts to develop a derivative or

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[113] 19 U.S.C. § 1675a(a)(5). Although the Commission must consider all factors, no one factor is necessarily dispositive. SAA at 886.

[114] 19 U.S.C. § 1675a(a)(2).

[115] 19 U.S.C. § 1675a(a)(2)(A-D).

[116] *See* 19 U.S.C. § 1675a(a)(3). The SAA states that "{c}onsistent with its practice in investigations, in considering the likely price effects of imports in the event of revocation and termination, the Commission may rely on circumstantial, as well as direct, evidence of the adverse effects of unfairly traded imports on domestic prices." SAA at 886.

more advanced version of the domestic like product.[117] All relevant economic factors are to be considered within the context of the business cycle and the conditions of competition that are distinctive to the industry. As instructed by the statute, we have considered the extent to which any improvement in the state of the domestic industry is related to the orders under review and whether the industry is vulnerable to material injury upon revocation.[118]

### B. Conditions of Competition and the Business Cycle

In evaluating the likely impact of the subject imports on the domestic industry if an order is revoked, the statute directs the Commission to consider all relevant economic factors "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[119] The following conditions of competition inform our determinations.

#### 1. Demand Conditions

In the original investigations and prior reviews, the Commission found overall demand for PET film to be derived from the demand for the downstream products.[120] It identified five main end use segments for PET film (packaging, industrial, electrical, imaging, and magnetics), although the magnetic end use segment had virtually disappeared since the time of the first reviews and the imaging end use segment was reportedly in decline as of the time of the second reviews.[121] The domestic industry had substantial captive consumption, although most of its capacity was devoted to the merchant market.[122]

During the original investigations, overall demand for PET film was increasing until 2000 or 2001, when it experienced a slowdown.[123] Apparent U.S. consumption was at a higher level in the first reviews, reaching *** pounds in 2006, but fluctuated in the second reviews;

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[117] 19 U.S.C. § 1675a(a)(4).

[118] The SAA states that in assessing whether the domestic industry is vulnerable to injury if the order is revoked, the Commission "considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they may also demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports." SAA at 885.

[119] 19 U.S.C. § 1675a(a)(4).

[120] *Original Determinations*, USITC Pub. 3518 at 4; *First Review Determinations*, USITC Pub. 3994 at 16; *Second Review Determinations*, USITC Pub. 4479 at 23.

[121] *Second Review Determinations*, USITC Pub. 4479 at 23.

[122] *Second Review Determinations*, USITC Pub. 4479 at 24.

[123] *Original Determinations*, USITC Pub. 3518 at 11-12.

apparent U.S. consumption of 662.1 million pounds in 2013 was below the level of 2006 but above the period low reached in 2009.[124]

In the current reviews, the overall demand for PET film is derived from the demand for the downstream products, as it was in the original investigations and prior reviews.[125] The main end uses for PET film remain the same, although the imaging end use segment is reportedly in decline.[126] Since the second reviews, there has been an increase in demand for lightweight product made by using less or lighter material.[127] Captive consumption is an important aspect of the U.S. PET film market, although the preponderance of the domestic industry's shipments from 2017 to 2019 were to the merchant market.[128]

Market participants, including most U.S. producers, importers, and purchasers, reported an increase in U.S. demand for PET film since 2014.[129] Firms perceived increased demand for PET film in light of population growth and increased demand for various packaging and labelling products.[130] By contrast, apparent U.S. consumption, as measured in these reviews, declined from 563.1 million pounds in 2017 to 557.2 million pounds in 2018 and 539.2 million pounds in 2019.[131]

Market participants, including a plurality of U.S. producers, importers, and purchasers, anticipate demand will increase in the reasonably foreseeable future.[132] Domestic parties assert that the COVID-19 pandemic resulted in a temporary increase in demand for PET film, particularly for packaging and certain industrial uses, driven by a stockpiling of goods for short- to medium-term needs.[133]

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[124] *First Review* Determinations, USITC Pub. 3994 at 17; Confidential First Review Determination, EDIS Doc. 298734 at 27; *Second Review Determinations,* USITC Pub. 4479 at 23.

[125] CR/PR at II-10.

[126] CR/PR at I-20, II-10.

[127] CR/PR at I-21. The production of lightweight product is known as "lightweighting" and is expected to continue. *See* CR/PR at I-21 & n.46.

[128] CR/PR at II-1, Table III-5.

[129] CR/PR at Table II-4.

[130] CR/PR at II-12.

[131] CR/PR at Table I-9. Apparent consumption data in these reviews are based on questionnaire responses. *See* CR/PR at IV-1-2. Because questionnaire coverage is not complete, the import component of apparent consumption data may be understated to some extent. *See* CR/PR at I-11.

[132] CR/PR at Table II-4.

[133] Domestic Producers Posthearing Brief, Response to Commission Questions (EDIS Docs. 715460 and 715539) (July 23 and 24, 2020), at 22 ("Domestic Producers Posthearing Brief"); Polyplex Letter, Response to Commission Questions (EDIS Docs. 715482 and 715486) (July 23, 2020), at 3 ("Polyplex Response to Commission Questions").

### 2. Supply Conditions

In the original investigations, there was one significant new entrant into the U.S. market: SKCA, owned by Korean producer SKC.[134] Nonsubject imports were a substantial source of supply to the U.S. market throughout the period of investigation, albeit at declining levels, and U.S. producers imported the majority of nonsubject imports during the period.[135]

In the first reviews, subject imports maintained only a small presence in the U.S. market after imposition of the orders. The U.S. market share held by nonsubject imports fluctuated but increased overall. The volume of nonsubject imports during the period of review may have been affected by antidumping duty orders or ongoing investigations existing at the time, such as the antidumping duty order on imports of PET film from Korea and the Commission's affirmative preliminary determination in November 2007 regarding imports of PET film from Brazil, China, Thailand, and the United Arab Emirates (UAE).[136]

In the second reviews, two new firms entered the domestic industry, and other firms had various changes in operations; capacity and production both declined. The domestic industry held the largest share of apparent U.S. consumption, as measured by quantity, but that share decreased irregularly over the period. Subject import market share, which was quite small throughout the period, also decreased irregularly. Nonsubject import market share fluctuated but rose slightly overall. The largest sources of nonsubject imports were Mexico, Korea, and the UAE.[137]

During the current period, the domestic industry was the largest supplier of PET film to the U.S. market.[138] Its share of apparent U.S. consumption by quantity was 88.8 percent in 2017, 88.3 percent in 2018, and 87.8 percent in 2019.[139] Eight domestic producers reported prolonged shutdowns or curtailments, one reported plant closings, one reported a relocation, one reported expansions, and one reported making major investments in production operations since 2014.[140] Overall, U.S. producers' capacity increased irregularly from ***

[134] *Original Determinations*, USITC Pub. 3518 at 11-12.

[135] *Original Determinations*, USITC Pub. 3518 at 12.

[136] *First Review Determinations*, USITC Pub. 3994 at 18-19. The order on PET film from Korea was revoked in 2010. No order was ever issued on PET film from Thailand; the order on PET film from Brazil was revoked after the first review. *See generally* CR at Table I-1. As discussed further below, orders remain in effect on PET film from China and the UAE.

[137] *Second Review Determinations*, USITC Pub. 4479 at 24-25.

[138] CR/PR at Table I-9.

[139] CR/PR at Table I-9.

[140] CR/PR at Table III-1.

pounds in 2017 to *** pounds in 2019.[141] Capacity utilization declined from *** percent in 2017 to *** percent in 2019.[142]

Cumulated subject imports were the smallest source of supply of PET film to the U.S. market during the period for which data were collected.[143] U.S. shipments of cumulated subject imports accounted for 2.5 percent of the quantity of apparent U.S. consumption in 2017, 2.4 percent in 2018, and 1.9 percent in 2019.[144]

Nonsubject imports were the second largest source of supply of PET film to the U.S. market and steadily increased during the period for which data were collected.[145] They accounted for 8.6 percent of the quantity of apparent U.S. consumption in 2017, 9.4 percent and 2018, and 10.2 percent in 2019.[146] Imports of PET film from China and the UAE, which are considered nonsubject imports for purposes of these reviews, are subject to antidumping duty orders.[147]

### 3. Substitutability and Other Conditions

In the original investigations, the Commission found that domestically produced PET film and subject imports were at least moderately substitutable, and that price was a significant factor in purchasing decisions. In the first and second reviews, the Commission found that domestically produced and imported PET film were highly substitutable, and that price remained an important factor in purchasing decisions.[148]

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[141] CR/PR at Table III-3.

[142] CR/PR at Table III-3.

[143] CR/PR at Table I-9.

[144] CR/PR at Table I-9.

[145] CR/PR at Table I-9.

[146] CR/PR at Table I-9.

[147] The Commission recently made affirmative determinations in the second reviews of these orders. *See* Commission's Determinations in Five-Year (Sunset) Reviews Concerning Polyethylene Terephthalate (PET) Film, Sheet, and Strip from China and the United Arab Emirates (Aug. 14, 2020), *available at* https://www.usitc.gov/press_room/news_release/2020/er0814ll1629.htm.

In addition, on August 19, 2020, the Commission issued a final affirmative determination in its investigations of PET sheet from Korea and Oman. *See Polyethylene Terephthalate (PET) Sheet from Korea and Oman Injures U.S. Industry, Says USITC (Aug. 19, 2020), available at https://usitc.gov/press_room/news_release/2020/er0819ll1632.htm.* The scope for the PET sheet investigations covers items based on thickness (*i.e.*, PET sheet consists of thicknesses of equal to or greater than 7 mil (0.007 inches or 177.8 µm) and not exceeding 45 mil (0.045 inches or 1143 µm). CR/PR at Table I-1.

[148] *Second Review Determinations*, USITC Pub. 4479 at 25, 28.

In both prior reviews, the Commission found the manufacture of PET film to be capital intensive. To remain profitable, plants needed to run at a relatively high capacity utilization rate for sustained periods.[149]

In the second reviews, the Commission found that raw materials costs were an important consideration in the price of PET film. It identified the basic raw materials for producing PET film to be (1) dimethyl terephthalate or purified terephthalic acid and (2) mono ethylene glycol, which come from xylene and ethylene, respectively.[150] Xylene is a byproduct from oil refineries, while ethylene is usually manufactured from natural gas.[151]

The record in these reviews similarly indicates that domestically produced PET film and cumulated subject imports are highly substitutable.[152] As discussed above, all responding U.S. producers and a majority of U.S. importers reported that domestically produced PET film is always or frequently interchangeable with subject imports from India and Taiwan.[153] A majority of responding purchasers indicated that subject imports from Taiwan were frequently interchangeable with the domestic like product and half of responding purchasers indicated that the domestic like product and subject imports from India were frequently interchangeable.[154] Asked to compare products with respect to 15 purchasing factors, majorities or pluralities of purchasers found the domestic like product and subject imports from India comparable with respect to 11 factors, and the domestic like product and subject imports from Taiwan comparable with respect to 12 factors.[155]

Price remains an important factor in purchasing decisions. Price/cost was the factor most frequently identified by purchasers as among the three most important factors in purchasing decisions.[156] Nearly all responding purchasers (17 of 18) reported that price is a very important factors in purchasing decisions.[157]

The principal raw materials for PET film continue to be (1) dimethyl terephthalate or purified terephthalic acid, derived from xylene; and (2) mono ethylene glycol, derived from

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[149] *First Review Determinations*, USITC Pub. 3994 at 19; *Second Review Determinations*, USITC Pub. 4479 at 26.

[150] *Second Review Determinations*, USITC Pub. 4479 at 26.

[151] CR/PR at I-24.

[152] CR/PR at II-14.

[153] CR/PR at Table II-10.

[154] CR/PR at Table II-10.

[155] CR/PR at Table II-9.

[156] CR/PR at Table II-6.

[157] CR/PR at Table II-7. All responding purchasers (18 of 18) report that availability, product consistency, and reliability of supply are very important factors in purchasing decisions. *Id*.

ethylene.[158] Raw materials represent the largest component of the total cost of goods sold ("COGS"), and ranged from a low of 47.7 percent in 2019 to a high of 51.2 percent in 2018.[159] Raw materials costs are greatly affected by crude oil and natural gas prices, which fluctuated from 2017 to 2019.[160]

As was the case in the prior reviews, PET film production is capital intensive and requires that producers operate at relatively high capacity utilization rates for sustainable periods to remain profitable.[161]

### C. Likely Volume of Subject Imports

*Original Investigations.* The Commission found in the original investigations that the volume of subject imports increased overall by 14.1 percent during the period. Subject import volume declined in the second half of 2001, after the filing of the petition and consistent with a decline in demand. The Commission found the volume and increase in volume of cumulated subject imports, both in absolute terms and relative to apparent consumption, to be significant.[162]

*First Reviews.* In the first reviews, the Commission found that the volume and market share of cumulated subject imports had generally declined, although there was an increase late in the period of review. Subject producers had both the incentive and the capability significantly to increase subject imports. The production capacity in India and Taiwan had increased substantially over the period. Additionally, subject producers in both countries had unused capacity that could be used to increase sales to the U.S. market if the orders were revoked. Given the high fixed costs associated with PET film production, the Commission found that there was an incentive for subject producers to maximize the use of available capacity. Thus, subject producers had a significant incentive to increase exports to the relatively large U.S. market if the orders were revoked.[163]

The Commission found that subject producers in both countries exported substantial and increasing volumes of their PET film production during the period of review despite purportedly higher prices for PET film in their home markets and increasing demand in India.[164]

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[158] CR/PR at I-24, V-1.

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

[160] CR/PR at V-1, Figure V-1.

[161] CR/PR at I-24; *see First Review Determinations*, USITC Pub. 3994 at 19; *Second Review Determinations*, USITC Pub. 4479 at 26.

[162] *Original Determinations*, USITC Pub. 3518 at 13.

[163] *First Review Determinations*, USITC Pub. 3994 at 20–21.

[164] *First Review Determinations*, USITC Pub. 3994 at 21–22.

If the orders were revoked, the attractiveness of the relatively open U.S. market and its generally higher prices would serve to provide incentives for producers in the subject countries to direct exports to the U.S. market then being shipped to other markets. The record indicated that prices for PET film in the United States tended to be appreciably higher than those in most other markets. The European Union (EU) had imposed antidumping duties on subject imports from India and Taiwan, providing subject producers an additional incentive to direct export shipments to the U.S. market if the orders under review were revoked.[165] The Commission concluded that the likely volume of cumulated subject imports, in absolute terms and relative to consumption and production in the United States, would be significant absent the restraining effect of the orders.[166]

*Second Reviews.* In its second reviews, the Commission found that the orders had a disciplining effect on the volume of subject imports during the period of review.[167] Subject producers had the incentive and capability to increase shipments of subject merchandise to the U.S. market within a reasonably foreseeable time if the orders were revoked.[168] The Commission found that subject producers increased capacity and production over the period of review, while their capacity utilization decreased.[169] Moreover, the PET film industries in both subject countries were export oriented, and exports from both countries increased overall during the period of review.[170] Attractive prices in the U.S. market and trade barriers imposed by the EU on PET film from India provided incentive for subject countries to export subject merchandise to the United States. The Commission concluded that cumulated subject import volumes would likely be significant, both in absolute terms and relative to U.S. consumption, if the orders were revoked.[171]

*Current Reviews*. In these reviews, the record indicates that the orders have had a disciplining effect on the volume of cumulated subject imports. Cumulated subject imports had a small and declining presence in in the U.S. market between 2017 and 2019. The quantity of cumulated subject imports declined from 16.0 million pounds in 2017 to 14.9 million pounds in

[165] *First Review Determinations*, USITC Pub. 3994 at 22–23.
[166] *First Review Determinations*, USITC Pub. 3994 at 23.
[167] *Second Review Determinations*, USITC Pub. 4479 at 26.
[168] *Second Review Determinations*, USITC Pub. 4479 at 26.
[169] *Second Review Determinations*, USITC Pub. 4479 at 26–27.
[170] *Second Review Determinations*, USITC Pub. 4479 at 27.
[171] *Second Review Determinations*, USITC Pub. 4479 at 27.

2018 and 11.8 million pounds in 2019.[172] Their market share declined from 2.5 percent in 2017 to 2.4 percent in 2018 and 1.9 percent in 2019.[173]

The record indicates that subject industries are large and export substantial quantities of PET film. Reporting subject producers' capacity increased from *** pounds in 2017 to *** pounds in 2019.[174] The reporting producers also reported over *** pounds of unused capacity in 2019, an amount in excess of *** percent of apparent U.S. consumption that year.[175] Available IHS Chemical Economics Handbook data indicate that data sourced from the questionnaire responses substantially understate actual capacity and unused capacity in India and Taiwan and that capacity in the subject countries is likely to increase in the reasonably foreseeable future.[176]

The reporting producers exported substantial quantities of PET film, with export shipments on a cumulated basis ranging from *** pounds in 2019 to *** pounds in 2018.[177] As previously stated, GTA data indicate that in 2019, India was the third-largest global exporter and Taiwan the sixth-largest of PET plates, sheets, film, foil, and strip of plastics.[178] Consequently, the record indicates that the cumulated subject industries currently export large amounts of PET film, and have the capability of increasing exports further.[179]

The record indicates that subject producers have the incentive to export additional quantities of subject merchandise to the U.S. market should the orders under review be revoked. Because PET film production is capital intensive, which leads producers to attempt to

[172] CR/PR at Table I-9.

[173] CR/PR at Table I-9.

[174] CR/PR at Table IV-19.

[175] CR/PR at Table IV-19; *compare* CR/PR at Table I-9. Subject producers' production increased from *** pounds in 2017 to *** pounds in 2019. CR/PR at Table IV-19.

[176] CR/PR at Table IV-8 (capacity data), Table IV-20 (indicating projected growth in capacity from 2018 to 2023 and excess of capacity and production in 2018). As previously stated, the IHS Chemical Handbook data concern a category of merchandise narrower than the scope. While the data shown in Table IV-20 for the "Indian subcontinent" contains data pertaining to Pakistan, it pertains overwhelmingly to the industry in India. *Compare* CR/PR at Table IV-8, *with* CR/PR at Table IV-20; *see also* IHS Chemical Economics Handbook, Polyester Film (Nov. 2018) at 6, EDIS Doc. 716983.

[177] CR/PR at Table IV-19.

[178] CR/PR at Table IV-23. GTA data concern a product grouping that includes both in-scope and out-of-scope products.

[179] End-of-period inventories in the subject countries fluctuated within a narrow range from 2017 to 2019. CR/PR at Table IV-19. Inventories of the subject merchandise in the United States were small. CR/PR at Table IV-7. Questionnaire responses from producers in India indicate some potential for product shifting. CR/PR at Table IV-12.

maximize capacity utilization,[180] there is an incentive for the subject producers to utilize their substantial quantities of excess capacity to increase exports. The United States is a very large market for PET film products.[181] Subject producers have maintained a presence in the U.S. market and consequently have access to U.S. distribution networks. Moreover, U.S. producers and one of two responding Indian producers reported that prices for PET film are generally higher in the United States that in other export markets.[182] Antidumping and countervailing duty orders imposed by several countries on PET film from India and/or Taiwan would provide further incentives for subject producers to direct PET film exports to the United States if the orders under review were revoked.[183]

In light of these factors, we find that subject producers are likely, absent the restraining effects of the orders, to direct significant volumes of PET film to the U.S. market.[184] We find that the likely volume of subject imports, both in absolute terms and relative to consumption in the United States, would be significant if the orders were revoked.

### D. Likely Price Effects of Subject Imports

*Original Investigations.* In the original investigations, the Commission found that the domestic like product and cumulated subject imports were at least moderately substitutable, and that price was a significant factor in purchasing decisions. Cumulated subject imports undersold domestically produced PET film in 183 out of 239 quarterly sales comparisons.[185] The margins of underselling were in many cases substantial, ranging up to 81.1 percent, and

[180] CR/PR at I-24.

[181] *See* CR/PR at Table IV-21 (IHS Chemical Economics Handbook data for consumption in various global markets for a PET film product category which is narrower than the scope).

[182] CR/PR at II-6, V-17.

[183] CR/PR at IV-34. PET film from India is subject to antidumping duty orders in Korea, Indonesia, and Brazil, and is subject to countervailing duty orders in Turkey and Brazil. PET film from Taiwan is subject to an antidumping duty order in Korea. *Id*.

[184] Jindal argues that Indian producers' shipments of PET film to the United States declined during the period of review and that there is no evidence that their shipments would increase if the orders were revoked. Jindal Prehearing Brief at 7-9. Jindal disregards that import trends under the discipline of the orders have little pertinence to what likely subject import volumes would be after revocation. Indeed, the SAA directs the Commission in five-year reviews not to assume a continuation of the status quo, as Jindal does, but "the likely impact in the reasonably foreseeable future of an important change in the status quo – the revocation or termination of a proceeding and the elimination of its restraining effects on volumes and prices of imports." SAA at 884.

[185] CR/PR at Table V-9.

remained substantial throughout the period of investigation. The Commission found the underselling to be significant.[186]

The Commission also found that the domestic industry experienced a substantial cost-price squeeze, particularly towards the end of the period. In particular, the ratio of COGS to net sales increased steadily throughout the period. The industry's costs were driven up over the period by increases in energy and raw material prices, and by the fact that fixed costs were being spread over a shrinking level of domestic sales. The Commission concluded that, in light of the significant volume of subject imports, the substitutability of subject imports and domestic product, the significant underselling by subject imports, and the failure of prices for the domestic product to rise in the face of significant increased costs, that subject imports had significant price-suppressing effects.[187]

*First Reviews.* The Commission found in the first reviews that domestically produced and imported PET film were highly substitutable. The general importance of price in purchasing decisions had not changed since the original investigations. The Commission also found that sustained underselling by even a relatively moderate volume of subject imports would be likely to have significant price-suppressing or price-depressing effects.[188]

Even with the orders in place, cumulated subject imports undersold the domestic like product in 89 out of 113 quarterly comparisons, and frequently by substantial margins. The Commission found that there was an incentive for producers to ship to the U.S. market because subject producers likely would be able to receive a higher price in the U.S. market relative to many other export markets while still underselling the domestic producers sufficiently to gain market share. The Commission concluded that there would likely continue to be significant price underselling if the orders were revoked.[189]

The Commission also found that downward price movements for domestic PET film beginning in the second half of 2005 and continuing throughout the review period, along with significant underselling by the subject imports, supported a finding that price depression existed and would likely continue if the orders were revoked. The Commission found that if the orders were revoked, subject imports would be likely to undersell the domestic like product significantly and would likely have significant depressing or suppressing effects on the prices of the domestic like product within a reasonably foreseeable time.[190]

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[186] *Original Determinations*, USITC Pub. 3518 at 14.
[187] *Original Determinations*, USITC Pub. 3518 at 15.
[188] *First Review Determinations*, USITC Pub. 3994 at 23–24.
[189] *First Review Determinations*, USITC Pub. 3994 at 24.
[190] *First Review Determinations*, USITC Pub. 3994 at 25.

*Second Reviews*. In the second reviews, the Commission found that price remained one of the most important factors in purchasing decisions, due in part to the high degree of substitutability between the domestic like product and cumulated subject imports. The Commission found that underselling occurred in 57 of 136 quarterly pricing comparisons despite the orders, with margins of underselling ranging from 0.1 to 69.6 percent.[191]

Given the underselling in the original investigations and the first reviews, the Commission concluded that underselling would likely recur if the antidumping and countervailing duty orders were revoked. Because of the importance of price in purchasing decisions, underselling would likely cause the domestic industry either to reduce its prices or forego price increases to maintain market share.[192]

*Current Reviews*. As discussed above, we find that the domestic like product and cumulated subject imports are highly substitutable and that price is an important factor in purchasing decisions.

The Commission collected pricing data on sales of five products in these reviews.[193] Seven U.S. producers and four importers provided usable pricing data.[194] Pricing data reported by these firms accounted for approximately 23.9 percent of U.S. producers' commercial U.S. shipments of PET film, 69.7 percent of commercial U.S. shipments of PET film from India, and 95.7 percent of commercial U.S. shipments of PET film from Taiwan in 2019.[195]

Cumulated subject imports undersold the domestic like product in 10 of 79 instances, involving 3.2 million pounds of cumulated subject imports, with margins of underselling ranging from 4.1 to 29.0 percent.[196] Cumulated subject imports oversold the domestic like product in the remaining 69 instances, involving 11.5 million pounds of cumulated subject imports, with margins of overselling ranging from 2.3 to 162.3 percent.[197] We find that the predominant overselling by subject imports reflects the disciplining effects of the orders.

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[191] *Second Review Determinations*, USITC Pub. 4479 at 27.

[192] *Second Review Determinations*, USITC Pub. 4479 at 27.

[193] CR/PR at V-6–7. The five pricing products were:

**Product 1.--** 48 gauge plain film for packaging/industrial markets.
**Product 2.--** 48 gauge corona-treated film for packaging/industrial markets.
**Product 3.--** 48 gauge chemically treated film for packaging/industrial markets (includes chemical coatings applied post-extrusion and during the extrusion process).
**Product 4.--** 92 gauge plain film for packaging/industrial markets.
**Product 5.--** 500-1000 gauge plain film for industrial/electrical markets.

[194] CR/PR at V-7.

[195] CR/PR at V-7.

[196] CR/PR at Table V-9.

[197] CR/PR at Table V-9.

As reviewed above, we have found that the volume of cumulated subject imports would likely increase significantly if the orders were revoked. Given the substitutability of the domestic like product and the cumulated subject imports, in such circumstances the predominant underselling that occurred during the original investigations would likely recur to enable the cumulated subject imports to gain sales and market share.[198] Because of the importance of price in purchasing decisions, this underselling would likely cause the domestic industry to either reduce its prices or forego price increases to maintain market share, as was the case in the original investigations.

We therefore conclude that the likely significant volume of cumulated imports of PET film from India and Taiwan would likely undersell the domestic like product to a significant degree and gain market share and would also have likely significant price depressing or suppressing effects if the orders were revoked.

### E. Likely Impact of Subject Imports

*Original Investigations.* In the original investigations, the Commission found that the domestic industry's capacity increased between 1999 and 2000, mainly due to SKC's entry into the market, and then declined in 2001. However, the domestic industry's production declined in each year of the period of investigation, and capacity utilization declined throughout. The industry's U.S. shipments and sales increased between 1999 and 2000, then declined in 2001 to levels below those of 1999. Although the domestic industry gained market share over the period of investigation, this increase largely reflected that SKC's U.S. production replaced imports from its owner in Korea. Inventories as a ratio to U.S. shipments declined from 1999 to 2000, before increasing in 2001. Most employment related indicators declined over the period of investigation.[199]

The Commission found that the financial position of the industry deteriorated throughout the period. The number of domestic producers reporting operating losses rose. The decline in financial position was due to a cost-price squeeze as the unit cost of goods increased and net sales value fell. The Commission found that the record demonstrated price

[198] Consequently, Jindal's reliance on the current predominant overselling by subject imports from India, *see* Jindal Prehearing Brief at 6, is misplaced. As previously discussed, the SAA specifically directs the Commission in five-year reviews not to assume continuation of the status quo. SAA at 884.

[199] *Original Determinations*, USITC Pub. 3518 at 16–17.

suppression.[200] The Commission concluded that subject imports were having a significant impact on the domestic industry.[201]

*First Reviews*. In the first reviews, the Commission found that the domestic industry was in a vulnerable or weakened condition given its weakened performance since 2004.[202] Most output-related indicators fluctuated but declined during the latter portion of the period of review. The Commission emphasized that capacity utilization, particularly critical to this capital-intensive industry, fluctuated and then declined after 2004, reaching a period low in interim 2007.[203] Employment indictors showed disparate trends, with productivity steadily increasing during the period while the number of production and related workers and wages paid declined.[204] The domestic industry's net sales by quantity decreased during the period of review, while its net sales by value increased due to increases in the average unit value. The industry's operating margin increased from 2002 to 2004 but declined from 2004 to 2006.[205]

The Commission found that although subject imports might displace some nonsubject imports upon revocation, the domestic industry would likely lose market share to the likely high volume of aggressively priced subject imports. At the same time, the domestic industry's profitability would likely decline as it would be forced to lower prices to compete with subject imports.[206] The Commission consequently concluded that revocation of the orders would likely have a significant impact on the domestic industry.[207]

*Second Reviews.* In the second reviews, the Commission found that the domestic industry was in a vulnerable condition.[208] Most output-related indicators declined overall during the period of review, employment indicators also declined, and the domestic industry sustained operating losses in 2008, 2009, and 2013.[209]

The Commission found that the likely additional volumes of subject imports would likely be priced in a manner that would undersell the domestic like product. It found that the domestic industry would need to respond by either forgoing sales and ceding market share or

[200] *Original Determinations*, USITC Pub. 3518 at 16–17.
[201] *Original Determinations*, USITC Pub. 3518 at 17.
[202] *First Review Determinations*, USITC Pub. 3994 at 28.
[203] *First Review Determinations*, USITC Pub. 3994 at 27–28.
[204] *First Review Determinations*, USITC Pub. 3994 at 27–28.
[205] *First Review Determinations*, USITC Pub. 3994 at 28.
[206] *First Review Determinations*, USITC Pub. 3994 at 28.
[207] *First Review Determinations*, USITC Pub. 3994 at 29.
[208] *Second Review Determinations*, USITC Pub. 4479 at 31.
[209] *Second Review Determinations*, USITC Pub. 4479 at 30–31.

by lowering or restraining its prices.[210] In its non-attribution analysis, the Commission considered the role of nonsubject imports in the U.S. market, and found that the domestic industry would more likely lose market share to the likely high volume of aggressively priced subject imports than to nonsubject imports if the orders were revoked. The Commission concluded that revocation of the antidumping and countervailing duty orders would likely have a significant impact on the domestic industry.[211]

*Current Reviews*. The domestic industry's trade indicators fluctuated from 2017 to 2019. U.S. producers' capacity fluctuated but increased overall, declining from 714.0 million pounds in 2017 to 713.0 million pounds in 2018, and rising to 721.5 million pounds in 2019.[212] By contrast, production declined overall, increasing from 594.0 million pounds in 2017 to 596.4 million pounds in 2018, and declining to 556.2 million pounds in 2019.[213] Capacity utilization increased from 83.2 percent in 2017 to 83.7 percent in 2018, before declining to 77.0 percent in 2019.[214] U.S. producers' U.S. shipments fluctuated and declined overall, increasing from *** pounds in 2017 to *** pounds in 2018, then decreasing to *** pounds in 2019.[215] The domestic industry maintained its predominant market share throughout the period for which data were collected: its share of the quantity of apparent U.S. consumption was 88.8 percent in 2017, 88.3 percent in 2018, and 87.8 percent in 2019.[216] U.S. producers' end-of-period inventories fluctuated and declined overall on an absolute basis but increased as a ratio to production. The end-of-period inventories were 177.3 million pounds (or 29.9 percent of production) in 2017, 183.1 million pounds (or 30.7 percent of production) in 2018, and 174.3 million pounds (or 31.3 percent of production) in 2019.[217]

The domestic industry's employment data generally declined from 2017 to 2019. The number of production and related workers ("PRWs") decreased each year from 1,698 in 2017 to 1,681 in 2018 and 1,620 in 2019, while total hours worked increased from 3,997 in 2017 to 4,064 in 2018 and then declined to 3,935 in 2019.[218] Both total wages paid and hourly wages decreased each year. Total wages paid declined from $129.4 million in 2017 to $128.7 million in 2018 and $123.7 million in 2019, while hourly wages declined from $32.38 per hour in 2017

[210] *Second Review Determinations*, USITC Pub. 4479 at 31.
[211] *Second Review Determinations*, USITC Pub. 4479 at 31.
[212] CR/PR at Table III-2.
[213] CR/PR at Table III-2.
[214] CR/PR at Table III-2.
[215] CR/PR at Table III-5.
[216] CR/PR at Table I-9.
[217] CR/PR at Table III-6.
[218] CR/PR at Table III-9.

to $31.67 per hour in 2018 and $31.44 per hour in 2019.[219] Productivity, as measured by pounds per hour, decreased from 148.6 in 2017 to 146.7 in 2018 and 141.3 in 2019.[220]

The domestic industry's financial data generally declined from 2017 to 2019, although the industry remained profitable. Net sales values increased from $956.7 million in 2017 to $998.3 million in 2019, and then declined to $947.9 million in 2019.[221] Gross profits decreased from $148.2 million in 2017 to $136.5 million in 2018 and $109.2 million in 2019.[222] Operating income decreased from $61.5 million in 2017 to $46.8 million in 2018 and $21.7 million in 2019.[223] The operating margin declined from 6.4 percent in 2017 to 4.7 percent in 2018 and 2.3 percent in 2019.[224] Net income also decreased each year from $41.9 million in 2017 to $22.2 million in 2018 and $3.3 million in 2019.[225] Capital expenditures declined from $*** in 2017 to $*** in 2018 and $*** in 2019.[226] Research and development expenses fluctuated within a narrow range but increased overall and were $14.3 million in 2017 and 2018 and $14.4 million in 2019.[227]

In assessing the question of the vulnerability of the domestic industry, we observe that the record indicates disparate trends. On the one hand, most measures of the domestic industry's output and its financial performance declined during 2017 to 2019. On the other hand, the industry remained profitable, its market share maintained a very high level, and market participants provided positive assessments of both demand since the last review and anticipated demand.[228]

As explained above, we find that cumulated subject imports would likely be significant in the reasonably foreseeable future if the orders under review were revoked. We also find that the subject imports would likely significantly undersell the domestic like product and would likely have price-depressing or -suppressing effects. As a result, aggressively priced cumulated subject imports would likely take market share from the domestic industry and adversely affect the industry's production, capacity utilization, employment, shipments,

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[219] CR/PR at Table III-9.
[220] CR/PR at Table III-9.
[221] CR/PR at Table III-10.
[222] CR/PR at Table III-10.
[223] CR/PR at Table III-10.
[224] CR/PR at Table III-10.
[225] CR/PR at Table III-10.
[226] CR/PR at Table III-14.
[227] CR/PR at Table III-14.
[228] *Compare* CR/PR at Table II-4, *with* CR/PR at Tables III-3, III-5, and III-9–10. *See also* CR/PR at II-12–13.

revenues, profitability, and return on investments. The decline in capacity utilization is particularly pertinent in light of the capital-intensive nature of PET film production. We consequently find that cumulated subject imports would likely have a significant impact on the domestic industry in the event of revocation.

We have also considered the role of factors other than subject imports so as not to attribute likely injury from other factors to the subject imports. Because the domestic industry supplies the majority of the U.S. market, and because subject imports are highly substitutable with the domestic like product, any increase in cumulated subject imports would likely come predominantly at the expense of the domestic industry. Consequently, the subject imports will likely have adverse effects on the domestic industry distinct from nonsubject imports. In addition, a plurality of market participants anticipates increasing demand for the product over the next two years.[229]

Accordingly, we conclude that, if the antidumping and countervailing duty orders were revoked, cumulated subject imports from India and Taiwan would likely have a significant impact on the domestic industry within a reasonably foreseeable time.

## V. Conclusion

For the above reasons, we determine that revocation of the countervailing duty order on PET film from India and the antidumping duty orders on PET film from India and Taiwan would likely lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

[229] CR/PR at Table II-4. Firms reported that they anticipate that demand increases will continue because of population growth and continuing consumer demand for more convenience-packaging options with some firms expecting demand to grow at the same rate as GDP. CR/PR at II-12. The Commission recognizes the global economic impact of the COVID-19 pandemic. However, there is evidence on the record that indicates that the pandemic has resulted in higher demand for PET film (especially for packaging end-uses) as more consumers buy prepackaged foods rather than visit a restaurant. CR/PR at II-12–13.

# Part I: Introduction

## Background

On July 1, 2019, the U.S. International Trade Commission ("Commission" or "USITC") gave notice, pursuant to section 751(c) of the Tariff Act of 1930, as amended ("the Act"),[1] that it had instituted reviews to determine whether revocation of the countervailing duty order on polyethylene terephthalate film, sheet, and strip ("PET FSS") from India and the antidumping duty orders on PET FSS from India and Taiwan would likely lead to the continuation or recurrence of material injury to a domestic industry.[2] [3] On October 4, 2019, the Commission determined that it would conduct full reviews pursuant to section 751(c)(5) of the Act.[4] The following tabulation presents information relating to the background and schedule of this proceeding:[5]

[1] 19 U.S.C. 1675(c).

[2] 84 FR 31343, July 1, 2019. All interested parties were requested to respond to this notice by submitting the information requested by the Commission.

[3] In accordance with section 751(c) of the Act, the U.S. Department of Commerce ("Commerce") published a notice of initiation of five-year reviews of the subject antidumping and countervailing duty orders. 84 FR 31304, July 1, 2019.

[4] 84 FR 67960, December 12, 2019. The Commission found that the domestic interested party group response to its notice of institution was adequate. With respect to the orders on PET FSS from India, two Commissioners determined that the respondent interested party group response was adequate, and one Commissioner determined that the respondent group response was inadequate but found that changes in the conditions of competition warranted full reviews of these orders. Two Commissioners determined that the respondent interested party group response was inadequate and voted to conduct expedited reviews of the orders on PET film from India. Consequently, the Commission determined to conduct full reviews of the antidumping and countervailing duty orders on PET FSS from India. With respect to the antidumping duty order on PET FSS from Taiwan, the Commission determined that the respondent interested party group response was inadequate. The Commission determined, however, to conduct a full review of the order in order to promote administrative efficiency in light of its determination to conduct full reviews of the orders on PET FSS from India (two Commissioners voted to conduct an expedited review of the order on PET FSS from Taiwan).

[5] The Commission's notice of institution, notice to conduct full reviews, scheduling notice, and statement on adequacy are referenced in appendix A and may also be found at the Commission's web site (internet address *www.usitc.gov*). Commissioners' votes on whether to conduct expedited or full reviews may also be found at the website. Appendix B presents the domestic interested parties' request to cancel the hearing.

| Effective date | Action |
|---|---|
| August 6, 2014 | Continuation of Commerce's countervailing duty order on PET FSS from India and antidumping orders on PET FSS from India and Taiwan (79 FR 45762, August 6, 2014) |
| July 1, 2019 | Commission's institution of five-year reviews (84 FR 31343, July 1, 2019) |
| July 1, 2019 | Commerce's initiation of five-year reviews (84 FR 31304, July 1, 2019) |
| October 4, 2019 | Commission's determinations to conduct full five-year reviews (84 FR 67960, December 12, 2019) |
| November 4, 2019 | Commerce's final results of expedited five-year reviews of the countervailing duty order (84 FR 59356, November 4, 2019) and antidumping orders (84 FR 59355, November 4, 2019) |
| March 18, 2020 | Commission's scheduling of the reviews (85 FR 16957, March 25, 2020) |
| July 16, 2020 | Commission's hearing - Cancelled (85 FR 43602, July 17, 2020) |
| August 27, 2020 | Commission's vote |
| September 17, 2020 | Commission's determinations and views |

## The original investigations

The original investigations resulted from a petition filed on May 17, 2001 with Commerce and the Commission by DuPont Teijin Films ("DuPont Teijin"), Wilmington, Delaware; Mitsubishi Polyester Film of America ("Mitsubishi"), Greer, South Carolina; and Toray Plastics (America), Inc. ("Toray"), North Kensington, Rhode Island. The petition alleged that an industry in the United States had been materially injured and threatened with material injury by reasons of subsidized imports of PET FSS from India and less than fair value ("LTFV") imports of PET FSS from India and Taiwan. Commerce determined that PET FSS imports from India were being sold at LTFV on May 16, 2002[6], and that PET FSS imports from Taiwan were being sold at LTFV on May 20, 2002.[7] On June 27, 2002, the Commission published its determinations that the domestic industry had been materially injured by reason of subsidized PET FSS imports from India and LTFV imports of PET FSS from India and Taiwan.[8] Commerce published the antidumping orders on PET FSS from India and Taiwan and issued a notice of the countervailing duty order on PET FSS from India on July 1, 2002.[9]

[6] 67 FR 34899, May 16, 2002, as amended by 67 FR 44175, July 1, 2002.
[7] 67 FR 35474, May 20, 2002, as amended by 67 FR 44174, July 1, 2002.
[8] 67 FR 43340, June 27, 2002.
[9] 67 FR 44174, July 1, 2002; 67 FR 44175, July 1, 2002; and 67 FR 44179, July 1, 2002.

## The first five-year reviews

On September 4, 2007, the Commission determined that it would conduct full reviews of the countervailing duty order on PET FSS from India and the antidumping duty orders on PET FSS from India and Taiwan.[10] On October 9, 2007, Commerce published its determinations that revocation of the countervailing duty order on PET FSS from India and the antidumping duty orders on PET FSS from India and Taiwan would be likely to lead to continuation or recurrence of dumping.[11] On April 25, 2008, the Commission notified Commerce of its determinations that material injury would be likely to continue or recur within a reasonably foreseeable time if the relevant orders were revoked.[12] Following affirmative determinations in the five-year reviews by Commerce and the Commission, effective May 8, 2008, Commerce issued a continuation of the countervailing duty order on PET FSS from India and the antidumping duty orders on PET FSS from India and Taiwan.[13]

## The second five-year reviews

On July 5, 2013, the Commission determined that it would conduct full reviews of the countervailing duty order on PET FSS from India and the antidumping duty orders on PET FSS from India and Taiwan.[14] Commerce published its determination that revocation of the countervailing duty order on PET FSS from India would be likely to lead to continuation or recurrence of countervailable subsidies on August 5, 2013.[15] On March 4, 2014, Commerce published its determination that revocation of the antidumping duty orders on PET FSS from India and Taiwan would be likely to lead to continuation or recurrence of dumping.[16] On June 27, 2014, the Commission notified Commerce of its determinations that material injury would be likely to continue or recur within a reasonably foreseeable time if the relevant orders were revoked.[17] Following affirmative determinations in the five-year reviews by Commerce and the Commission, effective August 6, 2014, Commerce issued a continuation of the countervailing

[10] 72 FR 52582, September 14, 2007.
[11] 72 FR 57300, October 9, 2007; 72 FR 57297, October 9, 2007.
[12] 73 FR 25030, May 6, 2008.
[13] 73 FR 26080, May 8, 2008; and 73 FR 26079, May 8, 2008.
[14] 78 FR 42105, July 15, 2013.
[15] 78 FR 47276, August 5, 2013.
[16] 79 FR 12153, March 4, 2014.
[17] 79 FR 42534, July 22, 2014.

duty order on PET FSS from India and the antidumping duty orders on PET FSS from India and Taiwan.[18]

## Previous and related investigations

There have been several previous and related investigations regarding PET film. Table I-1 provides an overview of these related investigations. Of the related investigations listed in the table, one set of reviews and one set of original investigations are ongoing.

On January 2, 2020, the Commission gave notice that it had instituted second reviews to determine whether revocation of the AD duty orders on PET FSS from China and the United Arab Emirates ("UAE") would be likely to lead to continuation or recurrence of material injury.[19] On April 6, 2020, the Commission determined to conduct expedited reviews in those five-year reviews.[20] Those reviews are in progress.

On July 9, 2019, the U.S. PET sheet industry filed for relief from alleged LTFV imports of PET sheet from Korea, Mexico, and Oman.[21] On September 13, 2019, the Commission determined that there was a reasonable indication that an industry in the United States is materially injured by reason of imports of PET sheet from Oman and Korea that are alleged to be sold in the United States at LTFV. The Commission further determined that imports of PET sheet from Mexico that are alleged to be sold in the United States at LTFV were negligible, and its antidumping duty investigation with regard to PET sheet from Mexico was thereby terminated.[22] On March 19, 2020, the Commission provided notice of the scheduling of the final phase of antidumping investigations concerning imports of PET sheet from Korea and Oman.[23] The final phase of investigations regarding PET sheet from Korea and Oman is underway.

[18] 79 FR 45762, August 6, 2014.

[19] 85 FR 114, January 2, 2020.

[20] Explanation of Commission Determinations on Adequacy in Polyethylene Terephthalate Film, Sheet, and Strip from China and the United Arab Emirates; Inv. Nos. 731-TA-1132 and 1134 (Second Review); April 6, 2020.

[21] 84 FR 33785, July 15, 2019.

[22] 84 FR 49116, September 18, 2019.

[23] 85 FR 15796, March 19, 2020.

**Table I-1**
**PET FSS: Previous and related title VII investigations**

| Original investigation | | | | | Five-year reviews | | Current status |
|---|---|---|---|---|---|---|---|
| Date | Number | Subject product | Country | Outcome | Date | Outcome | |
| 1990 | 731-TA-458 | PET film, sheet, and strip | Korea | Affirmative | 1999 | Affirmative | Order revoked 10/20/2010 |
| | | | | | 2005 | Affirmative | |
| | | | | | 2010 | Negative | |
| 1990 | 731-TA-459 | PET film, sheet, and strip | Japan | Affirmative | -- | -- | Order revoked 10/6/1995 |
| 1990 | 731-TA-460 | PET film, sheet, and strip | Taiwan | ITC preliminary negative | -- | -- | -- |
| 2007 | 731-TA-1131 | PET film, sheet, and strip | Brazil | Affirmative | 2013 | Negative | Order revoked 2/6/2015 |
| 2007 | 731-TA-1132 | PET film, sheet, and strip | China | Affirmative | 2013 | Affirmative | Ongoing expedited second review |
| | | | | | 2020 | Ongoing | |
| 2007 | 731-TA-1133 | PET film, sheet, and strip | Thailand | ITC preliminary negative | -- | -- | -- |
| 2007 | 731-TA-1134 | PET film, sheet, and strip | United Arab Emirates | Affirmative | 2013 | Affirmative | Ongoing expedited second review |
| | | | | | 2020 | Ongoing | |
| 2019 | 731-TA-1455 | PET sheet | Korea | ITC preliminary affirmative | -- | -- | Ongoing final |
| 2019 | 731-TA-1456 | PET sheet | Mexico | Terminated (negligible) | -- | -- | -- |
| 2019 | 731-TA-1457 | PET sheet | Oman | ITC preliminary affirmative | -- | -- | Ongoing final |

Note: The scope for the related PET film, sheet, and strip proceedings presented in this table cover essentially the same items as the scope of these current five-year reviews (i.e., all gauges or thicknesses), although the scope of these current reviews includes additional specifically excluded items (e.g., tracing and drafting film). The scope for the PET sheet proceedings, however, cover a subset of the items based on thickness (i.e., PET sheet consists of thicknesses of equal to or greater than 7 mil (0.007 inches or 177.8 µm) and not exceeding 45 mil (0.045 inches or 1143 µm)).

Note: Additional related proceedings concerning PET resin from Brazil, Canada, China, India, Indonesia, Korea, Oman, Pakistan, and Taiwan concern an upstream product of PET FSS and are not presented in this table.

Source: U.S. International Trade Commission publications and Federal Register notices.

## Summary data

Table I-2 and figure I-1 present a summary of data from the original investigations, prior reviews, and the current full five-year reviews. Since the original investigations, the quantity of apparent U.S. consumption has fluctuated, decreasing during the 2017-19 period. U.S.

producers' share of apparent U.S. consumption by both quantity and value was higher during the 2017-19 period than during the original investigations and first and second reviews. The subject imports' share of apparent U.S. consumption declined between the original investigations and the first and second reviews but increased slightly between the second reviews and current reviews. The reported nonsubject imports' share of apparent U.S. consumption by quantity fluctuated between the original investigations and first and second reviews but decreased to its lowest levels during the 2017-19 period.[24]

[24] Increased U.S. producers' share of apparent U.S. consumption and lower shares of apparent U.S. consumption from subject and nonsubject sources may be due to lower importers' questionnaire coverage during the current reviews as compared to the previous reviews and original investigations.

**Table I-2**
**PET FSS: Comparative data from the original investigation, first reviews, second reviews, and third reviews, 2001, 2006, 2013, and 2019**

| Item | Original investigations | First reviews | Second reviews | Third reviews |
|---|---|---|---|---|
| | 2001 | 2006 | 2013 | 2019 |
| | Quantity (1,000 pounds) | | | |
| U.S. consumption quantity | *** | *** | 662,050 | 613,830 |
| | Share of quantity (percent) | | | |
| Share of U.S. consumption: | | | | |
| U.S. producers' share | *** | *** | 76.0 | 87.8 |
| U.S. importers' share: | | | | |
| India | *** | *** | *** | 0.4 |
| Taiwan | *** | *** | *** | 1.6 |
| Subject sources | *** | *** | *** | 1.9 |
| Nonsubject sources | *** | *** | *** | 10.2 |
| All import sources | *** | *** | 24.0 | 12.2 |
| | Value (1,000 dollars) | | | |
| U.S. consumption | *** | *** | 1,207,212 | 992,564 |
| | Share of value (percent) | | | |
| Share of U.S. consumption: | | | | |
| U.S. producers' share | *** | *** | 79.8 | 89.0 |
| U.S. importers' share: | | | | |
| India | *** | *** | *** | 0.4 |
| Taiwan | *** | *** | *** | 1.6 |
| Subject sources | *** | *** | *** | 2.0 |
| Nonsubject sources | *** | *** | *** | 8.9 |
| All import sources | *** | *** | 20.2 | 11.0 |
| | Quantity (1,000 pounds); Value (1,000 dollars); and Unit value (dollars per pound) | | | |
| Shipments of U.S. imports.-- | | | | |
| India | | | | |
| Quantity | *** | *** | *** | 2,241 |
| Value | *** | *** | *** | 4,143 |
| Unit value | *** | *** | *** | $1.85 |
| Taiwan: | | | | |
| Quantity | *** | *** | *** | 9,584 |
| Value | *** | *** | *** | 15,820 |
| Unit value | *** | *** | *** | $1.65 |
| Subject sources: | | | | |
| Quantity | *** | *** | *** | 11,825 |
| Value | *** | *** | *** | 19,963 |
| Unit value | *** | *** | *** | $1.69 |
| Nonsubject sources: | | | | |
| Quantity | *** | *** | *** | 62,805 |
| Value | *** | *** | *** | 88,756 |
| Unit value | *** | *** | *** | $1.41 |
| All import sources: | | | | |
| Quantity | *** | *** | 158,687 | 74,630 |
| Value | *** | *** | 243,696 | 108,719 |
| Unit value | *** | *** | $1.54 | $1.46 |

Table continued

**Table I-2--Continued**
**PET FSS: Comparative data from the original investigation, first reviews, second reviews, and third reviews, 2001, 2006, 2013, 2019**

| Item | Original investigations | First reviews | Second review | Third reviews |
|---|---|---|---|---|
| | 2001 | 2006 | 2013 | 2019 |
| | Quantity (1,000 pounds); Value (1,000 dollars); and Unit value (dollars per pound) | | | |
| U.S. industry: | | | | |
| Capacity (quantity) | *** | *** | *** | 721,476 |
| Production (quantity) | *** | *** | *** | 556,197 |
| Capacity utilization (percent) | *** | *** | *** | 77.1 |
| U.S. shipments: | | | | |
| Quantity | *** | *** | *** | 539,200 |
| Value | *** | *** | *** | 883,845 |
| Unit value | *** | *** | *** | $1.64 |
| Ending inventory | *** | *** | *** | 174,271 |
| Inventories/total shipments | *** | *** | *** | 30.8 |
| Production workers | *** | *** | *** | 1,620 |
| Hours worked (1,000) | *** | *** | *** | 3,935 |
| Wages paid (1,000 dollars) | *** | *** | *** | 123,711 |
| Hourly wages | *** | *** | *** | $31.44 |
| Productivity (pounds per hour) | *** | *** | *** | 141.3 |
| Financial data: | | | | |
| Net sales: | | | | |
| Quantity | *** | *** | *** | 561,104 |
| Value | *** | *** | *** | 947,916 |
| Unit value | *** | *** | *** | $1.69 |
| Cost of goods sold | *** | *** | *** | 838,727 |
| Gross profit or (loss) | *** | *** | *** | 109,189 |
| SG&A expense | *** | *** | *** | 87,484 |
| Operating income or (loss) | *** | *** | *** | 21,705 |
| Unit COGS | *** | *** | *** | $1.49 |
| Unit operating income | *** | *** | *** | $0.04 |
| COGS/ Sales (percent) | *** | *** | *** | 88.5 |
| Operating income or (loss)/ Sales (percent) | *** | *** | *** | 2.3 |

Note: -- Data shown for shipments of imports in the original investigations (2001) and in the first five-year reviews (2006) are based on questionnaire responses for Taiwan and on official statistics for India and all other countries with the exception of Brazil. On the other hand, all import shipment data shown for the second five-year reviews and current five-year reviews were for shipments of imports reported in questionnaire responses.

Source: PET Film from India and Taiwan, Staff Report, Inv. Nos. 701-TA-415 and 731-TA-933-934 (Final), INV-Z-077, March 28, 2002, Table C-1; Polyethylene Terephthalate Film, Sheet, and Strip from India and Taiwan, Staff Report, Inv. Nos. 701-TA-415 and 731-TA-933-934 (Review), Table C-1; Polyethylene Terephthalate Film, Sheet, and Strip from India and Taiwan, Staff Report, Inv. Nos. 701-TA-415 and 731-TA-933-934 (Second Review), INV-MM-057, June 11, 2014, Table C-1.

**Figure I-1**
**PET FSS: U.S. producers' U.S. shipments and U.S. importers' imports, 1999–2019**

* * * * * * *

Source: Compiled from data submitted in response to Commission questionnaires and confidential reports from the original investigations, first reviews, and second reviews.

Note. --Data for 2007 are not available due to the first review ending in 2006 and the second beginning 2008. As noted in table I-2, data shown for shipments of imports in the original investigations (2001) and in the first five-year reviews (2006) are based on questionnaire responses for Taiwan and on official statistics for India and all other countries with the exception of Brazil. All import shipment data shown for the second five-year reviews and current five-year reviews were for shipments of imports reported in questionnaire responses.

## Statutory criteria

Section 751(c) of the Act requires Commerce and the Commission to conduct a review no later than five years after the issuance of an antidumping or countervailing duty order or the suspension of an investigation to determine whether revocation of the order or termination of the suspended investigation "would be likely to lead to continuation or recurrence of dumping or a countervailable subsidy (as the case may be) and of material injury."

Section 752(a) of the Act provides that in making its determination of likelihood of continuation or recurrence of material injury--

> *(1) IN GENERAL. -- . . . the Commission shall determine whether revocation of an order, or termination of a suspended investigation, would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time. The Commission shall consider the likely volume, price effect, and impact of imports of the subject merchandise on the industry if the order is revoked or the suspended investigation is terminated. The Commission shall take into account--*
>
> *(A) its prior injury determinations, including the volume, price effect, and impact of imports of the subject merchandise on the industry*

before the order was issued or the suspension agreement was accepted,

(B) whether any improvement in the state of the industry is related to the order or the suspension agreement,

*(C) whether the industry is vulnerable to material injury if the order is revoked or the suspension agreement is terminated, and*

*(D) in an antidumping proceeding . . ., (Commerce's findings) regarding duty absorption . . ..*

*(2) VOLUME. --In evaluating the likely volume of imports of the subject merchandise if the order is revoked or the suspended investigation is terminated, the Commission shall consider whether the likely volume of imports of the subject merchandise would be significant if the order is revoked or the suspended investigation is terminated, either in absolute terms or relative to production or consumption in the United States. In so doing, the Commission shall consider all relevant economic factors, including--*

*(A) any likely increase in production capacity or existing unused production capacity in the exporting country,*

*(B) existing inventories of the subject merchandise, or likely increases in inventories,*

*(C) the existence of barriers to the importation of such merchandise into countries other than the United States, and*

*(D) 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.*

*(3) PRICE. --In evaluating the likely price effects of imports of the subject merchandise if the order is revoked or the suspended investigation is terminated, the Commission shall consider whether--*

*(A) there is likely to be significant price underselling by imports of the subject merchandise as compared to domestic like products, and*

*(B) imports of the subject merchandise are likely to enter the United States at prices that otherwise would have a significant depressing or suppressing effect on the price of domestic like products.*

*(4) IMPACT ON THE INDUSTRY.--In evaluating the likely impact of imports of the subject merchandise on the industry if the order is revoked or the suspended investigation is terminated, the Commission shall consider all relevant economic factors which are likely to have a bearing on the state of the industry in the United States, including, but not limited to–*

*(A) likely declines in output, sales, market share, profits, productivity, return on investments, and utilization of capacity,*

*(B) likely negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment, and*

> *(C) likely negative effects on the existing development and production efforts of the industry, including efforts to develop a derivative or more advanced version of the domestic like product.*
>
> *The Commission shall evaluate all such relevant economic factors . . . within the context of the business cycle and the conditions of competition that are distinctive to the affected industry.*

Section 752(a)(6) of the Act states further that in making its determination, "the Commission may consider the magnitude of the margin of dumping or the magnitude of the net countervailable subsidy. If a countervailable subsidy is involved, the Commission shall consider information regarding the nature of the countervailable subsidy and whether the subsidy is a subsidy described in Article 3 or 6.1 of the Subsidies Agreement."

## Organization of report

Information obtained during the course of the reviews that relates to the statutory criteria is presented throughout this report. A summary of trade and financial data for PET FSS as collected in these reviews is presented in appendix C. U.S. industry data are based on the questionnaire responses of ten U.S. producers of PET FSS that are believed to have accounted for all or virtually all of domestic production of PET FSS in 2019. U.S. import data and related information are based on the questionnaire responses of 21 U.S. importers of PET FSS that are believed to have accounted for 59.2 percent of the total subject U.S. imports of PET FSS during 2018.[25] Foreign industry data and related information are based on the questionnaire responses of five producers of PET FSS. Four producers in India estimated to account for *** percent of total production in India in 2019 and one Taiwanese producer estimated to account for *** percent of that country's total production in 2019 submitted questionnaire responses. Responses by U.S. producers, importers, purchasers, and foreign producers of PET FSS to a series of questions concerning the significance of the existing antidumping and countervailing duty orders and the likely effects of revocation of such orders are presented in appendix D.

[25] ***.

## Commerce's reviews[26]

### Administrative reviews

Commerce has completed 14 administrative reviews of the outstanding countervailing duty order on PET FSS from India. Commerce has completed 13 administrative reviews of the outstanding antidumping duty order on PET FSS from India and 11 administrative reviews of the outstanding antidumping duty order on PET FSS from Taiwan.[27] The results of the administrative reviews are shown in table I-3.

[26] Commerce has not conducted any changed circumstances reviews or issued anti-circumvention findings since the completion of the last five-year reviews of the countervailing duty order on PET FSS from India and the antidumping duty orders on PET FSS from India and Taiwan. Commerce has not issued any company revocations or any duty absorption findings since the imposition of the orders.

[27] For previously reviewed or investigated companies not included in an administrative review, the cash deposit rate continues to be the company-specific rate published for the most recent period.

**Table I-3**
**PET FSS: Administrative reviews of the countervailing duty order for India**

| Date results published | Period of review | Producer or exporter | Margin (percent) |
|---|---|---|---|
| 69 FR 51063, August 17, 2004 | October 22, 2001–December 31, 2002 | Polyplex | 20.62 |
| 71 FR 7534, February 13, 2006 | January 1, 2003–December 31, 2003 | Jindal Poly Films | 15.07 |
| | | Polyplex | 9.24 |
| 72 FR 6530, February 12, 2007 | January 1, 2004–December 31, 2004 | Jindal Poly Films | 14.28 |
| | | Polyplex | 9.20 |
| 73 FR 15135, March 21, 2008 | January 1, 2005–December 31, 2005 | MTZ Polyfilms Ltd. | 31.25 |
| 73 FR 75672, December 12, 2008 | January 1, 2006–December 31, 2006 | MTZ Polyfilms Ltd. | 65.59 |
| 75 FR 6634, February 10, 2010 | January 1, 2007–December 31, 2007 | Jindal Poly Films | 7.17 |
| 76 FR 76948, December 9, 2011 | January 1, 2009–December 31, 2009 | Ester Industries Ltd. | 11.81 |
| 79 FR 11412, February 28, 2014 | January 1, 2011–December 31, 2011 | SRF Limited | 2.64 |
| 80 FR 11163, March 2, 2015 | January 1, 2012–December 31, 2012 | Jindal Poly Films | 7.66 |
| | | SRF Ltd. | 2.03 |
| 81 FR 7753, February 16, 2016 | January 1, 2013–December 31, 2013 | Jindal Poly Films | 8.90 |
| | | SRF Ltd. | 2.11 |
| | | Ester Industries Ltd. | 6.09 |
| | | Garware Polyester Ltd. | 6.09 |
| | | Polyplex Corporation Ltd. | 6.09 |
| | | Vacmet | 6.09 |
| | | Vacmet India Ltd. | 6.09 |
| 81 FR 89056, December 9, 2016 | January 1, 2014–December. 31, 2014 | Jindal Poly Films | 5.52 |
| | | SRF Ltd. | 2.16 |
| 83 FR 5612, February 8, 2018 | January 1, 2015–December 31, 2015 | Jindal Poly Films | 5.26 |
| | | SRF Ltd. | 5.79 |
| 84 FR 10789, March 22, 2019 | January 1, 2016–December 31, 2016 | Jindal Poly Films | 11.26 |
| | | SRF Ltd. | 7.54 |
| | | Chiripal Poly Films Ltd. | 9.40 |
| | | Ester Industries Ltd. | 9.40 |
| | | Garware Polyester Ltd. | 9.40 |
| | | Polyplex Corporation Ltd. | 9.40 |
| | | Vacmet India Ltd. | 9.40 |
| 85 FR 14463, March 12, 2020 | January 1, 2017–December 31, 2017 | Jindal Poly Films | 10.51 |
| | | SRF Ltd. | 7.22 |
| | | Ester Industries Ltd. | 9.30 |
| | | Garware Polyester Ltd. | 9.30 |
| | | Polyplex Corporation Ltd. | 9.30 |
| | | Vacmet India Ltd. | 9.30 |

Source: Cited Federal Register notices.

**Table I-3--Continued**
**PET FSS: Administrative reviews of the antidumping duty order for India**

| Date results published | Period of review | Producer or exporter | Margin (percent) |
|---|---|---|---|
| 70 FR 8072, February 17, 2005 | December 21, 2001–June 30, 2003 | Jindal Polyester Ltd. | 6.28 |
| | | All others | 24.14 |
| 71 FR 47485, August 17, 2006 | July 1, 2004–June 30, 2005 | Jindal Poly Films | 2.32 |
| | | MTZ Polyfilms, Ltd. | 0.00 |
| | | Polyplex Corporation Ltd. | 0.01 |
| | | All others | 21.14 |
| 73 FR 7252, February 7, 2008 | July 1, 2005–June 30, 2006 | MTZ Polyfilms Ltd. | 0.00 |
| 73 FR 71601, November 25, 2008 | July 1, 2006–June 30, 2007 | Jindal Poly Films | 0.00 |
| 76 FR 76943; December 9, 2011 | July 1, 2009–June 30, 2010 | Ester Industries Ltd. | 6.81 |
| 78 FR 9670, February 11, 2013 | July 1, 2010–June 30, 2011 | SRF Ltd. | 0.00 |
| | | Polyplex | 0.00 |
| | | Jindal Poly Films | 0.00 |
| 79 FR 11406, February 28, 2014 | July 1, 2011–June 30, 2012 | SRF Ltd. | 0.78 |
| | | Polyplex | 0.78 |
| | | Jindal Poly Films | 0.00 |
| 80 FR 11160, March 2, 2015 | July 1, 2012–June 30, 2013 | Jindal Poly Films | 1.89 |
| | | SRF Ltd. | 0.00 |
| 81 FR 7750, February 16, 2016 | July 1, 2013–June 30, 2014 | Jindal Poly Films | 0.59 |
| | | SRF Ltd. | 0.00 |
| | | Ester Industries Ltd. | 0.59 |
| | | Garware Polyester Ltd. | 0.59 |
| | | Polyplex Corporation | 0.59 |
| | | Vacmet | 0.59 |
| 81 FR 91903, December 19, 2016 | July 1, 2014–June 30, 2015 | Jindal Poly Films | 0.00 |
| | | SRF Ltd. | 0.00 |
| | | Garware Polyester Ltd. | 0.00 |
| | | Vacmet India | 0.00 |
| 83 FR 6162, February 13, 2018 | July 1, 2015–June 30, 2016 | Jindal Poly Films | 1.57 |
| | | SRF Ltd. | 0.00 |
| 84 FR 9092, March 13, 2019 | July 1, 2016–June 30, 2017 | Jindal Poly Films | 5.95 |
| | | SRF Ltd./SRF Ltd. of India | 0.00 |
| 85 FR 14883, March 16, 2020 | July 1, 2017–June 30, 2018 | Jindal Poly Films | 4.45 |
| | | SRF Limited of India | 0.00 |
| | | Ester Industries Ltd. | 4.45 |
| | | Garware Polyester Ltd. | 4.45 |
| | | Polyplex Corporation Ltd. | 4.45 |
| | | Vacmet India Ltd. | 4.45 |

Source: Cited Federal Register notices.

**Table I-3--Continued**
**PET FSS: Administrative reviews of the antidumping duty order for Taiwan**

| Date results published | Period of review | Producer or exporter | Margin (percent) |
|---|---|---|---|
| 69 FR 58129, September 29, 2004 | December 21, 2001–June 30, 2003 | Nan Ya | 1.94 |
| 76 FR 9745, February 22, 2011; 76 FR 18519, April 4, 2011 | July 1, 2008–June 30, 2009 | Nan Ya | 18.30 |
| | | Shinkong | 6.38 |
| 76 FR 76941, December 9, 2011 | July 1, 2009–June 30, 2010 | Nan Ya | 74.34 |
| | | Shinkong | 6.98 |
| 78 FR 9668, February 11, 2013 | July 1, 2010–June 30, 2011 | Nan Ya | 8.99 |
| | | Shinkong | 0.75 |
| 79 FR 11408, February 28, 2014 | July 1, 2011–June 30, 2012 | Shinkong | 4.48 |
| 80 FR 10051, February 25, 2015 | July 1, 2012–June 30, 2013 | Nan Ya | 1.56 |
| 80 FR 75451, December 2, 2015 | July 1, 2013–June 30, 2014 | Nan Ya | 0.00 |
| 81 FR 89055, December 9, 2016 | July 1, 2014–June 30, 2015 | Nan Ya | 0.00 |
| 82 FR 56947, December 1, 2017 | July 1, 2015–June 30, 2016 | Nan Ya | 1.34 |
| 83 FR 63625, December 11, 2018 | July 1, 2016–June 30, 2017 | Nan Ya | 0.00 |
| 85 FR 1139, January 9, 2020 | July 1, 2017–June 30, 2018 | Nan Ya | 0.00 |

Note: 76 FR 9745, February 22, 2011 established rates of 20.76 for Nan Ya and 6.38 for Shinkong. 76 FR 18519, April 4, 2011, amended the rate for Nan Ya to 18.30 percent.

Source: Cited Federal Register notices.

Commerce has conducted one new shipper review with respect to PET FSS from India. On December 24, 2009, Commerce received timely requests for AD and CVD new shipper reviews from SRF Ltd. ("SRF"), a producer and exporter in India, of all the PET FSS it exported to the United States. On May 27, 2011, Commerce published its final results of the countervailing duty new shipper review, a calculated individual *ad valorem* subsidy rate for SRF, for January 1, 2009, through December 31, 2009, of 3.04 percent ad valorem.[28]

## Scope rulings

Commerce has conducted one scope review with respect to PET FSS from Taiwan requested by Nan Ya Plastics Corp. Ltd. and Hop Industries Corp. On May 31, 2011, Commerce published its final results of the scope review stating that amorphous PET film that is not

[28] 75 FR 10758, March 9, 2010; and 76 FR 30908, May 27, 2011.

biaxially oriented is not within the scope of the antidumping duty order.[29] Additionally, there has been one scope review with regards to PET FSS from India requested by International Packaging Films, Inc. On August 25, 2003, Commerce determined that tracing and drafting film is outside of the scope of the order on PET FSS from India.[30]

## Five-year reviews

Commerce has issued the final results of its expedited reviews with respect to all subject countries.[31] Table I-4 and table I-5 present the countervailable subsidy margins/dumping margins calculated by Commerce in its original investigations and subsequent reviews.

**Table I-4**
**PET FSS: Commerce's original and five-year countervailable subsidy margins for producers/ exporters in India**

| Producer/exporter | Original margin (*percent*) | First five-year review margin (*percent*) | Second five-year review margin (*percent*) | Third five-year review margin (*percent*) |
|---|---|---|---|---|
| Ester Industries, Ltd. | 18.43 | 27.39 | 27.37 | 20.46 |
| Garware Polyester Ltd. | 24.48 | 33.44 | 33.42 | 26.70 |
| Polyplex Corp. Ltd. | 18.66 | 22.71 | 22.69 | 15.82 |
| All others | 20.40 | 29.36 | 29.34 | 22.50 |

Source: 67 FR 44179, July 1, 2002; 72 FR 57300, October 9, 2007; 78 FR 47276, August 5, 2013; and 84 FR 59356, November 4, 2019.

[29] 76 FR 31301, May 31, 2011.
[30] 70 FR 24533, May 10, 2005.
[31] 84 FR 59355, November 4, 2019 and 84 FR 59356, November 4, 2019.

**Table I-5**
**PET FSS: Commerce's original and five-year dumping margins for producers/exporters in India and Taiwan**

| Producer/exporter | Original margin (*percent*) | First five-year review margin (*percent*) | Second five-year review margin (*percent*) | Third five-year review margin (*percent*) |
|---|---|---|---|---|
| **India** | | | | |
| Ester Industries, Ltd. | 24.14 | 5.71 | 24.10 | 24.10 |
| Polyplex Corp. Ltd. | 10.34 | 0.001 | 3.02 | 3.02 |
| All others | 24.14 | 5.71 | 13.17 | 13.17 |
| **Taiwan** | | | | |
| Nan Ya Plastics Corp., Ltd. | 2.49 | 2.49 | 8.99 | 8.99 |
| Shinkong Synthetic Fibers Corp. | 2.05 | 2.05 | 0.75 | 0.75 |
| All others | 2.40 | 2.40 | 4.37 | 4.37 |

Note 1: Ester's original rate was found to be 24.24 percent, which was adjusted to 5.71 percent to take into account the export subsidy rate found in the companion countervailing duty investigation.

Note 2: Polyplex' original rate was found to be 10.34 percent, which was adjusted to 0.001 percent to take into account the export subsidy rate found in the companion countervailing duty investigation, and Polyplex was excluded from the antidumping duty order. Polyplex' exclusion was subsequently reversed by a decision of the Court of International Trade. See Notice of Decision of the Court of International Trade: Polyethylene Terephthalate Film, Sheet, and Strip from India, 69 FR 40352, July 2, 2004.

Note 3: The Indian "all others" rate established in the original investigations was based on Ester's rate.

Note 4: For purposes of the third sunset reviews, Commerce found it was appropriate to rely on the weighted-average margins for both the India Order and the Taiwan Order as reported in the Second PET Film Sunset Reviews Final Results. See Issues and Decision Memorandum: Final Results of Expedited Third Sunset Reviews of the Antidumping Duty Orders on Polyethylene Terephthalate Film, Sheet and Strip from India and Taiwan.

Source: 67 FR 34899, May 16, 2002; 67 FR 44174, July 1, 2002; 67 FR 44175, July 1, 2002; 73 FR 26079, May 8, 2008; 79 FR 12153, March 4, 2014 and 84 FR 59355, November 4, 2019.

# The subject merchandise

## Commerce's scope

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

> *The products covered by the antidumping duty and countervailing duty orders are all gauges of raw, pretreated, or primed PET Film, whether extruded or coextruded. Excluded are metallized films and other finished films that have had at least one of their surfaces modified by the application of a performance-enhancing resinous or inorganic layer of more than 0.00001 inches thick.*[32]

## Tariff treatment

PET FSS is currently imported under HTS statistical reporting number 3920.62.0090. PET FSS produced in India and Taiwan enters the U.S. market at a column 1-general duty rate of 4.2 percent *ad valorem*.[33] Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

## Section 301 tariff treatment

Section 301 of the Trade Act of 1974, as amended,[34] authorizes the Office of the U.S. Trade Representative ("USTR"), at the discretion of the President, to take appropriate action to respond to a country's unfair trade practices. Products of China classified under in-scope HTS

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[32] 84 FR 59356, November 4, 2019; Issues and Decision Memorandum: Final Results of Expedited Third Sunset Reviews of the Antidumping Duty Orders on Polyethylene Terephthalate Film, Sheet and Strip from India and Taiwan, October 29, 2019; and Issues and Decision Memorandum for the Final Results of the Expedited Third Sunset Review of the Countervailing Duty Order on Polyethylene Terephthalate Film, Sheet, and Strip from India, October 29, 2019.

[33] There are currently no Miscellaneous Tariff Bill provisions for the temporary period expiring December 31, 2020; however there was a petition submitted in the 2019 cycle recommended by the Commission under the American Manufacturing Competitiveness Act of 2016 (Pub. L. No. 114-159, § 3(a), 130 Stat. 397 (2016)), granting a reduced or suspended duty for PET FSS. In 2016, a duty-suspension petition (no. 2171) was submitted for imports, but the Commission did not recommend its inclusion in a miscellaneous tariff bill due to domestic producer objection(s). *American Manufacturing Competitiveness Act of 2016: Final Report*, USITC Publication 4712, August 2017, pp. 10-11; App. A: All Petitions, p. 67; App. H: Category VI Petitions, pp. 11, 693-694. In 2019, petition 1903526 under HTS 3920.62.00 for capacitor-grade biaxially oriented polyester film was submitted and preliminarily recommended for inclusion into the miscellaneous tariff bill for duty suspension or reduction by the Commission. *American Manufacturing Competitiveness Act: Preliminary Report*, USITC Publication 5067, June 2020, App. A: All Petitions, p. 126; App. C: Category II Petitions, pp. 36, 1548. https://www.usitc.gov/trade_tariffs/mtb_program_information/reports?items_per_page=All.

[34] 19 U.S.C. § 2411.

subheadings 3920.62.00 were included in USTR's 2nd enumeration ("Tranche 2, List 2") that became subject to the additional 25-percent *ad valorem* duties on or after August 23, 2018.[35] See also U.S. note 20(d) to subchapter III of HTS chapter 99.[36]

# The product

## Description and applications[37]

PET FSS is a high-performance, clear, flexible, and transparent or translucent material that is produced from PET polymer, a linear, thermoplastic polyester resin. It is generally more expensive than other plastic films and is used typically only when its unique properties are required. Special properties imparted to PET FSS during the manufacturing process are integral to its preferred use in a myriad of downstream commodity and specialty applications encompassing food and other packaging, industrial, electrical, imaging, and magnetics sectors. Domestic producers ship PET FSS by truck to converters who apply thicker out-of-scope coatings and printing. PET FSS is also sold through distributors and to end users.

PET FSS has certain inherent desirable qualities such as brilliant optical clarity, high tensile strength, good flexibility, retention of physical properties over a wide temperature range, excellent electrical insulation properties, durability, heat resistance, good gas-barrier properties, excellent dimensional stability, chemical inertness, and relatively low moisture absorption. It is available commercially in a range of widths, thicknesses, and properties, depending upon the needs of end users, and is generally more expensive than other plastic films owing to its diverse and superior properties. PET FSS can be made as a single layer or can be coextruded with other polyester polymers, blended with pigments, and coated in-line with applied polymer and other agents into a multilayer film encompassing the desired characteristics.

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[35] 83 FR 40823, pp. 40823-40838. The U.S. Trade Representative has granted exclusion from Section 301 duties under 9903.88.02 for HTS subheading 3920.62 for two products: 1) films coated on one or both sides with polyvinylidene chloride (PVdC) or polyvinyl alcohol (PVOH), whether or not having a primer layer between the base and coating; any of the foregoing having a total thickness greater than 0.01 mm but not greater than 0.03 mm (described in statistical reporting number 3920.62.0090); and 2) thermoformable PET sheets, with a thickness of 0.35 mm or more but not exceeding 1.7 mm, to which PET glitter flakes are permanently fastened, in rolls not less than 250 mm in width and not more than 1,092 mm in length (described in statistical reporting number 3920.62.0090). HTSUS (2020), Revision 13, USITC Publication 5072, June 2020, Ch 99, pp. 101, 112.

[36] HTSUS (2020), Revision 13, USITC Publication 5072, June 2020, Ch 99, pp. 21-22. As Section 301 duties are only applicable to China, they do not apply to any subject imports in these current reviews.

[37] Unless otherwise noted, this information is based on Second review publication, pp. I-16-20.

There are five subject PET film end-use categories generally recognized by the industry: packaging, industrial and specialties, electrical, imaging, and magnetics. However, traditional magnetic end use applications have mostly disappeared, and the imaging end use segment is declining.[38] [39] The product is produced and sold for a myriad of end uses in two major categories—general purpose commodity-grade films and specialty-grade films.[40] Depending on the producer and end-use application, PET films are characterized as thin films or thick films, with thin films generally but not exclusively ranging from the 48 gauge commodity packaging markets up to 200 gauge for other thin film commodity and specialty markets, and thicker films ranging above 200 gauge to around 1,400 gauge for the more value added industrial and specialty, and electrical markets.[41]

Packaging end-use examples include general purpose food packaging, film for flexible and stand-up pouches, packaging for pet food, peel-able seals, lids, packaging for snacks, barrier films, can laminations, vacuum insulation panels, and medical packaging. Industrial and specialty film applications include hot stamping foil, release films, photo resist films, metallic yarns, adhesive tapes, plastic cards (including smart cards), labels, lamination films, brightness enhancement films (computer screens), solar/safety window films, medical test strips, and other miscellaneous uses.[42] Electrical and optical applications include display films for tablets and phones, photovoltaic cells, motor wire and cable, transformer insulation films, capacitors, thermal printing tapes, membrane touch switches (computer and calculator keyboards), and flexible printed circuit films.[43] Imaging applications include microfilm, printing and pre-press films, color proofing, printing plates, drawing office drafting film, overhead transparencies, X-ray films, instant photos, business graphics, and wide format displays. Magnetics end uses include videotape, audio cassette tape, floppy disks, and advanced high- density computer storage media. Selected product types manufactured by domestic producers include flexible

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[38] IHS, Chemical Economics Handbook, Polyester Film, November 2018, p. 7.

[39] Domestic interested parties DuPont, Mitsubishi, SKC, and Toray ("petitioners") posthearing brief, p. 15; Polyplex posthearing brief, Exhibit I, p. 1.

[40] The industry currently sells thin and thick films, Jindal Poly Films, "PET Films," https://www.jindalpoly.com/products/pet-films, retrieved July 27, 2020; Polyplex, "BOPET Films," https://www.polyplex.com/products-application/sarafil/bopet, retrieved July 27, 2020.

[41] In Petitioners' experience, demand for thinner films (i.e., 48 gauge to 92 gauge) is generally growing faster than demand for thicker films across applications. Petitioners' posthearing brief, p. 21.

[42] According to the petitioners, the packaging and industrial segments remain the largest two market segments, Petitioners' posthearing brief, p. 15.

[43] Petitioners stated that there has been high growth in optical films. Petitioners' posthearing brief, p. 15.

packaging, window film and solar window film, silicon release and other liners, industrial carrier web, pressure sensitive label stock, printing plate and motors applications, optical films and optical display films (flat panel TV), LCD, renewable energy films, photovoltaic cell, touch screen applications, imaging and medical X-rays.[44] [45]

Since the second reviews, the industry has seen developments in increased lightweighting and increased recycling. Lightweighting refers to a practice of using less or lighter material for the end product.[46] In bottling, this phenomenon is sometimes referred to as "thin walling." Lightweighting of PET film began many years ago in stand-up pouches, where the thickness of films moved from 48 gauge to 44 gauge.[47] The process of lightweighting is currently observed in the *** segment.[48]

Recyclability has evolved over time. Environmental efforts have been developing to increase the content of recycled material in packaging and to decrease the use of single use packaging. This includes increasing the percent content of recycled material in packaging (using post-consumer recycle), as well as replacing specialty multi-layered laminates that cannot be recycled (including PET) with monolayer or new multi-layer laminates that can be recycled.[49]

In addition, there have been efforts to make polyester from plant-based raw materials as opposed to fossil fuel-based raw materials. One example is the green cap on Coke water bottles; the material used to make the cap is made from plant-based materials.[50] Some

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[44] IHS, Chemical Economics Handbook, Polyester Film, November 2018, p. 5.

[45] Petitioner's note that demand for films in photovoltaic applications grew early in the POR but has since declined significantly. Petitioners' posthearing brief, p. 15.

[46] BASF, "World's lightweight future," BASF Information, Innovation, n.d. retrieved July 27, 2020. https://www.basf.com/cn/en/media/BASF-Information/Innovation/Worlds-lightweight-future.html. Jacobsen, Jessica, "Plastic packages influenced by lightweighting, bio-based materials," June 14, 2013. https://www.bevindustry.com/articles/86485-plastic-packages-influenced-by-lightweighting-bio-based-materials. Sanchez, Rudy, "Is lightweighting plastic materials really a solution for managing single-use plastics?" Dieline, January 8, 2019. https://thedieline.com/blog/2019/1/8/is-lightweighting-plastic-materials-really-a-solution-for-managing-single-use-plastics.

[47] Petitioners' posthearing brief, p. 18.

[48] For this segment, ***. Lightweighting has an impact on producers' profitability because ***. Petitioners' posthearing brief, p. 18.

[49] Petitioners' posthearing brief, p. 18.

[50] Coca-Cola, "Why can't Coca-Cola make the Entire PlantBottle™ Package from Plant-based Material?" Frequently Asked Questions, n.d., retrieved July 27, 2020. https://www.coca-colaafrica.com/packages/why-coke-cant-make-entire-plantbottle-package-from-plant-materials#; (Footnote continued from previous page) Though difficult, Coca-Cola has been continually aiming towards a higher and higher recycled content bottle and announced a 100 percent recycled bottle for the South African market in December 2019. Coca-Cola, "Bonaqua Launches South Africa's First Water
(Footnote continued on next page)

attempts have also been made to make purified terephthalic acid, a raw material, from plant-based material, but capacity and availability combined with a higher cost limited its application.[51]

## Manufacturing processes[52]

PET FSS is produced by the "sequential draw" biaxial orientation ("BOPET") process, a technology fundamentally standard across the industry as shown in the process flow diagram of figure I-2.[53] The basic process steps are polymerization, extrusion and film casting, drawing and biaxial orientation, crystallization (heat setting), cooling, winding, and finishing. Sophisticated scanners and control systems maintain optimal process conditions. Many value added in-line film treatments may also be applied to modify the film during routine processing, including antistatic agents applied by running the film over microporous liquid coating drums, other chemical treatments, co-extrusion of other polyester substrates onto one or both sides of the film via melt phase lamination processes to promote adhesion, introduction of fillers and pigments into the PET polymer melt via masterbatch systems, and corona treatment for downstream converter requirements.[54]

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Bottle Made Entirely Out of Recycled Plastic," Sustainability, December 13, 2019. https://www.coca-colaafrica.com/stories/south-africas-first-water-bottle-made-entirely-out-of-recycled-plastic; Petitioner's posthearing brief, p. 18; Handfield, Robert, "The Drive to 100% Bio-based Plastic Bottles," Supply Chain Resource Cooperative, NC State University, April 15, 2016. https://scm.ncsu.edu/scm-articles/article/the-drive-to-100-bio-based-plastic-bottles.

[51] Petitioner notes the exercise was limited since customers were unwilling to pay a higher cost for these products. Petitioners' posthearing brief, p. 18.

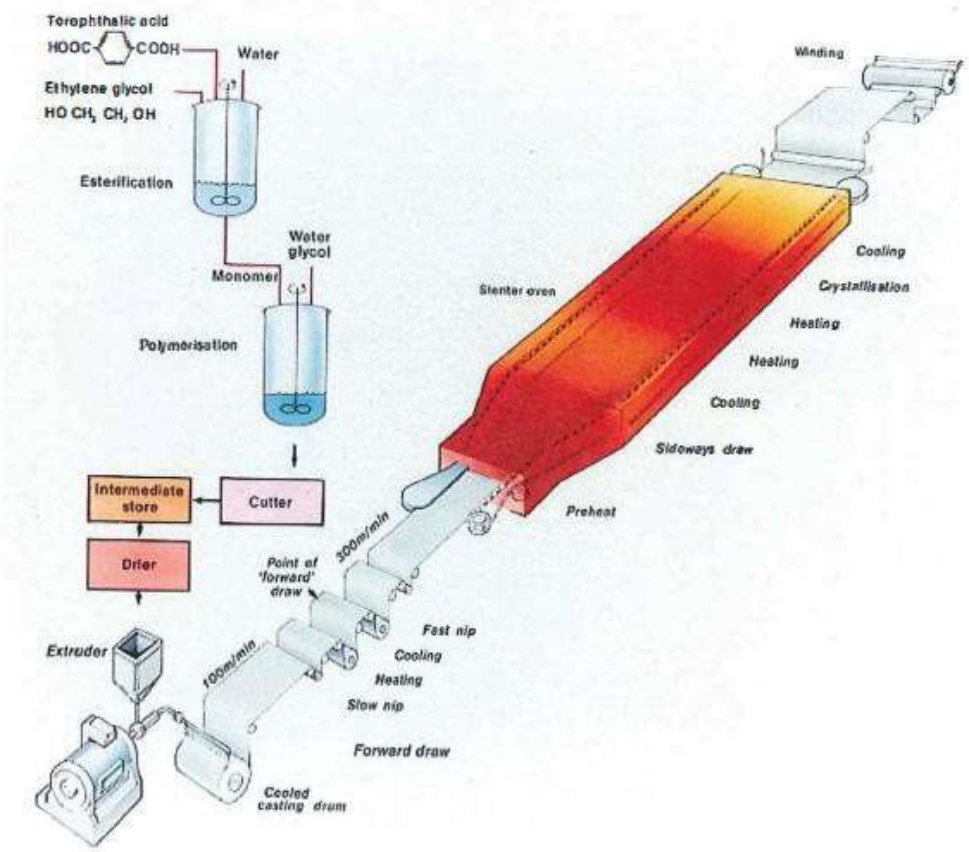
[52] Unless otherwise noted, this information is based on the second review publication, pp. I-16-20.

[53] In Petitioners' experience, the manufacturing process is generally the same for all thicknesses and/or sizes of PET film. In some cases, the same machinery is used to make each of the different thicknesses of PET film, i.e., film, "thin" sheet, and "thick" sheet, with different settings on the equipment for each category. In other cases, a producer may have equipment designed and built to only produce films of a specific thickness range. Thinner films may also be somewhat more difficult to make "on spec" than thicker films. Petitioners' posthearing brief, p. 20.

[54] Corona treatment is the act of exposing the surface of a material to a highly active electric field to modify its surface energy.

**Figure I-2**

**PET FSS: Process flow diagram for PET film production**




Source: Polyethylene Terephthalate Film, Sheet, and Strip from India and Taiwan Investigation Nos. 701-TA-415 and 731-TA-933 and 934 (Second Review), USITC Publication 4479, July 2014 ("Second review publication"), figure I-1.

In the sequential draw process, molten PET polymer is extruded under pressure through a narrow-slotted die which may vary from 18 inches to 6 feet or more in length. The molten material exits the die directly onto an ultra-smooth casting drum which cools the melt and forms an amorphous polymeric film. From there, the film is stretched (drawn) in a longitudinal direction over a series of precision motorized rollers. The stretched film next enters a long-heated chamber called a stenter (or tenter) oven, where it is subjected to a transverse stretch (sideways draw) to complete biaxial orientation. Biaxial orientation aligns the polymeric chains into a uniform structure which imparts strength, toughness, clarity, and all the other value-added properties characteristic of PET film. The finished film of the desired width and gauge (nominally 1 micron (4 gauge) to 350 microns (1,400 gauge)) is wound into rolls for shipment to

the customer. PET film is typically slit into rolls ranging from 2 inches to 11 feet wide and 500 to 200,000 feet in length and sold to downstream converters whoapply various thicker substrates to the film for ultimate nonsubject end-use requirements. Certain U.S. primary PET film producers may also convert base film into nonsubject "equivalent PET film" on the same equipment by applying coatings exceeding 0.254 microns (0.00001 inch; ca. 1 gauge) and sell the value-added film to downstream end users.[55]

Manufacturers may produce their own PET polymer using the batch polymerization or continuous polymerization process, or a combination thereof, or source polymer feedstock from related firms or on the open market. The batch process allows the film producer to custom tailor PET polymer for specific end-use applications. The basic raw materials for producing PET film are: (1) dimethyl terephthalate ("DMT") or purified terephthalic acid ("PTA"), derived from xylene; and (2) monoethylene glycol ("MEG"), derived from ethylene. Ethylene usually is manufactured from natural gas, while xylene is a byproduct from oil refineries.

Operations are capital-intensive, dictating that plants be run at relatively high capacity utilization rates for sustainable periods to remain profitable. Most plants operate on a 24 hour-per-day, 7 day-per-week basis, with some allotted downtime for maintenance and repairs. The PET film production process is conducted in a "clean room" environment to protect the finished film from microscopic airborne contamination. Sturdy equipment and vibratory control are essential to the production of uniform thickness and surface features.

The major producers do not normally run other types of film on their production lines unless necessary owing to the intricacies of the process, and, therefore, do not normally employ production workers for other purposes. Also, most production lines are geared to the production of products within specified gauge ranges (thin, intermediate, or thick) across end-use groups because of the exacting requirements of the process and variability in PET polymer processing characteristics. Therefore, the larger producers with more lines and sophisticated surface modification and other technologies, together with the capability to generally produce multiple polymer grades, tend to have the capability to provide a wider range of products to each end-use sector.

[55] 1 micron = 3.937 gauge (0.00004 inch); 100 gauge = 1 mil (0.001 inches).

## Domestic like product issues

In its original determinations, the Commission defined the domestic like product to consist of all PET FSS, not including equivalent PET film (PET film with a coating of more than 0.0001 inch thick).[56] In the first and second five-year reviews, the Commission again defined the domestic like product as consisting of all PET film, not including equivalent PET film, corresponding to the scope of the orders.[57] In its notice of institution in these current five-year reviews, the Commission solicited comments from interested parties regarding the appropriate domestic like product and domestic industry.[58] One domestic producer, Terphane, offered comments on these definitions and agreed with the definitions contained in the Commission's notice of institution.[59] The Indian respondent, Jindal Poly, did not agree with the definition of the domestic like product and attested that thick films (i.e., films with thickness of more than 50 microns) should be excluded from the definition of the domestic like product.[60] In their prehearing briefs, domestic interested parties (DuPont, Mitsubishi, SKC, and Toray and Terphane) argued that the Commission should again define a single domestic like product consisting of all PET film corresponding to the scope of the Orders.[61] No interested party disagreed with the definition of the domestic like product in their prehearing or posthearing briefs.

## U.S. market participants

### U.S. producers

During the original investigations, nine firms supplied the Commission with information on their U.S. operations with respect to PET FSS. These firms accounted for 100 percent of U.S. production of PET FSS in 2001.[62] During the first five-year reviews, eight firms supplied the

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[56] Polyethylene Terephthalate Film, Sheet, and Strip from India and Taiwan, Inv. Nos. 701-TA-415 and 731-TA-933-934 (Final), USITC Publication 3518, June 2002, pp. 4-6.

[57] Polyethylene Terephthalate Film, Sheet, and Strip from India and Taiwan, Inv. Nos. 701-TA-415 and 731-TA-933-934 (Review), USITC Publication 3994 ("First review publication"), April 2008, p. 6, and Second review publication, p. 6.

[58] 84 FR 31343, July 1, 2019.

[59] Domestic interested party Terphane's response to the notice of institution, July 31, 2019, p. 26.

[60] Respondent interested party's response to the notice of institution, July 31, 2019, p. 10.

[61] Petitioners' prehearing brief, p. 4; and Domestic interested party Terphane's prehearing brief, p. 9.

[62] The nine U.S. producers that supplied the Commission with usable questionnaire information during the original investigations were: 3M, Agfa, Curwood, DuPont Teijin, Kodak; Mitsubishi, SKC, Terphane, and Toray. ***.

Commission with information on their U.S. operations with respect to PET FSS.[63] These firms accounted for 100 percent of U.S. production of PET FSS in 2006. In the second five-year reviews, 11 firms provided the Commission with information on their U.S. PET film operations. These firms accounted for 100 percent of U.S. production of PET film in 2013.[64] In these current proceedings, the Commission issued U.S. producers' questionnaires to 11 firms, ten of which provided the Commission with information on their PET FSS operations and one of which certified that it no longer produces PET FSS.[65] These firms are believed to account for 100 percent of U.S. production of PET FSS in 2019. Presented in table I-6 is a list of current domestic producers of PET FSS and each company's position on continuation of the orders, production locations, related and/or affiliated firms, and share of reported production of PET FSS in 2019.

**Table I-6**
**PET FSS: U.S. producers, positions on orders, U.S. production locations, and shares of 2019 reported U.S. production**

| Firm | Position on continuation of order(s) | Production location(s) | Share of production (percent) |
|---|---|---|---|
| 3M | *** | Decatur, AL<br>Greenville, SC | *** |
| Carestream | *** | Windsor, CO | *** |
| DuPont Teijin | *** | Hopewell, VA | *** |
| Eastman Kodak | *** | Rochester, NY | *** |
| Flex Films | *** | Elizabethtown, KY | *** |
| Mitsubishi | *** | Greer, SC | *** |
| Polyplex USA | *** | Decatur, AL | *** |
| SKC | *** | Covington, GA | *** |
| Terphane | *** | Bloomfield, NY | *** |
| Toray | *** | North Kingstown, RI | *** |
| Total | | | 100.0 |

Note: Data do not sum to 100 percent due to rounding.

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

[63] The eight U.S. producers that supplied the Commission with usable questionnaire information during the first five-year reviews were: 3M, Curwood, DuPont Teijin, Kodak, Mitsubishi, SKC, Terphane, and Toray.

[64] The 11 U.S. producers that supplied the Commission with usable questionnaire information during the second five-year reviews were: 3M, Carestream, Curwood, DuPont Teijin, Kodak, Flex USA, Mitsubishi, Polyplex, SKC, Terphane, and Toray.

[65] ***

As indicated in table I-7, seven U.S. producers are related to foreign producers PET FSS and five are related to U.S. importers of PET FSS. In addition, as discussed in greater detail in Part III, four U.S. producers directly import the subject merchandise and four purchase the subject merchandise from U.S. importers.

**Table I-7**
**PET FSS: U.S. producers' ownership, related and/or affiliated firms**

| Item / Firm | Firm Name | Affiliated/Ownership |
|---|---|---|
| **Ownership:** | | |
| *** | *** | *** |
| *** | *** | *** |
| *** | *** | *** |
| *** | *** | *** |
| *** | *** | *** |
| *** | *** | *** |
| *** | *** | *** |
| *** | *** | *** |
| *** | *** | *** |
| *** | *** | *** |
| *** | *** | *** |
| **Related importers/exporters:** | | |
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| *** | *** | *** |
| *** | *** | *** |
| *** | *** | *** |
| *** | *** | *** |
| *** | *** | *** |
| *** | *** | *** |

Table continued on next page.

**Table I-7--Continued**
**PET FSS: U.S. producers' ownership, related and/or affiliated firms**

| **Related producers:** | | |
|---|---|---|
| *** | *** | *** |
| *** | *** | *** |
| *** | *** | *** |
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| *** | *** | *** |

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

## U.S. importers

In the original investigations, 22 firms supplied the Commission with usable information on their operations involving the importation of PET FSS. The importers of PET FSS from Taiwan in the original investigations reported imports that were greater than official statistics in 1999 and 2000 (148.4 percent and 150.0 percent, respectively), while the importers of PET FSS from India in the original investigations accounted for 61.0 percent of official imports from India in 2001.[66] During the first five-year reviews, 32 firms supplied the Commission with usable information on their operations involving the importation of PET FSS. Responding firms' subject imports of PET FSS from India and Taiwan were approximately *** percent and *** percent, respectively, of the official import statistics quantities under HTS statistical reporting number 3920.62.0090 during 2004-06.[67] In the second five-year reviews, 21 firms provided usable questionnaire responses, representing *** percent of Commerce official import statistics from India for the period examined and *** percent of Commerce official import statistics from Taiwan for the period examined.[68]

In the current proceedings, the Commission issued U.S. importers' questionnaires to 28 firms believed to be importers of PET FSS, as well as to the 11 firms that were believed to be U.S. producers of PET FSS. Usable questionnaire responses were received from 21 firms, representing *** percent of U.S. imports from India and *** percent of U.S. imports from Taiwan in 2018.[69] Table I-8 lists all responding U.S. importers of PET FSS from India, Taiwan, and other sources, their locations, and their shares of U.S. imports in 2019.

[66] PET Film from India and Taiwan, Staff Report, Inv. Nos. 701-TA-415 and 731-TA-933-934 (Final), INV-Z-077, March 28, 2002, p. IV-1.

[67] Polyethylene Terephthalate Film, Sheet, and Strip from India and Taiwan, Staff Report, Inv. Nos. 701-TA-415 and 731-TA-933-934 (Review) ("First review confidential report"), p. IV-4.

[68] Polyethylene Terephthalate Film, Sheet, and Strip from India and Taiwan, Staff Report, Inv. Nos. 701-TA-415 and 731-TA-933-934 (Second Review), INV-MM-057 (Second review confidential report"), June 11, 2014, p. I-12.

[69] Based on 2018, the latest full year available, proprietary Customs data using HTS statistical reporting number 3920.62.0090, adjusted to remove the firms that certified they had not imported PET FSS since January 1, 2014, was used.

**Table I-8**
**PET FSS: U.S. importers, their headquarters, and share of total imports by source, 2019**

| Firm | Headquarters | Share of imports by source (percent) | | | | |
|---|---|---|---|---|---|---|
| | | India | Taiwan | Subject sources | Nonsubject sources | All import sources |
| Amcor Flexibles | Oshkosh, WI | *** | *** | *** | *** | *** |
| Carestream | Rochester, NY | *** | *** | *** | *** | *** |
| D'Addario | Farmingdale, NY | *** | *** | *** | *** | *** |
| DuPont Teijin | Hopewell, VA | *** | *** | *** | *** | *** |
| Eastman Kodak | Rochester, NY | *** | *** | *** | *** | *** |
| Granwell | West Caldwell, NJ | *** | *** | *** | *** | *** |
| International Packaging | Norwood, NJ | *** | *** | *** | *** | *** |
| Jindal Poly | New Delhi, | *** | *** | *** | *** | *** |
| Klear Plastic | Ann Arbor, MI | *** | *** | *** | *** | *** |
| Kolon USA | Ridgefield Park, NJ | *** | *** | *** | *** | *** |
| Mitsubishi | Greer, SC | *** | *** | *** | *** | *** |
| MJW | Boca Raton, FL | *** | *** | *** | *** | *** |
| NOW Plastics | East Longmeadow, MA | *** | *** | *** | *** | *** |
| Oliner Fibre | Union, NJ | *** | *** | *** | *** | *** |
| Polyplex USA | Decatur, AL | *** | *** | *** | *** | *** |
| Rocheux | Somerset, NJ | *** | *** | *** | *** | *** |
| Siliconature | Caledonia, MI | *** | *** | *** | *** | *** |
| Terphane | Bloomfield, NY | *** | *** | *** | *** | *** |
| Toppan USA | Griffin, GA | *** | *** | *** | *** | *** |
| Toray | North Kingstown, RI | *** | *** | *** | *** | *** |
| Triton | Fredericksburg, VA | *** | *** | *** | *** | *** |
| Total | | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Note. --Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

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

## U.S. purchasers

The Commission received 18 usable questionnaire responses from firms that bought PET FSS during 2017-19.[70] Ten responding purchasers are converters, eight are end users, and one is a distributor. The large responding purchasers were ***.

[70] Of the 18 responding purchasers, 18 purchased domestic PET FSS, 4 purchased imports of FSS from India, 2 purchased imports of FSS from Taiwan, and 14 purchased imports of PET FSS from other sources.

## Apparent U.S. consumption and U.S. market shares

Data concerning apparent U.S. consumption of PET FSS are shown in table I-9 and figure I-3. U.S. producers' U.S. shipments fell by 4.2 percent by quantity and 1.9 percent by value between 2017 and 2019. U.S. shipments of imports from subject sources fell by 26.1 percent by quantity and 9.7 percent by value from 2017 to 2019, while U.S. shipments of imports from nonsubject sources increased by 14.8 percent by quantity and 21.4 percent by value. Apparent U.S. consumption fell by 3.1 percent from 2017 to 2019.

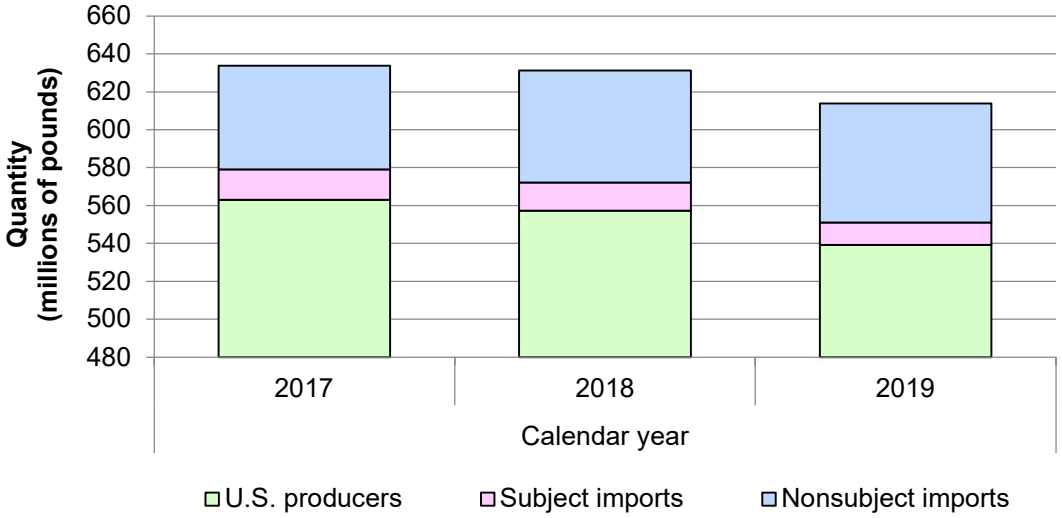
U.S. producers' share of apparent U.S. consumption by quantity declined by 1.0 percentage points during 2017-19. The share of apparent U.S. consumption by quantity held by subject imports from India decreased by 1.1 percentage points between 2017 and 2019, while the share held by subject imports from Taiwan increased by 0.5 percentage points over this period. The share of apparent U.S. consumption held by nonsubject imports increased in each year, ending 1.6 percentage points higher in 2019 than in 2017.

**Table I-9**
**PET FSS: Apparent U.S. consumption, 2017-19**

| Item | Calendar year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Quantity (1,000 pounds) | | |
| U.S. producers' U.S. shipments | 563,091 | 557,242 | 539,200 |
| U.S. shipments of imports from.-- | | | |
| India | 9,213 | 4,457 | 2,241 |
| Taiwan | 6,792 | 10,422 | 9,584 |
| Subject sources | 16,005 | 14,879 | 11,825 |
| Nonsubject sources | 54,689 | 59,057 | 62,805 |
| All import sources | 70,694 | 73,936 | 74,630 |
| Apparent consumption | 633,785 | 631,178 | 613,830 |
| | Value (1,000 dollars) | | |
| U.S. producers' U.S. shipments | 901,214 | 939,277 | 883,845 |
| U.S. shipments of imports from.-- | | | |
| India | 9,612 | 6,005 | 4,143 |
| Taiwan | 12,486 | 17,052 | 15,820 |
| Subject sources | 22,098 | 23,057 | 19,963 |
| Nonsubject sources | 73,109 | 83,173 | 88,756 |
| All import sources | 95,207 | 106,230 | 108,719 |
| Apparent consumption | 996,421 | 1,045,507 | 992,564 |
| | Share of quantity (percent) | | |
| U.S. producers' U.S. shipments | 88.8 | 88.3 | 87.8 |
| U.S. shipments of imports from.-- | | | |
| India | 1.5 | 0.7 | 0.4 |
| Taiwan | 1.1 | 1.7 | 1.6 |
| Subject sources | 2.5 | 2.4 | 1.9 |
| Nonsubject sources | 8.6 | 9.4 | 10.2 |
| All import sources | 11.2 | 11.7 | 12.2 |
| | Share of value (percent) | | |
| U.S. producers' U.S. shipments | 90.4 | 89.8 | 89.0 |
| U.S. shipments of imports from.-- | | | |
| India | 1.0 | 0.6 | 0.4 |
| Taiwan | 1.3 | 1.6 | 1.6 |
| Subject sources | 2.2 | 2.2 | 2.0 |
| Nonsubject sources | 7.3 | 8.0 | 8.9 |
| All import sources | 9.6 | 10.2 | 11.0 |

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

**Figure I-3**
**PET FSS: Apparent U.S. consumption, 2017-19**




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

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

## U.S. market characteristics

Major end-use categories for PET FSS include food and other packaging, industrial, electrical, imaging, and magnetics (see Part I). Packaging is the largest end use, accounting for about *** percent of U.S. consumption in 2018.[1] Other end uses include electrical/electronic, release films, reprographics, and labels and decals.[2] The packaging and industrial segments remain the largest end uses for PET FSS, with both experiencing worldwide growth and there has also been growth in optical grade films used in electronics.[3]

Within the larger segments, there are numerous sub-segments. Each sub-segment consists of a particular type of PET FSS (defined by gauge, coatings, and other specifications) that is often produced for that particular sub-segment and sold to purchasers who participate primarily in that sub-segment. Different producers also have different specialties and emphases across segments and sub-segments. PET FSS types can be classified as commodity films, semi-specialty films, and specialty films.[4] Domestic producers reported that the majority of PET FSS sold in the U.S. market is commodity films.

U.S. PET FSS producers fall into two categories, firms that produce primarily or solely for the merchant market (DuPont Teijin, Flex Films, Mitsubishi, Polyplex USA, SKC, Terphane, and Toray) and those that produce primarily or solely for captive consumption (Carestream, Eastman Kodak, and 3M).[5] All of the U.S. producers that produce primarily for the merchant market have affiliated PET FSS production facilities in other countries, including two (Polyplex USA and Flex Films) that have affiliated production facilities in India.

Most U.S. producers (6 of 9) and some importers (4 of 17) reported that there have been changes in the product mix or product range of PET FSS since 2014, and four producers and three importers anticipate changes. Reported changes include changes driven by environmental concerns, including "lightweighting" of PET FSS (one firm cited, for example, a shift from 118-gauge PET FSS for labels and liners to 98-gauge), reduction of waste material,

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[1] ***.

[2] Second review publication, p. II-1.

[3] Domestic interested parties' posthearing brief, p. 15.

[4] Second review publication, p. II-1.

[5] ***. The portion of U.S. production that was internally consumed has declined since the second review, falling from *** percent in 2008 to *** percent in 2013 to *** percent in 2019. Second review confidential report, pp. III-5 and III-8, and U.S. producers' responses to Commission questionnaires.

development of eco-label friendly films, and increased use of recycled PET. U.S. producers also reported eroding profit margins on commodity films as low-priced imports continue to enter the market, constant product improvements, and development of new products and applications to serve higher-priced market segments. *** reported that increased import competition and lower prices in specialty markets, such as printing plates, motors, flexible electronics, labels, and industrial, has forced it to shift its product mix toward more commodity products. It stated that low prices in commodity products affect the entire product range, dragging down prices on higher-end products, and forcing it to reduce spending on research and development, technological improvements, and new product offerings. Importer *** reported that although plain 48-gauge film has not changed much since 2014, there have been changes in value-added and coated products. Demand growth for thinner films has been greater than demand growth for thicker films.[6]

Anticipated changes in product range include increased demand for recyclable products and a continuing trend towards lighter weight product/reduced gauges. Purchaser *** cited Walmart's plastic reduction efforts as contributing to this trend, and it also cited overcapacity for PET resin. Other anticipated changes include continued new product development by producers in India and Taiwan to compete in the U.S. market (reported by ***); a move toward 36-gauge instead of 48-gauge PET FSS for stand up pouch packaging and from rigid to flexible packaging (***); and a likely switch in the sleeve label industry to PET FSS from polyvinyl chloride, which has a poor environmental image (***).

Apparent U.S. consumption of PET FSS has declined since the original investigations and decreased during 2017 to 2019. Overall, apparent U.S. consumption in 2019 was 3.2 percent lower than in 2017.

## Channels of distribution

For U.S. producers and importers, the converters channel was the largest category for PET FSS' channels of distribution, followed by end users and then distributors (table II-1). Conversion activities include coating, metallizing, and/or laminating PET FSS.[7] For imports from

[6] Domestic interested parties' posthearing brief, p. 21. Polyplex also reported that the share of thin film used for packaging has increased. Polyplex's posthearing brief, exhibit 1, p. 1.

[7] ***.

India, converters were the largest channel, comprising more than half of shipments, followed by distributors and then end users. Most imports from Taiwan went to converters, with a smaller share going to end users.

**Table II-1**
**PET FSS: U.S. producers' and importers' share of reported U.S. commercial shipments, by sources and channels of distribution, 2017-2019**

| Item | Calendar year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Share of U.S. shipments (percent) | | |
| U.S. producers: | | | |
| to Distributors | 21.2 | 21.9 | 23.6 |
| to End users | 39.6 | 38.7 | 36.9 |
| to Converters | 39.2 | 39.4 | 39.5 |
| U.S. importers: India | | | |
| to Distributors | 41.0 | 30.5 | 26.0 |
| to End users | 2.7 | 8.6 | 21.0 |
| to Converters | 56.4 | 60.9 | 53.1 |
| U.S. importers: Taiwan | | | |
| to Distributors | --- | 0.0 | 0.1 |
| to End users | 43.9 | 30.3 | 30.1 |
| to Converters | 56.1 | 69.7 | 69.8 |
| U.S. importers: Subject sources | | | |
| to Distributors | 23.6 | 9.1 | 5.0 |
| to End users | 20.2 | 23.8 | 28.4 |
| to Converters | 56.3 | 67.0 | 66.6 |
| U.S. importers: All other sources | | | |
| to Distributors | 8.9 | 9.8 | 9.2 |
| to End users | 36.8 | 35.2 | 29.0 |
| to Converters | 54.3 | 55.0 | 61.8 |
| U.S. importers: All sources | | | |
| to Distributors | 12.2 | 9.6 | 8.5 |
| to End users | 33.0 | 32.9 | 28.9 |
| to Converters | 54.8 | 57.4 | 62.6 |

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

## Geographic distribution

U.S. producers and importers reported selling PET FSS to all regions in the contiguous United States (table II-2). For U.S. producers, 9 percent of sales were within 100 miles of their production facility, 75 percent were between 101 and 1,000 miles, and 16 percent were over 1,000 miles. Importers sold 16 percent within 100 miles of their U.S. point of shipment, 79 percent between 101 and 1,000 miles, and 5 percent over 1,000 miles.

**Table II-2**
**PET FSS: Geographic market areas in the United States served by U.S. producers and importers**

| Region | U.S. producers | India | Taiwan | Subject |
|---|---|---|---|---|
| Northeast | 10 | 5 | 4 | 9 |
| Midwest | 9 | 5 | 4 | 9 |
| Southeast | 9 | 5 | 4 | 8 |
| Central Southwest | 8 | 2 | 2 | 4 |
| Mountain | 7 | 2 | 2 | 4 |
| Pacific Coast | 8 | 4 | 2 | 6 |
| Other | 1 | --- | 1 | 1 |
| All regions (except Other) | 7 | 2 | 2 | 4 |
| Reporting firms | 10 | 6 | 4 | 9 |

Note: Other is all other U.S. markets, including AK, HI, PR, and VI.

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

# Supply and demand considerations

## U.S. supply

Table II-3 provides a summary of the supply factors regarding PET FSS from U.S. producers and from subject countries. Reported capacity in the United States and India increased from 2017 to 2019 and *** in Taiwan. Responding firms in the United States and India reported shipping PET FSS mainly to their respective home markets and the responding firm in Taiwan reported shipping mainly to ***.

**Table II-3**
**PET FSS: Supply factors that affect the ability to increase shipments to the U.S. market**

| | Capacity (million pounds) | | Capacity utilization (percent) | | Ratio of inventories to total shipments (percent) | | Shipments by market, 2019 (percent) | | Able to shift to alternate products |
|---|---|---|---|---|---|---|---|---|---|
| Country | 2017 | 2019 | 2017 | 2019 | 2017 | 2019 | Home market shipments | Exports to non-U.S. markets | No. of firms reporting "yes" |
| United States | *** | *** | *** | *** | *** | *** | *** | *** | 1 of 10 |
| India | *** | *** | *** | *** | *** | *** | *** | *** | 0 of 4 |
| Taiwan | *** | *** | *** | *** | *** | *** | *** | *** | *** of 1 |

Note: Responding U.S. producers accounted for all of U.S. production of PET FSS in 2019. Foreign producer questionnaire responses were received from four producers in India estimated to account for *** percent of PET FSS production in India in 2019 and one producer in Taiwan estimated to account for *** percent of PET FSS production in Taiwan in 2019. 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 Part I, "U.S. market participants."

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

**Domestic production**

Based on available information, U.S. producers of PET FSS have the ability to respond to changes in demand with moderate-to-large changes in the quantity of shipments of U.S.-produced PET FSS to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity and a high, but stable, share of inventories. Factors mitigating responsiveness of supply include a limited ability to shift shipments from alternate markets and a limited ability to shift production to or from alternate products.

U.S. producers' capacity utilization was lower in 2019 than in 2017 as there was a small increase in overall U.S. capacity (1.1 percent) coupled with a larger decrease in production (6.4 percent). U.S. producers shipped a small share of their total shipments to export markets, including Canada, Mexico, Europe, and Asia. U.S. producers reported that they cannot easily shift their sales to other markets, citing long initial qualification times (which can take 6 to 12 months or longer), complex logistics, high initial costs in entering a new market, difficulty competing with suppliers from low-cost regions, substantial investments require to shift to new products, and high transportation costs. *** reported that it has lower profit margins on exports since it absorbs ocean freight and tariff costs. *** stated that it generally supplies PET FSS to local markets from its regional production facilities, that its specialty products "do not translate directly to other regions," and that it would require significant development and customer technical service set up to export to other regions. Three producers reported barriers to trade in exporting their PET FSS, in particular *** reported high tariffs on PET FSS in Europe (6 percent) and Brazil (16 percent).

Only one U.S. producer reported an ability to produce other products on the same equipment as PET FSS. *** reported it also produces out-of-scope PET film; production of out-of-scope merchandise accounted for about 1 percent of U.S. production using the same equipment. U.S. producers *** stated that PET FSS production is highly capital intensive, and that producers have a strong incentive to operate plants 24 hours a day, 7 days a week, 50-plus weeks a year, with downtime only for maintenance.

**Subject imports from India**

Based on available information, producers of PET FSS from India have the ability to respond to changes in demand with moderate-to-large changes in the quantity of shipments of PET FSS to the U.S. market. The main contributing factors to this degree of responsiveness of supply are relatively large and growing overall capacity and some available unused capacity.

Factors mitigating responsiveness of supply include a somewhat limited ability to shift shipments from alternate markets and a limited ability to shift production to or from alternate products.

Capacity utilization in India increased from 2017 to 2019, with production increases outpacing capacity increases. Most shipments were to the Indian home market (*** percent in 2019), with the remainder going to a variety of export markets, including Europe, Asia, and the Middle East. Two of the four responding Indian producers reported producing other products on the same equipment as PET FSS, accounting for less than *** percent of total production on the equipment during 2017-19, although none of the firms reported that they could shift production to products other than PET FSS. *** reported producing PET film that was metallized or with a coating thickness greater than the range defined in the scope, and *** reported producing BOPP (biaxially oriented polypropylene) and CPP (cast polypropylene) film.

In describing the PET FSS market in India, Indian producers estimated that there were between 11 and 13 PET FSS producers in India.[8] *** and *** described the market in India as very competitive since, according to ***, PET FSS "is largely a commodity product." *** stated that the flexible packaging industry in India is expected to grow by at least 10 percent per year through 2022 and stated that demand is high in India because of rising consumerism and changing consumer preferences towards packaged items. It added that Indian plastic films producers "have become competitive in the domestic market and a better product mix in terms of the proportion of value-added in the overall, both of which are driving growth and profitability in the home market."

All responding Indian producers reported that all their U.S. sales in 2019 were on a spot basis. Three of the four responding producers reported that their product range, product mix, and marketing to the Indian home market did not differ from export markets while one (***) stated that it sells specialty products to the United States and a few other countries. Three of the four producers reported that the PET FSS they sell in the home market is interchangeable with that sold to export markets while one (***) stated that its export markets require different thicknesses and surface properties than the Indian market.

Two producers provided comments comparing prices in the U.S. market versus the Indian home market. *** stated its prices are based on negotiations with the buyers and that prices of its exports are "at par with the price prevailing in Indian market." ***

[8] *** stated that total capacity in India was 671,000 tonnes and that the domestic industry is operating at about 85 percent capacity utilization.

stated that prices in the United States are higher than those in the Indian market and third-country markets.

All four Indian producers reported that they face import competition for PET FSS in their home market. *** reported that import sources in India included Bahrain, Brazil, Dubai, Mexico, Pakistan, Peru, Poland, Russia, Thailand, and Turkey. *** stated that the top five import sources of PET FSS in India are China, Korea, Netherlands, Thailand, and the United States. *** reported facing competition from duty-free imports from ASEAN-India FTA countries. *** stated that import sources in India were China, Indonesia, Korea, and Thailand, and that imports were mostly limited to products not made by Indian producers, such as thick films and ultra-thin films.

Indian producers had mixed responses regarding the ability to shift sales between the U.S. market and alternative country markets, with *** stating that it is easy to do so and *** stating that it could not shift sales within a 12-month period. *** stated that each export market has a unique demand-supply equilibrium and tariff structure and that its current priority are markets in ***. It stated that it is easy to sell to countries that have FTAs with India but there are barriers in selling to other countries, such as the Mercosur member countries (with 16 percent tariffs on PET film) and four countries (Brazil, Indonesia, Korea, and Turkey) that have AD/CVD duties on *** of PET film. *** did not comment on its ability to shift sales.

**Subject imports from Taiwan**

Based on available information, producers of PET FSS from Taiwan have the ability to respond to changes in demand with moderate changes in the quantity of shipments of PET FSS to the U.S. market. The main contributing factor to this degree of responsiveness of supply are some available unused capacity. Factors mitigating responsiveness of supply include limited ability to shift shipments from alternate markets and limited ability to shift production to or from alternate products.

Reported capacity in Taiwan was stable from 2017-19, and production increased irregularly, resulting in higher capacity utilization in 2019 than in 2017.[9] Slightly less than half of the Taiwan producer's shipments were to the home market in 2019, with most of the remainder going to export markets other than the United States. Asia was the primary export market. The responding Taiwan producer, Nan Ya, reported *** of other products

[9] ***.

on the same machinery and that it was *** to produce other products on the same equipment as PET FSS. In describing the market in Taiwan, Nan Ya stated it accounts for about *** percent of production in Taiwan, with a second producer, Shin Kong, accounting for the remaining *** percent.

Nan Ya reported that *** of its U.S. sales in 2019 were on a *** basis. It reported that its product range, product mix, and marketing to the home market *** from export markets. ***.

Nan Ya stated that *** prices in the U.S. market and other markets. It stated that it *** import competition in its home market *** and that competition in the home market is based on ***. Nan Ya stated that ***. In addition, it stated that the product mix ***.

**Imports from nonsubject sources**

Nonsubject imports accounted for 84.4 percent of total U.S. imports in 2019, according to data from importer questionnaires. Data based on U.S. official import statistics indicate that the largest sources of nonsubject imports during 2017-2019 were Mexico (22.4 percent of imports in 2019) and Korea (20.3 percent). Combined, these countries accounted for 42.7 percent of nonsubject imports in 2019.[10]

[10] Official import statistics include a broader range of products than PET FSS. Imports from Canada and Oman were not included in these calculations. Official import statistics indicate that Oman was the largest import source during 2017-19; however, industry information indicate that imports from Oman were in out-of-scope sheet form. Additionally, industry information indicates that Canada does not produce or have capacity for PET film. ***.

**Supply constraints**

Most U.S. producers (7 of 8 responding) and importers (16 of 19) reported no supply constraints for their PET FSS. However, U.S. producer *** reported some supply disruptions *** in 2017, and *** 2018. ***.[11] Two importers reported supply constraints because of the AD/CVD orders on PET FSS: *** reported an inability to compete in the market, and *** reported that it lost its largest customer and has had to bring in PET FSS from ***, which offers less capability and fewer offerings than Indian suppliers.

On the other hand, 11 of 18 purchasers reported supply constraints since January 1, 2014, particularly citing supply shortages in 2017 and 2018 and constraints from U.S. producers. *** stated that U.S. supply was tight in 2017 and 2018, with U.S. demand exceeding supply. *** reported short supply for 48-gauge PET FSS in 2017 and 2018 because of high demand for thicker gauge material for flat screens and mobile phones. It added that it has recently experienced longer lead times on coated PET FSS from its small number of approved suppliers. *** reported limited availability of 48-gauge "vanilla" PET film. *** reported delays caused by supplier capacity limitations. *** reported that there were many times since 2014 when it was unable to obtain PET FSS domestically and that it was sometimes quicker to get PET FSS from overseas. *** reported that suppliers in subject countries (Garware in India and Nan Ya in Taiwan) have not responded to its inquiries.

Several purchasers reported supply issues with domestic producers. *** reported supply issues with Mitsubishi, SKC, DuPont Teijin, and Toray, but did not elaborate on the issues. *** stated that Mitsubishi had service issues prior to the startup of its new production line. *** reported that before Mitsubishi's new line opened in 2018, Mitsubishi accepted a higher volume of orders than it could produce, and *** added that deliveries were "abysmal" and quality was "poor." *** reported that for one type of PET FSS, it had to find another supplier since its U.S. supplier was not able to meet volume requirements in a timely manner, although it continued to buy other types of PET FSS from this U.S. producer.

[11] Domestic interested parties' posthearing brief, p. 25.

*** stated that in 2017 a domestic supplier was unwilling to supply PET FSS because of capacity constraints and has since been an unreliable supplier.

**New suppliers**

Most purchasers reported no new suppliers in the U.S. market since January 1, 2014. However, two purchasers reported new entrants and two expect additional entrants. Purchasers cited Siliconature, Uflex and Polyplex as new suppliers.[12] *** anticipates new suppliers from China, Pakistan, and the UAE will enter the market, and *** anticipates that a more aggressive supplier, perhaps Indorama, will purchase DuPont Teijin's U.S. and European businesses.

## U.S. demand

Based on available information, the overall demand for PET FSS is likely to experience small-to-moderate changes in response to changes in price. The main contributing factors are the lack of substitute products tempered by PET FSS's highly variable cost shares of final products.

**End uses and cost share**

U.S. demand for PET FSS depends on the demand for U.S.-produced downstream products. As noted previously, PET FSS is used in a wide variety of applications, with packaging being the largest end use. Because PET FSS is used in a wide variety of end-use products (which are themselves often used in other downstream products), the percent of the final cost that is accounted for by PET FSS varies widely across and within end uses. Cost shares reported in the second reviews for some end uses include (in percent): packaging (15 to 70, average of about 30); release liners (40 to 70); labels (10 to 50); packing tapes (50); medical (12); optical films (15 to 20 ); motors (3); industrial (40 to 68); solar window films (15 to 50); metalized PET (75); laminated film (80); specialty films (16); balloons (80); and reflective sheeting (10).[13]

Most responding firms (6 of 10 responding U.S. producers, 14 of 17 importers, and 9 of 11 purchasers) reported no changes in end uses in 2014. Among firms reporting changes, firms reported declining use of PET FSS in several applications in the United States: optical displays,

[12] Uflex and Polyplex are global producers of PET FSS and have production facilities in the United States as well as in other countries. Siliconature does not appear to be a producer of PET FSS; according to its website it produces silicone release liners. https://www.siliconature.com/en/release-liners-manufacturing/, retrieved June 8, 2020.

[13] Second review publication, p. II-10.

solar applications, and thermal transfer ribbons and thermal lams (as a result of increased imports of these downstream products). Firms also reported new developments in PET FSS end-use products including flexible packaging.

Most firms (6 of 10 responding U.S. producers, 12 of 16 importers, and 9 of 11 purchasers) reported no anticipated changes in end uses. Some firms anticipated changes particularly in packaging to reduce non-recyclable waste, including replacing PET with polyethylene (PE) or polypropylene (PP) laminates that can be used with paper products, downgauging to reduce the amount of PET in packaging products, and use of recycled content PET. Firms also anticipate continued decreased demand for traditional X-ray products; increased use of PET FSS in medical face shields, transparent barrier packaging, and thermo-formable packaging; and increased imports of lower-value downstream products.

**Business cycles**

Most responding U.S. producers (6 of 9) and a smaller number of importers (8 of 19) and purchasers (3 of 18) reported that the PET FSS market is subject to business cycles. Firms described longer-term business cycles driven by supply and demand and seasonal variations in end-use markets. U.S. producers described the business cycle as consisting of periods of high demand and tight supply followed by capacity expansions and periods of oversupply. *** stated that there is typically a 4-to-6-year business cycle for PET FSS. *** stated that continued production capacity increases, particularly in China and India, have created oversupply in those countries with the excess production exported to the United States and Europe.

Seasonal cycles reported include higher demand for food packaging during growing seasons (with high demand in the first quarter and weak demand in the fourth quarter) and that demand for printing plates follows the packaging markets. Other seasonal cycles reported include demand for motor manufacturing following the housing industry for home appliances and that demand for window film is highest in the first and second quarters. One purchaser reported higher PET FSS consumption in the summer months and one importer reported that PET shrink film used by the beverage industry has higher demand in the spring and summer.

**Demand trends**

Most firms reported an increase in U.S. demand for PET FSS since January 1, 2014, and all responding purchasers reported that demand for their end-use products using PET FSS increased (table II-4). Firms' responses regarding future U.S. demand were more mixed, although a plurality of firms expect demand to increase over the next two years.

**Table II-4**
**PET FSS: Firms' responses regarding U.S. demand and demand outside the United States**

| Item | Number of firms reporting | | | |
|---|---|---|---|---|
| | Increase | No change | Decrease | Fluctuate |
| **U.S. demand:** | | | | |
| Demand in the United States: U.S. producers | 6 | --- | 2 | 1 |
| Importers | 9 | 2 | 2 | 3 |
| Purchasers | 8 | 1 | 2 | 4 |
| Foreign producers | 3 | --- | --- | 1 |
| Anticipated demand in the United States: U.S. producers | 4 | 2 | 1 | 2 |
| Importers | 7 | 3 | 2 | 4 |
| Purchasers | 7 | 3 | 3 | 3 |
| Foreign producers | 2 | 1 | --- | 1 |
| Demand for purchasers' final products: Purchasers | 11 | --- | --- | --- |
| **Demand outside of the United States:** | | | | |
| Demand outside the United States: U.S. producers | 5 | --- | 1 | 3 |
| Importers | 8 | 3 | 1 | 4 |
| Purchasers | 8 | 1 | 1 | 2 |
| Foreign producers | 4 | --- | --- | --- |
| Anticipated demand outside the United States: U.S. producers | 5 | 1 | 1 | 2 |
| Importers | 5 | 4 | 2 | 4 |
| Purchasers | 6 | 3 | 1 | 2 |
| Foreign producers | 4 | --- | --- | --- |
| Demand in subject countries: Foreign producers | 4 | --- | --- | 1 |

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

Firms attributed increased demand for PET FSS to population growth, increased demand for packaging and labeling, a transition from rigid packaging to flexible packaging, consumer demand for more convenience-packaging options (such as single serve packaging and pouches), more packaging for pet food, and increased use of packaging tape for e-commerce. One U.S. producer stated that the U.S. packaging industry has consolidated and is now dominated by large multinational, multi-sector companies. Purchaser *** stated that the coronavirus has greatly increased demand for PET FSS and that suppliers are having trouble supplying the market, particularly with Indian companies out of the supply chain. Firms reporting decreased demand reported declining demand for imaging films and increased imports of downstream products such as thermal transfer ribbons.

Firms reported that they anticipate that demand increases will continue because of population growth and continuing consumer demand for more convenience-packaging options with some firms expecting demand to grow at the same rate as GDP. *** reported

short-term disruptions in demand resulting from the COVID-19 pandemic, although it noted that the pandemic has resulted in higher demand for packaging films as more consumers buy prepackaged foods instead of visiting a restaurant. Some firms anticipated decreased growth because of a decline in plastics use and less demand for certain types of PET FSS such as imaging films.

Most firms also reported increased demand outside of the United States, and all four responding Indian producers reported increased demand in the Indian home market. Taiwan producer Nan Ya reported that demand in Taiwan ***. Nan Ya also stated that demand ***.

In general, firms described higher demand in markets outside of the United States and attributed increased demand in these markets to overall population growth, the emergence of a middle class with increased purchasing power, and increased consumer demand for more convenience-packaging options. Firms cited higher growth in emerging markets particularly in Asia, with increased demand for PET FSS for both packaging and for optical films used in televisions and phones. Firms also reported a transition from rigid packaging to flexible packaging, a "boom" in the flexible packaging industry since 2014, and global growth in packaging and label applications and in packaging tape for e-commerce. One firm reported that demand for multi-layer ceramic capacitors in Japan and Korea has led to higher demand growth for PET FSS in Asia than in the United States.

A plurality of firms anticipated continued growth in demand for PET FSS outside the United States, citing many of the same factors mentioned previously, such as population growth and increased demand for convenience-packaging options and continued growth in the electronics sector. Some firms anticipate reduced growth with light weighting and reduced use of single-use packaging.

Domestic interested parties reported that PET FSS demand in the United States and EU is growing *** percent annually, that demand in most of Asia is growing *** percent annually, and that demand in China is growing at an even higher rate. They also stated that the COVID-19 crisis temporarily increased demand for PET FSS for packaging and some industrial uses, including stockpiling of materials *** and that demand for PET FSS for other uses has declined. They anticipate declining demand over the next one to two years because of the global economic downturn.[14]

[14] Domestic interested parties' posthearing brief, pp. 22-24.

**Substitute products**

Substitutes for PET FSS, although somewhat limited, include BOPP (bi-axially oriented polypropylene film) and BOPA (bi-axially oriented polypropylene film) for food and other flexible packaging uses, certain laminating papers for electrical insulation uses, and polycoated paper and polyolefin films for lamination and conversion uses.[15]

Most firms reported no changes in substitutes since 2014 (7 of 10 U.S. producers, 16 of 17 importers, 13 of 18 purchasers) or anticipated changes in substitutes (7 of 10 U.S. producers, 14 of 15 importers, 13 of 18 purchasers). Reported changes in substitutes included the use of post-consumer recycled resins re-processed into polyester pellets and downgauging of PET FSS. Anticipated changes reported include the possible replacement of PET laminates in packaging with reclaimable PE and PP laminates, possible elimination of single use packaging, new demands for downgauging in packaging markets, paper liners used in place of low-end PET FSS, and the replacement of PET FSS with less expensive materials like paper or polypropylene.

## Substitutability issues

The degree of substitution between domestic and imported PET FSS depends upon such factors as relative prices, quality (e.g., grade standards, defect rates, etc.), and conditions of sale (e.g., price discounts/rebates, lead times between order and delivery dates, reliability of supply, product services, etc.). Based on available data, staff believes that there is a high degree of substitutability between domestically produced PET FSS and PET FSS imported from subject sources.

### Lead times

PET FSS is primarily produced-to-order. U.S. producers reported that 76 percent of their commercial shipments were produced-to-order, with lead times averaging 32 days, and 24 percent were from inventories, with lead times averaging 5 days. Importers reported that 90 percent of shipments were produced-to-order with average lead times of 70 days. Indian producers reported that 90 percent of their shipments to the U.S. market were produced-to-order and that lead times averaged 40 days. Taiwan producer Nan Ya reported that *** percent of its shipments to the U.S. market were produced-to-order and that lead times averaged *** days.

[15] In the second reviews, 5 of 8 producers, 4 of 15 importers, and 8 of 14 purchasers reported substitute products. Second review publication, p. II-9.

## Knowledge of country sources

All 18 responding purchasers indicated they had marketing/pricing knowledge of domestic product, 6 of product from India, 3 of product from Taiwan, and 12 of product from nonsubject countries.[16]

As shown in table II-5, most purchasers and their customers sometimes or never make purchasing decisions based on the producer or country of origin. Reasons cited for making decisions based on the manufacturer include a limited number of approved manufacturers, production qualification, prior experience with the producer, lead times and availability, quality, some types of PET FSS are only made by a limited number of producers, security of supply, regional and global sourcing considerations, adherence to contracts, and price.

Reasons for purchasing based on the country of origin included a preference for U.S.-produced product because of faster lead times and for quality concerns, a desire for multiple suppliers to balance security of supply, export considerations for thermal transfer ribbons, and geopolitical tensions.

**Table II-5**
**PET FSS: Purchasing decisions based on producer and country of origin**

| Purchaser/customer decision | Always | Usually | Sometimes | Never |
|---|---|---|---|---|
| Purchaser makes decision based on producer | 6 | 2 | 7 | 3 |
| Purchaser's customers make decision based on producer | --- | 2 | 4 | 9 |
| Purchaser makes decision based on country | 4 | 3 | 4 | 7 |
| Purchaser's customers make decision based on country | --- | 1 | 2 | 12 |

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

Half of the responding purchasers (9 of 18) reported preferring certain country sources. Many of these firms cited a preference of U.S. product because of faster lead times, higher quality, better service, fewer supply chain disruptions, and better logistics. *** stated that it prefers to use lower cost import film from China for export markets while *** stated that its customers do not want film from China.

## Factors affecting purchasing decisions

The most often cited top three factors firms consider in their purchasing decisions for PET FSS were price (17 firms), quality/meet specifications (16 firms), and availability/supply/lead-time (15 firms) as shown in table II-6. Quality was the most frequently cited first-most important factor (cited by 14 firms). Price was the most frequently reported

[16] Other countries listed include Bahrain, Brazil, Germany, Indonesia, Israel, Italy, Japan, Korea, Mexico, Pakistan, Singapore, Thailand, and Turkey.

second-most important factor (9 firms); and availability was the most frequently reported third-most important factor (8 firms).

Most responding purchasers (12 of 18) reported that they sometimes purchase the lowest-priced product, five reported they usually do, and one reported it never does.

**Table II-6**
**PET FSS: Ranking of factors used in purchasing decisions as reported by U.S. purchasers, by number of firms**

| Factor | First | Second | Third | Total |
|---|---|---|---|---|
| Price/cost | 2 | 9 | 6 | 17 |
| Quality/meet specifications | 14 | 3 | 1 | 16 |
| Availability/supply/lead time | 2 | 5 | 8 | 15 |
| All other factors | 0 | 3 | 3 | 6 |

Note: Other factors include service for second factor, and credit, product line, and innovation for third factor.

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

### Importance of specified purchase factors

Purchasers were asked to rate the importance of 15 factors in their purchasing decisions (table II-7). Six factors were rated as very important by more than half of responding purchasers: availability, product consistency, and reliability of supply (18 firms each); price (17); quality meets industry standards (15); and delivery time (14).

**Table II-7**
**PET FSS: Importance of purchase factors, as reported by U.S. purchasers, by number of responding firms**

| Factor | Very important | Somewhat important | Not important |
|---|---|---|---|
| Availability | 18 | --- | --- |
| Delivery terms | 6 | 11 | 1 |
| Delivery time | 14 | 4 | --- |
| Discounts offered | 2 | 13 | 3 |
| Minimum quantity requirements | 6 | 10 | 2 |
| Packaging | 4 | 13 | 1 |
| Payment terms | 5 | 13 | --- |
| Price | 17 | 1 | --- |
| Product consistency | 18 | --- | --- |
| Product range | 5 | 8 | 5 |
| Quality meets industry standards | 15 | 3 | --- |
| Quality exceeds industry standards | 8 | 6 | 4 |
| Reliability of supply | 18 | --- | --- |
| Technical support/service | 9 | 9 | --- |
| U.S. transportation costs | 3 | 14 | 1 |

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

**Supplier certification**

All but one responding purchaser (17 of 18) require their suppliers to become certified or qualified to sell PET FSS to their firm. Purchasers generally reported that the time to qualify a new supplier ranged from 90 days to one year, with a median reported time of 180 days. Eight purchasers reported that a domestic or foreign supplier had failed in its attempt to qualify product or had lost its approved status since January 1, 2014. Five of these firms reported qualification issues with various U.S. producers, including Dupont Teijin, Flex Films, Mitsubishi, Polyplex USA, SKC and Toray, and five reported issues with imported product, including one firm which reported an issue with subject imports from Polyplex India.

**Changes in purchasing patterns**

Purchasers were asked about changes in their purchasing patterns from different sources since January 1, 2014 (table II-8). Reasons that firms increased domestic purchases included availability, new products made with domestic film, growth in downstream products that use specialty PET FSS produced by Mitsubishi, using a domestic producer instead of JBF (India) as a secondary supplier in 2017, and growth in overall purchases of PET FSS. Reasons for decreased domestic purchases were U.S. capacity and price. Three purchasers reported increased purchases from India for added capacity and lower price, purchases of a specialty grade, and increased overall purchases. The reasons reported for decreased purchases from India included supplier JBF experienced financial trouble in 2017. Two firms reported decreased purchases from Taiwan because of the difficulty of doing business and fewer products made with Taiwan film. Reasons for increased purchases from nonsubject countries were price, wider product offering, and an overall increase in purchases. Reasons for decreased purchases were tariffs on PET FSS from China and the discontinuation of flexible display production.

Twelve of 18 responding purchasers reported that they had changed suppliers since January 1, 2014. General reasons for changing suppliers included price, quality, availability, discontinuation of end-use product, and to maintain at least two suppliers to avoid supply risks. Specifically, firms dropped or reduced purchases from Shaoxing (China), Mitsubishi (Germany), SKC (China and Korea), and PPG because of pricing; JBF because of its bankruptcy; Mitsubishi because of capacity constraints and "spotty" product availability, Flex for quality and commercial reasons; and Radix (China) because it was "not an honest supplier."[17] Firms added or increased purchases from Mitsubishi and Toray because of price and Superfilms/Fatra for more capacity.

[17] The country of origin is listed when provided by the responding purchaser.

**Importance of purchasing domestic product**

Fourteen of 18 purchasers reported that none of their purchases required U.S.-produced product. Four firms reported preferences for domestic product for reasons other than legal or customer requirements. These reasons included: quality and service, impact of duties recovery, short lead time, and qualified sources happened to be domestic.

**Table II-8**
**PET FSS: Changes in purchase patterns from U.S., subject, and nonsubject countries**

| Source of purchases | Did not purchase | Decreased | Increased | Constant | Fluctuated |
|---|---|---|---|---|---|
| United States | --- | 2 | 5 | 8 | 3 |
| India | 10 | 1 | 3 | 1 | --- |
| Taiwan | 10 | 2 | --- | 2 | --- |
| All other countries | 2 | 2 | 3 | 7 | 3 |

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

## Comparisons of domestic products, subject imports, and nonsubject imports

Purchasers were asked a number of questions comparing PET FSS produced in the United States, subject countries, and nonsubject countries. First, purchasers were asked for a country-by-country comparison on the same 15 factors (table II-9) for which they were asked to rate the importance.

In comparing U.S. and Indian product, most purchasers reported that the products were comparable on 7 of the 15 factors and for four factors (availability, delivery time, reliability of supply, and technical support/service) a majority or plurality reported that the U.S. product was superior. Purchasers were evenly divided between rating the U.S. superior and comparable for two factors (quality exceeds industry standards and U.S. transportation costs); and purchasers were split on the two remaining factors, with a majority of purchasers reporting that the Indian product was superior or comparable for discounts offered and a majority reporting that the U.S. product was superior or comparable for product range.

Most purchasers reported that U.S. and Taiwan product were comparable on all factors except delivery time, reliability of supply, and U.S. transportation costs, for which a majority rated the U.S. product as superior, and availability for which firms were evenly divided between the U.S. product being superior or comparable to the Taiwan product. Most purchasers reported that U.S. and nonsubject product were comparable on all factors except delivery time and technical support/service, for which a majority or plurality rated the U.S. product as superior.

For three of the six factors that firms rated as the most important (price, product consistency, and quality meets industry standards) (table II-7), a majority of responding

purchasers reported that domestic PET FSS and PET FSS from India and Taiwan were comparable and for the remaining three most important factors (availability, delivery time, and reliability of supply), a majority of responding purchasers reported that U.S. product was superior to PET FSS from India and Taiwan.

**Table II-9**
**PET FSS: Purchasers' comparisons between U.S.-produced and imported product**

| Factor | U.S. vs. India | | | U.S. vs. Taiwan | | | U.S. vs. nonsubject | | |
|---|---|---|---|---|---|---|---|---|---|
| | S | C | I | S | C | I | S | C | I |
| Availability | 5 | 4 | --- | 3 | 3 | --- | 4 | 10 | 1 |
| Delivery terms | 3 | 5 | --- | 2 | 3 | --- | 5 | 10 | --- |
| Delivery time | 7 | --- | --- | 4 | 1 | --- | 14 | 1 | --- |
| Discounts offered | 2 | 3 | 3 | 1 | 4 | --- | 4 | 10 | 1 |
| Minimum quantity requirements | 3 | 4 | 1 | 2 | 3 | --- | 3 | 11 | 1 |
| Packaging | 2 | 5 | 1 | 1 | 4 | --- | 1 | 12 | 2 |
| Payment terms | 2 | 5 | 1 | 2 | 3 | --- | 3 | 11 | 1 |
| Price | --- | 6 | 2 | --- | 5 | --- | 2 | 8 | 5 |
| Product consistency | 3 | 5 | --- | --- | 5 | --- | 1 | 13 | 1 |
| Product range | 3 | 3 | 2 | 1 | 4 | --- | 2 | 12 | 1 |
| Quality meets industry standards | 2 | 6 | --- | 1 | 4 | --- | 1 | 14 | --- |
| Quality exceeds industry standards | 4 | 4 | --- | 1 | 4 | --- | 1 | 12 | 1 |
| Reliability of supply | 5 | 3 | --- | 3 | 2 | --- | 6 | 8 | 1 |
| Technical support/service | 4 | 3 | 1 | --- | 4 | 1 | 7 | 5 | 3 |
| U.S. transportation costs | 4 | 4 | --- | 3 | 2 | --- | 6 | 8 | --- |

Note: A rating of superior means that price/U.S. transportation costs is generally lower. For example, if a firm reported "U.S. superior," it meant that the U.S. product was generally priced lower than the imported product.

Note: S=first listed country's product is superior; C=both countries' products are comparable; I=first list country's product is inferior.

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

## Comparison of U.S.-produced and imported PET FSS

In order to determine whether U.S.-produced PET FSS can generally be used in the same applications as imports from India and Taiwan, U.S. producers, importers, and purchasers were asked whether the products can always, frequently, sometimes, or never be used interchangeably. As shown in table II-10, all responding U.S. producers and the majority of responding importers reported that the U.S. product was always or frequently interchangeable with imports from India and Taiwan. Purchasers' answers regarding interchangeability between U.S. and Indian product were split between frequently and sometimes interchangeable. Most responding purchasers reported that the domestic product was frequently interchangeable with imported product from Taiwan and other countries.

**Table II-10**
**PET FSS: Interchangeability between PET FSS produced in the United States and in other countries, by country pair**

| Country pair | U.S. producers | | | | U.S. importers | | | | U.S. purchasers | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | F | S | N | A | F | S | N | A | F | S | N |
| United States vs. India | 5 | 3 | --- | --- | 5 | 6 | 1 | 1 | --- | 4 | 4 | --- |
| United States vs. Taiwan | 5 | 3 | --- | --- | 4 | 5 | 2 | 1 | --- | 6 | 1 | --- |
| India vs. Taiwan | 5 | 3 | --- | --- | 4 | 3 | 1 | 1 | 1 | 3 | 1 | --- |
| United States vs. Other | 5 | 2 | 1 | --- | 4 | 7 | 2 | 2 | --- | 11 | 4 | --- |
| India vs. Other | 5 | 1 | 1 | --- | 4 | 5 | --- | 1 | 1 | 3 | 4 | --- |
| Taiwan vs. Other | 5 | 2 | --- | --- | 4 | 4 | 1 | 1 | 1 | 3 | 1 | --- |

Note: A=Always, F=Frequently, S=Sometimes, N=Never.

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

Factors that reportedly limit interchangeability between sources include lead times and lack of interchangeability between specialty PET FSS produced in different countries. Purchaser *** reported that product from India was sometimes interchangeable since it has not successfully qualified an Indian PET FSS manufacturer for all products. *** reported that product from India was sometimes interchangeable with other countries because of the limited supply of higher-gauge films and quality requirements. *** reported that for its very specific end use (***), it uses imported PET FSS from *** because of ***. *** stated that PET FSS from Taiwan was never interchangeable with PET FSS producers in the United States and India because the Taiwan producer Nan Ya develops PET FSS to meet each U.S. customers' requirements and unique specifications. *** stated that U.S. label producers are hesitant to change sources since they are used to using domestic film and that it can take months or years to qualify film from Taiwan with existing users of domestic film.

Several firms commented on the interchangeability of PET FSS from nonsubject countries. *** reported that nonsubject imports from *** have similar capabilities to *** current supplier but would need to be tested further. *** stated that only PET FSS from *** is certified for its production of ***. *** reported that PET FSS produced by Flex in Mexico has had some quality issues, although the price is usually lower. *** stated that suppliers of PET FSS from *** do not have the same variety or technical capabilities as India.

As can be seen from table II-11, most responding purchasers reported that domestically produced product, and imported product from India, Taiwan and other countries always or usually met minimum quality specifications.

**Table II-11**
**PET FSS: Ability to meet minimum quality specifications, by source**

| Factor | Always | Usually | Sometimes | Rarely or never |
|---|---|---|---|---|
| United States | 4 | 14 | --- | --- |
| India | 3 | 3 | 1 | --- |
| Taiwan | 1 | 5 | 1 | --- |
| Other | 3 | 11 | 1 | --- |

Note: Purchasers were asked how often domestically produced or imported PET FSS meets minimum quality specifications for their own or their customers' uses.

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

In addition, U.S. producers, importers, and purchasers were asked to assess how often differences other than price were significant in sales of PET FSS from the United States, subject, or nonsubject countries. As seen in table II-12, most U.S. producers and importers reported that differences other than price between U.S., Indian, and Taiwan PET FSS were sometimes or never significant in their sales of PET FSS. Most purchasers reported that differences other than price were always significant in purchase decisions between U.S. product and imports from India and Taiwan and were divided between always and sometimes with respect to such differences between U.S. product and PET FSS from nonsubject countries.

**Table II-12**
**PET FSS: Significance of differences other than price between PET FSS produced in the United States and in other countries, by country pair**

| Country pair | U.S. producers | | | | U.S. importers | | | | U.S. purchasers | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | F | S | N | A | F | S | N | A | F | S | N |
| United States vs. India | 1 | 1 | 2 | 4 | 2 | 1 | 5 | 5 | 6 | 1 | 1 | 1 |
| United States vs. Taiwan | 1 | 1 | 2 | 4 | --- | --- | 8 | 4 | 5 | 2 | --- | 2 |
| India vs. Taiwan | 1 | --- | 2 | 4 | --- | 1 | 4 | 3 | 3 | 1 | 1 | 1 |
| United States vs. Other | 1 | 1 | 3 | 4 | 3 | --- | 6 | 6 | 6 | 1 | 6 | 2 |
| India vs. Other | 1 | --- | 2 | 4 | 1 | 1 | 3 | 4 | 3 | 1 | 2 | 1 |
| Taiwan vs. Other | 1 | --- | 2 | 4 | 1 | --- | 4 | 4 | 3 | 1 | 1 | 1 |

Note: A = Always, F = Frequently, S = Sometimes, N = Never.

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

In describing differences in non-price factors, firms generally cited quality, availability, lead time, and technical support as important factors. *** stated that U.S. producers had advantages in technical support, faster service, and an established transportation network. Importer *** stated that it is sometimes able to win business because U.S. producers have long lead times and lack responsiveness when dealing with smaller users. *** stated that PET FSS from India and Taiwan is not available. *** stated that domestic producers offer greater flexibility and shorter lead times compared to nonsubject country Korea.

*** reported differences in transportation networks, product range and quality, and availability. It stated that compared to India, other PET FSS supplier sources such as East Asia (including Taiwan), Canada, Mexico and Europe have much shorter lead times, and that the U.S. industry has a delivery advantage within the country. It stated the end use of the PET FSS produced in most countries is generally same, although it stated that there are certain products which are produced in India but are not produced in the United States, Taiwan or other countries. It added that quality can differ based on manufacturing technology, production standards, and the quality of the raw material used. It stated that availability of PET FSS from India depends on demand in India and in other countries and that demand in India is high and is likely to increase in the near future. It added that demand in certain other PET FSS producing countries like Taiwan and the European countries is relatively small and these countries export their surplus production. Lastly, it stated that the U.S. producers are unable to supply the entire U.S. market and that imports are needed to fill the gap.

## Elasticity estimates

This section discusses elasticity estimates. No parties provided comments on these estimates in their prehearing or posthearing briefs.

### U.S. supply elasticity

The domestic supply elasticity for PET FSS measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price of PET FSS. The elasticity of domestic supply depends on several factors including the level of excess capacity, the ease with which producers can alter capacity, producers' ability to shift to production of other products, the existence of inventories, and the availability of alternate markets for U.S.-produced PET FSS. Analysis of these factors above indicates that the U.S. industry is likely to have a moderately high ability to increase or decrease shipments to the U.S. market; an estimate in the range of 4 to 8 is suggested.

### U.S. demand elasticity

The U.S. demand elasticity for PET FSS measures the sensitivity of the overall quantity demanded to a change in the U.S. market price of PET FSS. This estimate depends on factors discussed above such as the existence, availability, and commercial viability of substitute products, as well as the component share of the PET FSS in the production of any downstream products. Based on the available information, the aggregate demand for PET FSS is likely to be moderately inelastic; a range of -0.5 to -1.0 is suggested.

### Substitution elasticity

The elasticity of substitution depends upon the extent of product differentiation between the domestic and imported products.[18] Product differentiation, in turn, depends upon such factors as quality (e.g., chemistry, appearance, etc.) and conditions of sale (e.g., availability, sales terms/ discounts/ promotions, etc.). Based on available information, the elasticity of substitution between U.S.-produced PET FSS and imported PET FSS is likely to be in the range of 3 to 5.

[18] The substitution elasticity measures the responsiveness of the relative U.S. consumption levels of the subject imports and the domestic like products to changes in their relative prices. This reflects how easily purchasers switch from the U.S. product to the subject products (or vice versa) when prices change.

# Part III: Condition of the U.S. industry

## Overview

The information in this section of the report was compiled from responses to the Commission's questionnaires. Ten firms, which accounted for 100 percent of U.S. production of PET FSS during 2019, supplied information on their operations in these reviews.[1]

### Changes experienced by the industry

Domestic producers were asked to indicate whether their firm had experienced any plant openings, relocations, expansions, acquisitions, consolidations, closures, or prolonged shutdowns because of strikes or equipment failure; curtailment of production because of shortages of materials or other reasons, including revision of labor agreements; or any other change in the character of their operations or organization relating to the production of PET FSS since January 1, 2014. Of the ten domestic producers which provided responses in these reviews, eight reported prolonged shutdowns or curtailments, one reported plant closings, one reported a relocation, one reported expansions, and one reported major investments. U.S. producers' reported changes in operations responses are presented in table III-1.

[1] ***.

**Table III-1**
**PET FSS: U.S. producers' reported changes in operations**

| Item / Firm | Reported changed in operations |
|---|---|
| **Plant closings:** | |
| *** | *** |
| **Relocations:** | |
| *** | *** |
| **Expansions:** | |
| *** | *** |
| **Prolonged shutdowns or curtailments:** | |
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |
| **Other:** | |
| *** | *** |

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

## U.S. capacity, production, and capacity utilization

Table III-2 and figure III-1 present U.S. producers' capacity, production, and capacity utilization. Total capacity increased slightly (1.1 percent) from 2017 to 2019 (slight increases were reported by ***), while total production declined 6.4 percent over the same period. *** reported a decline in production over the period. *** reported the largest percentage declines in their production between 2017 and 2019, *** percent, respectively. *** reported the largest production decline (***) over this period. As a result, overall production capacity utilization decreased by 6.1

percentage points between 2017 and 2019. *** had the largest capacity utilization declines (by *** percentage points, respectively). *** to report increases in both production and capacity utilization over the period. ***.[2]

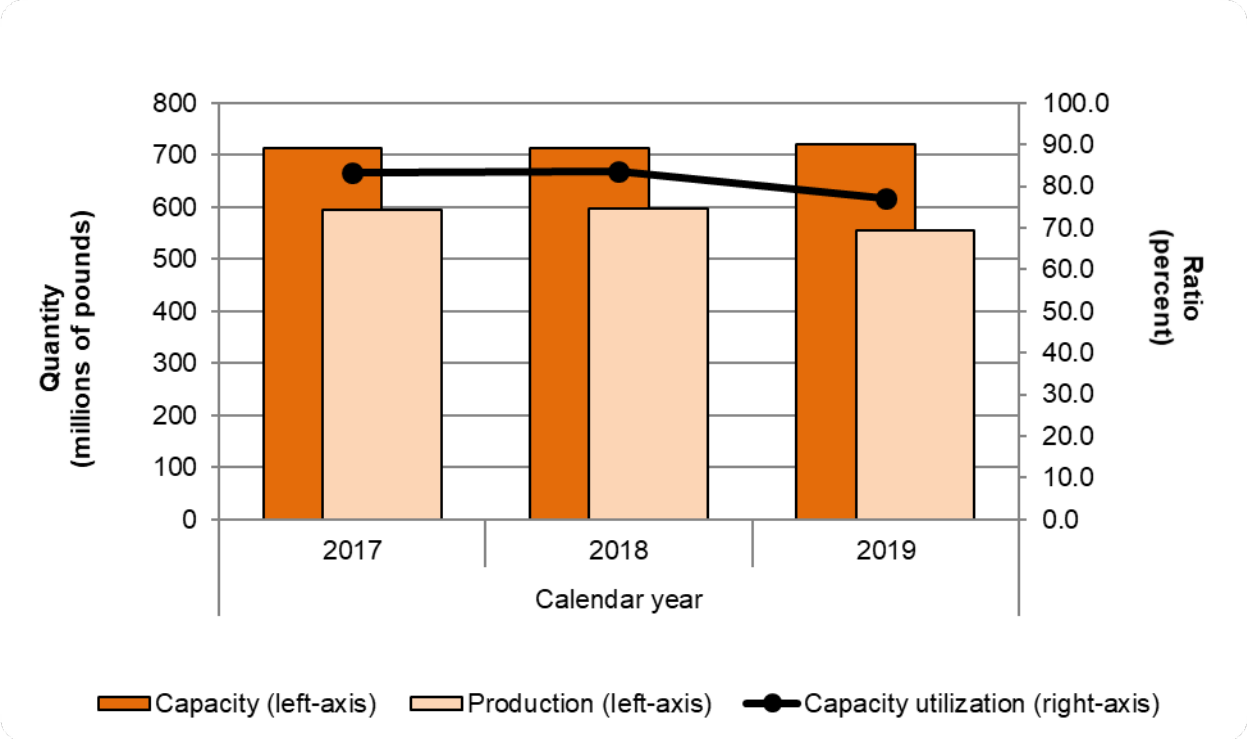
[2] Email from ***, June 15, 2020.

**Table III-2**
**PET FSS: U.S. producers' capacity, production, and capacity utilization, 2017-19**

| Item | Calendar year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Capacity (1,000 pounds) | | |
| 3M | *** | *** | *** |
| Carestream | *** | *** | *** |
| DuPont Teijin | *** | *** | *** |
| Eastman Kodak | *** | *** | *** |
| Flex Films | *** | *** | *** |
| Mitsubishi | *** | *** | *** |
| Polyplex USA | *** | *** | *** |
| SKC | *** | *** | *** |
| Terphane | *** | *** | *** |
| Toray | *** | *** | *** |
| All firms | 713,967 | 712,986 | 721,476 |
| | Production (1,000 pounds) | | |
| 3M | *** | *** | *** |
| Carestream | *** | *** | *** |
| DuPont Teijin | *** | *** | *** |
| Eastman Kodak | *** | *** | *** |
| Flex Films | *** | *** | *** |
| Mitsubishi | *** | *** | *** |
| Polyplex USA | *** | *** | *** |
| SKC | *** | *** | *** |
| Terphane | *** | *** | *** |
| Toray | *** | *** | *** |
| All firms | 593,985 | 596,352 | 556,197 |
| | Capacity utilization (percent) | | |
| 3M | *** | *** | *** |
| Carestream | *** | *** | *** |
| DuPont Teijin | *** | *** | *** |
| Eastman Kodak | *** | *** | *** |
| Flex Films | *** | *** | *** |
| Mitsubishi | *** | *** | *** |
| Polyplex USA | *** | *** | *** |
| SKC | *** | *** | *** |
| Terphane | *** | *** | *** |
| Toray | *** | *** | *** |
| All firms | 83.2 | 83.6 | 77.1 |

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

**Figure III-1**
**PET FSS: U.S. producers' capacity, production, and capacity utilization, 2017-19**




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

The Commission asked U.S. producers whether they had produced any other products using the same equipment, machinery, or employees as used to produce PET FSS between 2017 and 2019. ***. Table III-3 presents U.S. producers' overall capacity and production of products on the same machinery as PET FSS. Other products made up *** of total reported production between 2017 and 2019.

**Table III-3**
**PET FSS: U.S. producers' overall capacity and production of products on the same machinery as PET FSS, 2017-19**

| Item | Calendar year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Quantity (1,000 pounds) | | |
| Overall capacity | *** | *** | *** |
| Production: PET FSS | *** | *** | *** |
| Production: Out-of-scope-merchandise | *** | *** | *** |
| Production: Total same machinery | *** | *** | *** |
| | Ratios and shares (percent) | | |
| Capacity utilization | *** | *** | *** |
| Production: PET FSS | *** | *** | *** |
| Production: Out-of-scope-merchandise | *** | *** | *** |
| Production: Total same machinery | 100.0 | 100.0 | 100.0 |

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

## Constraints on capacity

All ten responding U.S. producers reported constraints in the manufacturing process for PET FSS (table III-4). Some of the cited constraints included extrusion system capacity, downtime for repairs and maintenance, product mix changes, customer demand, and raw materials availability.

**Table III-4**
**PET FSS: U.S. producers' manufacturing constraints**

| | |
|---|---|
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |

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

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

Table III-5 presents U.S. producers' U.S. shipments, export shipments, and total shipments as well as internal consumption and transfers to related firms between 2017 and 2019. *** of the ten responding producers reported U.S. commercial shipments of PET FSS during the period.[3] Of the ten responding firms, *** reported export shipments, *** reported internal consumption, and *** reported transfers to related firms during the period. U.S. commercial shipments, export shipments, and total shipments all decreased by quantity between 2017 and 2019, by ***, ***, and *** percent, respectively. Export markets reported for U.S.-produced PET FSS were ***

[3] ***.

***. The average unit values for both U.S. and export shipments rose from 2017 to 2019, by *** and *** percent, respectively.

**Table III-5**
**PET FSS: U.S. producers' U.S. shipments, export shipments, and total shipments, 2017-19**

| Item | Calendar year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Quantity (1,000 pounds) | | |
| Commercial U.S. shipments | *** | *** | *** |
| Internal consumption | *** | *** | *** |
| Transfers to related firms | *** | *** | *** |
| U.S. shipments | 563,091 | 557,242 | 539,200 |
| Export shipments | *** | *** | *** |
| Total shipments | *** | *** | *** |
| | Value (1,000 dollars) | | |
| Commercial U.S. shipments | *** | *** | *** |
| Internal consumption | *** | *** | *** |
| Transfers to related firms | *** | *** | *** |
| U.S. shipments | 901,214 | 939,277 | 883,845 |
| Export shipments | *** | *** | *** |
| Total shipments | *** | *** | *** |
| | Unit value (dollars per pound) | | |
| Commercial U.S. shipments | *** | *** | *** |
| Internal consumption | *** | *** | *** |
| Transfers to related firms | *** | *** | *** |
| U.S. shipments | 1.60 | 1.69 | 1.64 |
| Export shipments | *** | *** | *** |
| Total shipments | *** | *** | *** |
| | Share of quantity (percent) | | |
| Commercial U.S. shipments | *** | *** | *** |
| Internal consumption | *** | *** | *** |
| Transfers to related firms | *** | *** | *** |
| U.S. shipments | *** | *** | *** |
| Export shipments | *** | *** | *** |
| Total shipments | 100.0 | 100.0 | 100.0 |
| | Share of value (percent) | | |
| Commercial U.S. shipments | *** | *** | *** |
| Internal consumption | *** | *** | *** |
| Transfers to related firms | *** | *** | *** |
| U.S. shipments | *** | *** | *** |
| Export shipments | *** | *** | *** |
| Total shipments | 100.0 | 100.0 | 100.0 |

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

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

## U.S. producers' inventories

Table III-6 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 increased 3.3 percent between 2017 and 2018 and then decreased 4.8 percent between 2018 and 2019 for a total decrease of 1.7 percent over the period. U.S. producers' ratio of inventories to U.S. production and ratio of inventories to U.S. shipments both rose during 2017 to 2019, by 1.5 and 0.8 percentage points, respectively.

**Table III-6**
**PET FSS: U.S. producers' inventories, 2017-19**

| Item | Calendar year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Quantity (1,000 pounds) | | |
| U.S. producers' end-of-period inventories | 177,319 | 183,102 | 174,271 |
| | Ratio (percent) | | |
| Ratio of inventories to.-- | | | |
| U.S. production | 29.9 | 30.7 | 31.3 |
| U.S. shipments | 31.5 | 32.9 | 32.3 |
| Total shipments | *** | *** | *** |

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

## U.S. producers' imports and purchases

Table III-7 presents data on individual U.S. producers' U.S. production and U.S imports of PET FSS from all sources. During 2017-19, *** U.S. producer (***) imported PET FSS from India, and *** U.S. producers (***) imported PET FSS from nonsubject sources. The highest ratio of imports to U.S. production for each company was *** percent for ***, *** percent for ***, *** percent for ***(***), and *** percent for ***.

**Table III-7**
**PET FSS: U.S. producers' U.S. imports, 2017-19**

| Item | Calendar year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Quantity (1,000 pounds) | | |
| *** U.S. production | *** | *** | *** |
| *** U.S. imports from nonsubject sources (***) | *** | *** | *** |
| | Ratio (percent) | | |
| *** ratio of imports from nonsubject sources to U.S. production | *** | *** | *** |
| | Narrative | | |
| *** reason for importing | *** | | |
| | Quantity (1,000 pounds) | | |
| *** U.S. production | *** | *** | *** |
| *** U.S. imports from Nonsubject sources (***) | *** | *** | *** |
| | Ratio (percent) | | |
| *** ratio of imports from nonsubject sources to U.S. production | *** | *** | *** |
| | Narrative | | |
| *** reason for importing | *** | | |

Table continued

**Table III-7--Continued**
**PET FSS: U.S. producers' U.S. imports, 2017-19**

| Item | Calendar year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | **Quantity (1,000 pounds)** | | |
| *** U.S. production | *** | *** | *** |
| *** U.S. imports from India | *** | *** | *** |
| *** U.S. imports from nonsubject sources (***) | *** | *** | *** |
| | **Ratio (percent)** | | |
| *** ratio of imports from India to U.S. production | *** | *** | *** |
| *** ratio of imports from nonsubject sources to U.S. production | *** | *** | *** |
| | **Narrative** | | |
| *** reason for importing | *** | | |
| | **Quantity (1,000 pounds)** | | |
| *** U.S. production | *** | *** | *** |
| *** U.S. imports from nonsubject sources | *** | *** | *** |
| | **Ratio (percent)** | | |
| *** ratio of imports from nonsubject sources (***) to U.S. production | *** | *** | *** |
| | **Narrative** | | |
| *** reason for importing | *** | | |

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

Table III-8 presents data on individual U.S. producers' reported purchases of PET FSS imported from subject sources as well as the ratio of such purchases to U.S. production.

**Table III-8**
**PET FSS: U.S. producers' purchases, 2017-19**

| Item | Calendar year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Quantity (1,000 pounds) | | |
| *** -- U.S. production | *** | *** | *** |
| Purchases from domestic producers | *** | *** | *** |
| Purchases from nonsubject countries | *** | *** | *** |
| | Narrative | | |
| Purchased from producers/distributors | *** | | |
| | Quantity (1,000 pounds) | | |
| *** -- U.S. production | *** | *** | *** |
| Purchases from domestic producers | *** | *** | *** |
| | Narrative | | |
| Purchased from producers/distributors | *** | | |
| | Quantity (1,000 pounds) | | |
| *** -- U.S. production | *** | *** | *** |
| Purchases from domestic producers | *** | *** | *** |
| Purchases from nonsubject countries | *** | *** | *** |
| | Narrative | | |
| Purchased from producers/distributors | *** | | |
| | Quantity (1,000 pounds) | | |
| *** -- U.S. production | *** | *** | *** |
| Purchases from nonsubject countries | *** | *** | *** |

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

## U.S. employment, wages, and productivity

Table III-9 shows U.S. producers' employment-related data during 2017 to 2019. Each of the employment indicators declined between 2017 and 2019 except unit labor costs and hours worked per production related worker. The aggregate number of production and related workers fell by 4.6 percent, total hours worked declined by 1.6 percent, wages paid declined by 4.4 percent, hourly wages fell by 2.9 percent, and productivity fell by 4.9 percent. Hours worked per production related worker rose 3.2 percent during the period.

**Table III-9**
**PET FSS: U.S. producers' employment related data, 2017-19**

| Item | Calendar year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| Production and related workers (PRWs) (number) | 1,698 | 1,681 | 1,620 |
| Total hours worked (1,000 hours) | 3,997 | 4,064 | 3,935 |
| Hours worked per PRW (hours) | 2,354 | 2,418 | 2,429 |
| Wages paid ($1,000) | 129,420 | 128,717 | 123,711 |
| Hourly wages (dollars per hour) | $32.38 | $31.67 | $31.44 |
| Productivity (pounds per hour) | 148.6 | 146.7 | 141.3 |
| Unit labor costs (dollars per pound) | $0.22 | $0.22 | $0.22 |

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

# Financial experience of U.S. producers

## Background

Nine U.S. producers provided usable financial data.[4] All of the reporting producers except *** firms have a fiscal year that ends on December 31 and reported on the basis of generally accepted accounting principles.[5] Net sales consisted of commercial sales, internal consumption, and transfers to related firms which accounted for 81.4 percent, *** percent, and *** percent of total net sales quantity in 2019, respectively.[6] In 2019, *** accounted for *** percent of the U.S. producers' net sales by quantity, *** accounted for *** percent, *** accounted for *** percent, *** accounted for *** percent, *** accounted for *** percent, *** accounted for *** percent, and all other firms accounted for *** percent.

## Operations on PET FSS

Table III-10 presents aggregated data on U.S. producers' operations in relation to PET FSS. Table III-11 shows the changes in average unit values of sales and costs. Table III-12 presents selected company-specific financial data.

[4] ***. U.S. producers' questionnaire responses of ***, question II-7.

[5] *** used International Financial Reporting Standards as their accounting basis. The fiscal year for *** ends ***.

[6] *** is the only firm which did not report internal consumption and *** reported transfers to related firms during the reporting period.

**Table III-10**
**PET FSS: Results of operations of U.S. producers, 2017-19**

| Item | Fiscal year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Quantity (1,000 pounds) | | |
| Commercial shipments | *** | *** | *** |
| Internal consumption | *** | *** | *** |
| Transfers to related firms | *** | *** | *** |
| Total net sales | 562,009 | 560,773 | 561,104 |
| | Value (1,000 dollars) | | |
| Commercial shipments | *** | *** | *** |
| Internal consumption | *** | *** | *** |
| Transfers to related firms | *** | *** | *** |
| Total net sales | 956,742 | 998,348 | 947,916 |
| Cost of goods sold.-- | | | |
| Raw materials | 386,410 | 441,036 | 400,058 |
| Direct labor | 165,374 | 171,519 | 165,069 |
| Other factory costs | 256,796 | 249,285 | 273,600 |
| Total COGS | 808,580 | 861,840 | 838,727 |
| Gross profit | 148,162 | 136,508 | 109,189 |
| SG&A expense | 86,660 | 89,665 | 87,484 |
| Operating income or (loss) | 61,502 | 46,843 | 21,705 |
| Other expenses/(income), net | 19,584 | 24,617 | 18,377 |
| Net income or (loss) | 41,918 | 22,226 | 3,328 |
| Depreciation/amortization | 46,068 | 48,701 | 61,527 |
| Cash flow | 87,986 | 70,927 | 64,855 |
| | Unit value (dollars per pound) | | |
| Commercial shipments | *** | *** | *** |
| Internal consumption | *** | *** | *** |
| Transfers to related firms | *** | *** | *** |
| Total net sales | 1.70 | 1.78 | 1.69 |
| Cost of goods sold.-- | | | |
| Raw materials | 0.69 | 0.79 | 0.71 |
| Direct labor | 0.29 | 0.31 | 0.29 |
| Other factory costs | 0.46 | 0.44 | 0.49 |
| Average COGS | 1.44 | 1.54 | 1.49 |
| Gross profit | 0.26 | 0.24 | 0.19 |
| SG&A expense | 0.15 | 0.16 | 0.16 |
| Operating income or (loss) | 0.11 | 0.08 | 0.04 |
| Net income or (loss) | 0.07 | 0.04 | 0.01 |

Table continued on next page.

**Table III-10—Continued**
**PET FSS: Results of operations of U.S. producers, 2017-19**

| Item | Fiscal year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Ratio to COGS (percent) | | |
| Cost of goods sold.-- | | | |
| Raw materials | 47.8 | 51.2 | 47.7 |
| Direct labor | 20.5 | 19.9 | 19.7 |
| Other factory costs | 31.8 | 28.9 | 32.6 |
| Total COGS | 100.0 | 100.0 | 100.0 |
| | Ratio to net sales (percent) | | |
| Cost of goods sold.-- | | | |
| Raw materials | 40.4 | 44.2 | 42.2 |
| Direct labor | 17.3 | 17.2 | 17.4 |
| Other factory costs | 26.8 | 25.0 | 28.9 |
| Total COGS | 84.5 | 86.3 | 88.5 |
| Gross profit | 15.5 | 13.7 | 11.5 |
| SG&A expense | 9.1 | 9.0 | 9.2 |
| Operating income or (loss) | 6.4 | 4.7 | 2.3 |
| Net income or (loss) | 4.4 | 2.2 | 0.4 |
| | Number of firms reporting | | |
| Operating losses | 3 | 3 | 4 |
| Net losses | 4 | 3 | 4 |
| Data | 9 | 9 | 9 |

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

**Table III-11**
**PET FSS: Changes in average unit values between fiscal years**

| Item | Between fiscal years | | |
|---|---|---|---|
| | 2017-19 | 2017-18 | 2018-19 |
| | Change in AUVs (percent) | | |
| Commercial shipments | *** | *** | *** |
| Internal consumption | *** | *** | *** |
| Transfers to related firms | *** | *** | *** |
| Total net sales | ▼(0.8) | ▲4.6 | ▼(5.1) |
| Cost of goods sold.-- Raw materials | ▲3.7 | ▲14.4 | ▼(9.3) |
| Direct labor | ▼(0.0) | ▲3.9 | ▼(3.8) |
| Other factory costs | ▲6.7 | ▼(2.7) | ▲9.7 |
| Average COGS | ▲3.9 | ▲6.8 | ▼(2.7) |
| Gross profit | ▼(26.2) | ▼(7.7) | ▼(20.1) |
| SG&A expense | ▲1.1 | ▲3.7 | ▼(2.5) |
| Operating income or (loss) | ▼(64.7) | ▼(23.7) | ▼(53.7) |
| Net income or (loss) | ▼(92.0) | ▼(46.9) | ▼(85.0) |
| | Change in AUVs (dollars per pound) | | |
| Commercial shipments | *** | *** | *** |
| Internal consumption | *** | *** | *** |
| Transfers to related firms | *** | *** | *** |
| Total net sales | ▼(0.01) | ▲0.08 | ▼(0.09) |
| Cost of goods sold.-- Raw materials | ▲0.03 | ▲0.10 | ▼(0.07) |
| Direct labor | ▼(0.0001) | ▲0.01 | ▼(0.01) |
| Other factory costs | ▲0.03 | ▼(0.01) | ▲0.04 |
| Average COGS | ▲0.06 | ▲0.10 | ▼(0.04) |
| Gross profit | ▼(0.07) | ▼(0.02) | ▼(0.05) |
| SG&A expense | ▲0.002 | ▲0.01 | ▼(0.004) |
| Operating income or (loss) | ▼(0.07) | ▼(0.03) | ▼(0.04) |
| Net income or (loss) | ▼(0.07) | ▼(0.03) | ▼(0.03) |

Note.--AUV changes preceded by a "▲" represent an increase, while period changes preceded by a "▼" represent a decrease.

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

**Table III-12**
**PET FSS: Select results of operations of U.S. producers, by company, 2017-19**

| Item | Fiscal year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Net sales quantity (1,000 pounds) | | |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| All firms | 562,009 | 560,773 | 561,104 |
| | Net sales value (1,000 dollars) | | |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| All firms | 956,742 | 998,348 | 947,916 |
| | COGS (1,000 dollars) | | |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| All firms | 808,580 | 861,840 | 838,727 |

Table continued on next page.

**Table III-12—Continued**
**PET FSS: Select results of operations of U.S. producers, by company, 2017-19**

| Item | Fiscal year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Gross profit or (loss) (1,000 dollars) | | |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| All firms | 148,162 | 136,508 | 109,189 |
| | SG&A expenses (1,000 dollars) | | |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| All firms | 86,660 | 89,665 | 87,484 |
| | Operating income or (loss) (1,000 dollars) | | |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| All firms | 61,502 | 46,843 | 21,705 |

Table continued on next page.

**Table III-12—Continued**
**PET FSS: Select results of operations of U.S. producers, by company, 2017-19**

| Item | Fiscal year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Net income or (loss) (1,000 dollars) | | |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| All firms | 41,918 | 22,226 | 3,328 |
| | COGS to net sales value (percent) | | |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| All firms | 84.5 | 86.3 | 88.5 |
| | Gross profit or (loss) to net sales value (percent) | | |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| All firms | 15.5 | 13.7 | 11.5 |

Table continued on next page.

**Table III-12—Continued**
**PET FSS: Select results of operations of U.S. producers, by company, 2017-19**

| Item | Fiscal year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | **SG&A expenses to net sales value (percent)** | | |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| All firms | 9.1 | 9.0 | 9.2 |
| | **Operating income or (loss) to net sales value (percent)** | | |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| All firms | 6.4 | 4.7 | 2.3 |
| | **Net income or (loss) to net sales value (percent)** | | |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| All firms | 4.4 | 2.2 | 0.4 |

Table continued on next page.

**Table III-12—Continued**
**PET FSS: Select results of operations of U.S. producers, by company, 2017-19**

| Item | Fiscal year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Unit net sales value (dollars per pound) | | |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| All firms | 1.70 | 1.78 | 1.69 |
| | Unit raw materials (dollars per pound) | | |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| All firms | 0.69 | 0.79 | 0.71 |
| | Unit direct labor (dollars per pound) | | |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| All firms | 0.29 | 0.31 | 0.29 |

Table continued on next page.

**Table III-12—Continued**
**PET FSS: Select results of operations of U.S. producers, by company, 2017-19**

| Item | Fiscal year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Unit other factory costs (dollars per pound) | | |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| All firms | 0.46 | 0.44 | 0.49 |
| | Unit COGS (dollars per pound) | | |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| All firms | *** | *** | *** |
| | Unit gross profit or (loss) (dollars per pound) | | |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| All firms | 0.26 | 0.24 | 0.19 |

Table continued on next page.

**Table III-12—Continued**
**PET FSS: Select results of operations of U.S. producers, by company, 2017-19**

| Item | Fiscal year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Unit SG&A expense (dollars per pound) | | |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| All firms | 0.15 | 0.16 | 0.16 |
| | Unit operating income or (loss) (dollars per pound) | | |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| All firms | 0.11 | 0.08 | 0.04 |
| | Unit net income or (loss) (dollars per pound) | | |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| All firms | 0.07 | 0.04 | 0.01 |

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

## Net sales

Total net sales quantity and value irregularly declined by 0.2 percent and 0.9 percent from 2017 to 2019, respectively, driven by the declines in internal consumption. Whereas the quantity and value reported for commercial sales and transfers to related firms overall increased during the reporting period. As shown in table III-12, ***. As shown in table III-12, average unit sales values increased from $1.70 in 2017 to $1.78 in 2018 before declining to $1.69 in 2019. ***.[7]

## Cost of goods sold and gross profit or (loss)

Total COGS irregularly increased by 3.7 percent from 2017 to 2019. As shown in table III-12, *** reported overall increasing total COGS from 2017 to 2019, while *** reported overall declining total COGS during the same period. As a ratio to net sales, COGS increased from 84.5 percent in 2017 to 88.5 percent in 2019.

[7] Unit net sales values for internal consumption and transfers are higher than commercial sales because ***. Email from ***, June 4, 2020. ***. Emails from ***, June 4 and 9, 2020.

As shown in table III-10, raw materials represent the largest component of total COGS, and ranged from 47.7 percent in 2019 to 51.2 percent of total COGS in 2018. The U.S. industry's raw material costs irregularly increased from 2017 to 2019. Per-pound raw material costs increased from $0.69 in 2017 to $0.79 in 2018 before declining to $0.71 in 2019. Raw materials consist of purified terephthalic acid ("PTA"), mono ethylene glycol ("MEG"), and other material inputs such as ***.[8] Three U.S. producers reported purchasing inputs from related suppliers: ***.[9]

The second largest component of COGS is other factory costs, which accounted for between 28.9 percent (2018) and 32.6 percent (2019) of total COGS. Table III-10 shows that the U.S. industry's other factory costs irregularly increased from 2017 to 2019 while per-pound other factory costs also irregularly increased from $0.46 in 2017 to $0.44 in 2018 to $0.49 in 2019. ***.[10]

Lastly, direct labor is the smallest component of COGS, representing between 19.7 percent (2019) and 20.5 percent (2017) of total COGS. The industry's direct labor costs irregularly declined from 2017 to 2019. Per-pound direct labor costs moved within a relatively narrow range during the reporting period.

Table III-10 shows that U.S. producers' aggregate gross profits declined from 2017 to 2019 due to the combined effects of the decline in total net sales value and the increase in total COGS driven by increased raw material costs and other factory costs. Gross profit margin (gross profit as a ratio to net sales) declined from 15.5 percent in 2017 to 11.5 percent in 2019.

[8] U.S. producer's questionnaire responses, question III-9c.

[9] All three companies confirmed that these inputs were reported in a manner consistent with each firm's own accounting books and records. U.S. producers' questionnaire responses of ***, questions III-6, III-7, and III-8.

[10] ***. Email from ***, June 4, 2020.

## Selling, general, and administrative expenses and operating income or (loss)

As shown in table III-10, the U.S. industry's selling, general, and administrative ("SG&A") expense ratios (i.e., total SG&A expenses divided by net sales) moved within a narrow range of 9.0 percent in 2018 to 9.2 percent in 2019 during the reporting period. On a per-unit basis, SG&A expenses modestly increased from $0.15 in 2017 to $0.16 in 2018 and 2019.[11] ***.[12]

Operating income declined from $61.5 million in 2017 to $21.7 million in 2019. Aggregated for the industry, operating income margins (operating income as a share of net sales) also declined, from 6.4 percent in 2017 to 2.3 percent in 2019.

## Other expenses and net income or (loss)

Classified below the operating income level are interest expense, other expense, and other income. In table III-10, these items are aggregated and only the net amount is shown. The net "all other expenses" irregularly declined from 2017 to 2019. Interest expenses were the largest component of "all other expenses" for reporting firms.[13]

Similar to operating income, net income declined each year from $41.9 million 2017 to $3.3 million in 2019 and the net income margin (net income as a ratio to net sales) declined from 4.4 percent in 2017 to 0.4 percent in 2019.

[11] ***. U.S. producers' questionnaire response of ***, question III-10.
[12] ***. Email from ***, June 10, 2020.
[13] ***. U.S. producers' questionnaire responses of ***, questions III-10.

## Historical operations on PET FSS

Table III-13 presents historical data on U.S. producers' operations in relation to PET FSS from 2014 to 2016. Total net sales quantity increased from 2014 to 2015, but declined from 2015 to 2016, resulting in an increase of 4.7 percent by quantity from 2014 to 2016. Total net sales value declined by 12.7 percent from 2014 to 2016. Operating income and operating income margins declined by 47.3 percent and 3.8 percentage points from 2014 to 2016, respectively.

**Table III-13**
**PET FSS: Results of operations of U.S. producers, 2014-16**

| Item | Fiscal year | | |
|---|---|---|---|
| | 2014 | 2015 | 2016 |
| Net sales quantity | 519,699 | 551,905 | 544,041 |
| Net sales value | 1,072,221 | 1,040,050 | 935,605 |
| Operating income | 103,262 | 88,779 | 54,457 |
| Operating income to net sales value (percent) | 9.6 | 8.5 | 5.8 |

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

## Variance analysis

A variance analysis is most useful for products that do not have substantial changes in product mix over the reporting period and the methodology is most sensitive at the plant or firm level, rather than the aggregated industry level. Because of the wide variation in product mix and unit values between firms in this proceeding, a variance analysis is not presented.

## Capital expenditures and research and development expenses

Table III-14 presents capital expenditures and research and development ("R&D") expenses by firm. Aggregated capital expenditures declined from 2017 to 2019. ***.[14] R&D expenses were reported by four U.S. producers and moved within a relatively narrow range throughout the reporting period.

**Table III-14**
**PET FSS: Capital expenditures and research and development expenses for U.S. producers, by firm, 2017-19**

| Item | Fiscal year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Capital expenditures (1,000 dollars) | | |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| All firms | *** | *** | *** |
| | Research and development expenses (1,000 dollars) | | |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| All firms | 14,283 | 14,271 | 14,420 |

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

[14] Email from ***, June 5, 2020.

## Assets and return on assets

Table III-15 presents data on the U.S. producers' total assets and their operating return on assets ("ROA").[15] Total assets irregularly declined, and the operating ROA continually declined from 2017 to 2019. ***.[16]

**Table III-15**
**PET FSS: U.S. producers' total assets and return on assets, 2017-2019**

| Firm | Fiscal year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Total net assets (1,000 dollars) | | |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| All firms | 793,137 | 800,231 | 771,377 |
| | Operating return on assets (percent) | | |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| *** | *** | *** | *** |
| All firms | 7.8 | 5.9 | 2.8 |

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

[15] The return on assets is calculated as operating income divided by total assets. With respect to a firm's overall operations, the total asset value reflects an aggregation of a number of assets which are generally not product specific. Thus, high-level allocations are generally required in order to report a total asset value for the subject product.

[16] U.S. producers' questionnaire response of ***, question III-12.

# Part IV: U.S. imports and the foreign industries

## U.S. imports

### Overview

The Commission issued questionnaires to 28 potential importers of PET FSS between 2014 to 2019, as well as to the 11 firms that were believed to be U.S. producers of PET FSS. Usable questionnaire responses were received from 21 firms, while 11 firms indicated that they had not imported PET FSS during the period for which data were collected.[1] [2] Based on official Commerce statistics for statistical reporting number 3920.62.00.90, importers' questionnaire data accounted for 34.2 percent of total U.S. imports during 2018 and 59.2 percent of total subject imports during 2018. Firms responding to the Commission's questionnaire accounted for the following shares of individual subject country's subject imports (as a share of official import statistics, by quantity) during 2018.[3]

- 43.8 percent of the subject imports from India during 2018
- 74.8 percent of the subject imports from Taiwan during 2018

Official Commerce statistics for PET FSS imported under statistical reporting number 3920.62.00.90 may be overstated as they include out-of-scope products, e.g. "equivalent PET film," and possibly amorphous ("APET") and crystalline ("CPET") PET film. Further, there have been two scope reviews concerning PET FSS, one excluding tracing and drafting film from India; and the second excluding amorphous PET film that is not biaxially oriented from Taiwan.[4]

[1] The firms that certified that they had not imported subject merchandise during the review period were ***.

[2] *** certified that it had imported ***. In addition, ***'s questionnaire response was not included in the dataset as the company indicated ***.

[3] ***.

[4] See Scope Rulings section in Part I and 76 FR 31301, May 31, 2011; and 70 FR 24533, May 10, 2005.

Therefore, in light of the data coverage by the Commission's questionnaires, possible overstatement of Commerce statistics, and scope exclusions, the PET FSS import data in this report are based on questionnaire responses.

## Imports from subject and nonsubject countries

Table IV-1 and figure IV-1 present information on U.S. imports of PET FSS from India, Taiwan, and all other sources during 2017-19. Three U.S. importers accounted for an aggregate *** percent of the reported U.S. imports of PET FSS from India *** during 2017-19.[5] *** U.S. imports of PET FSS from Taiwan during 2017-19 (***).[6]

Reported imports from India declined 74.8 percent by quantity and 67.6 percent by value between 2017 and 2019, while imports from Taiwan increased 43.4 percent by quantity and 37.3 percent by value over this period. This resulted in a decline of 26.1 percent by quantity and 11.8 percent by value over the period for imports from subject sources. The decline in reported imports from India was mainly driven by reductions in imports by ***.[7] Comparatively, imports from nonsubject sources increased 18.1 percent by quantity and 22.7 percent by value over the period. Unit values of imports from India increased 29.0 percent over this period, while unit values from Taiwan declined by 4.0 percent during 2017-19. Unit values of imports from nonsubject sources increased 4.0 percent over this period.

[5] The importers named *** as the Indian producers.
[6] *** indicated that they import from Taiwanese foreign producer ***.
[7] ***.

**Table IV-1**
**PET FSS: U.S. imports, by source, 2017-19**

| Item | Calendar year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Quantity (1,000 pounds) | | |
| U.S. imports from.-- | | | |
| India | 9,656 | 4,146 | 2,437 |
| Taiwan | 6,766 | 10,660 | 9,705 |
| Subject sources | 16,422 | 14,806 | 12,142 |
| Nonsubject sources | 55,478 | 60,169 | 65,499 |
| All import sources | 71,900 | 74,975 | 77,641 |
| | Value (1,000 dollars) | | |
| U.S. imports from.-- | | | |
| India | 8,997 | 4,752 | 2,915 |
| Taiwan | 10,234 | 15,530 | 14,049 |
| Subject sources | 19,231 | 20,282 | 16,964 |
| Nonsubject sources | 71,836 | 78,818 | 88,162 |
| All import sources | 91,067 | 99,100 | 105,126 |
| | Unit value (dollars per pound) | | |
| U.S. imports from.-- | | | |
| India | 0.93 | 1.15 | 1.20 |
| Taiwan | 1.51 | 1.46 | 1.45 |
| Subject sources | 1.17 | 1.37 | 1.40 |
| Nonsubject sources | 1.29 | 1.31 | 1.35 |
| All import sources | 1.27 | 1.32 | .35 |

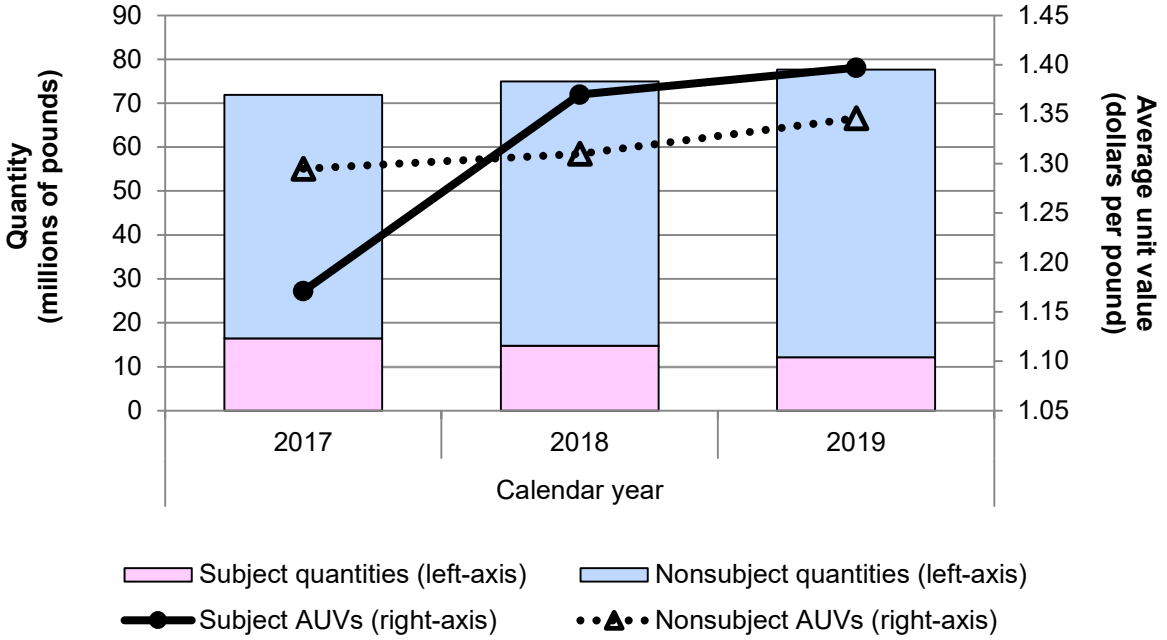
Table continued on next page.

**Table IV-1--Continued**
**PET FSS: U.S. imports, by source, 2017-19**

| Item | Calendar year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Share of quantity (percent) | | |
| U.S. imports from.-- | | | |
| India | 13.4 | 5.5 | 3.1 |
| Taiwan | 9.4 | 14.2 | 12.5 |
| Subject sources | 22.8 | 19.7 | 15.6 |
| Nonsubject sources | 77.2 | 80.3 | 84.4 |
| All import sources | 100.0 | 100.0 | 100.0 |
| | Share of value (percent) | | |
| U.S. imports from.-- | | | |
| India | 9.9 | 4.8 | 2.8 |
| Taiwan | 11.2 | 15.7 | 13.4 |
| Subject sources | 21.1 | 20.5 | 16.1 |
| Nonsubject sources | 78.9 | 79.5 | 83.9 |
| All import sources | 100.0 | 100.0 | 100.0 |
| | Ratio to U.S. production (percent) | | |
| U.S. imports from.-- | | | |
| India | 1.6 | 0.7 | 0.4 |
| Taiwan | 1.1 | 1.8 | 1.7 |
| Subject sources | 2.8 | 2.5 | 2.2 |
| Nonsubject sources | 9.3 | 10.1 | 11.8 |
| All import sources | 12.1 | 12.6 | 14.0 |

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

**Figure IV-1**
**PET FSS: U.S. import quantities and average unit values, 2017-19**




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

## Cumulation considerations

In assessing whether U.S. imports from the subject countries are likely to compete with each other and with the domestic like product, the Commission 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.

### Fungibility

Table IV-2 and figure IV-2 present U.S. importers' and U.S. producers' PET FSS U.S. shipments by product type; PET film (less than 48 gauge), thin PET sheet (48 gauge or greater but less than 200 gauge), and thick PET sheet (greater than 200 gauge). Appendix E also contains product fungibility tables by product type and width breakouts by source. The majority (*** percent) of U.S. producers U.S. shipments were of thin PET sheet in 2019. U.S. shipments of imports from India were evenly distributed between the three product types (***, ***, and *** percent, respectively), while the vast majority (*** percent) of U.S.

shipments of imports from Taiwan in 2019 were of thin PET sheet. The majority (*** percent and *** percent, respectively).

**Table IV-2**
**PET FSS: U.S. producers' and U.S. importers' U.S. shipments by product type, 2019**

| Source | U.S. shipments | | | |
|---|---|---|---|---|
| | PET film | Thin PET sheet | Thick PET sheet | All product types |
| | Quantity (1,000 pounds) | | | |
| U.S. producers | *** | *** | *** | 539,200 |
| U.S. shipments of imports from.--India | *** | *** | *** | 2,241 |
| Taiwan | *** | *** | *** | 9,584 |
| Subject sources | *** | *** | *** | 11,825 |
| Nonsubject sources | *** | *** | *** | 62,805 |
| All import sources | *** | *** | *** | 74,630 |
| U.S. producers and U.S. importers | *** | *** | *** | 613,830 |
| | Share across (percent) | | | |
| U.S. producers | *** | *** | *** | 100.0 |
| U.S. shipments of imports from.--India | *** | *** | *** | 100.0 |
| Taiwan | *** | *** | *** | 100.0 |
| Subject sources | *** | *** | *** | 100.0 |
| Nonsubject sources | *** | *** | *** | 100.0 |
| All import sources | *** | *** | *** | 100.0 |
| U.S. producers and U.S. importers | *** | *** | *** | 100.0 |
| | Share down (percent) | | | |
| U.S. producers | *** | *** | *** | 89.0 |
| U.S. shipments of imports from.--India | *** | *** | *** | 0.4 |
| Taiwan | *** | *** | *** | 1.6 |
| Subject sources | *** | *** | *** | 1.9 |
| Nonsubject sources | *** | *** | *** | 10.2 |
| All import sources | *** | *** | *** | 12.2 |
| U.S. producers and U.S. importers | 100.0 | 100.0 | 100.0 | 100.0 |

Note: The product types in the table are PET film (less than 48 gauge), thin PET sheet (48 gauge or greater but less than 200 gauge), and thick PET sheet (greater than 200 gauge).

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

**Figure IV-2**
**PET FSS: U.S. producers' and U.S. importers' U.S. shipments by product type, 2019**

* * * * * * *

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

Table IV-3 and figure IV-3 present U.S. shipments by width. In 2019, the vast majority (*** percent) of U.S. shipments from U.S. producers was PET FSS with widths greater than 3 inches. While U.S. producers and U.S. importers of PET FSS from nonsubject sources reported some U.S. shipments of PET FSS of 3 inches or less, none were reported for by importers from either subject source.

**Table IV-3**
**PET FSS: U.S. producers' and U.S. importers' U.S. shipments by product width, 2019**

| Source | U.S. shipments | | |
|---|---|---|---|
| | Widths of 3" or less | Widths greater than 3" | All widths |
| | Quantity (1,000 pounds) | | |
| U.S. producers | *** | *** | 539,200 |
| U.S. shipments of imports from.--India | *** | *** | 2,241 |
| Taiwan | *** | *** | 9,584 |
| Subject sources | *** | *** | *** |
| Nonsubject sources | *** | *** | 62,805 |
| All import sources | *** | *** | 74,630 |
| U.S. producers and U.S. importers | *** | *** | 613,830 |
| | Share across (percent) | | |
| U.S. producers | *** | *** | 100.0 |
| U.S. shipments of imports from.--India | *** | *** | 100.0 |
| Taiwan | *** | *** | 100.0 |
| Subject sources | *** | *** | 100.0 |
| Nonsubject sources | *** | *** | 100.0 |
| All import sources | *** | *** | 100.0 |
| U.S. producers and U.S. importers | *** | *** | 100.0 |
| | Share down (percent) | | |
| U.S. producers | *** | *** | 87.8 |
| U.S. shipments of imports from.--India | *** | *** | 0.4 |
| Taiwan | *** | *** | 1.6 |
| Subject sources | *** | *** | 1.9 |
| Nonsubject sources | *** | *** | 10.2 |
| All import sources | *** | *** | 12.2 |
| U.S. producers and U.S. importers | 100.0 | 100.0 | 100.0 |

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

**Figure IV-3**
**PET FSS: U.S. producers' and U.S. importers' U.S. shipments by product width, 2019**

* * * * * * *

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

## Geographical markets

Table IV-4 presents U.S. imports of PET plates, sheets, film, foil, and strip from India, Taiwan, and nonsubject sources by customs district of entry in 2019, as reported under HTS statistical reporting number 3920.62.0090 less Canada and Oman.[8] While U.S. imports from India, Taiwan, and nonsubject sources entered through each of the ports of entry, the "East" border of entry accounted for the plurality of imports of PET plates, sheets, film, foil, and strip for each of these sources in 2019.

[8] It is believed that there are no producers of biaxially oriented PET film in Canada or Oman. ***.

**Table IV-4**
**PET plates, sheets, film, foil, and strip: U.S. imports by border of entry, 2019**

| Item | Border of entry | | | | |
|---|---|---|---|---|---|
| | East | North | South | West | All borders |
| | Quantity (1,000 pounds) | | | | |
| Imports from.-- | | | | | |
| India | 5,545 | 2,549 | 2,497 | 1,146 | 11,739 |
| Taiwan | 10,742 | 544 | 1,135 | 5,793 | 18,214 |
| Subject sources | 16,288 | 3,093 | 3,632 | 6,939 | 29,953 |
| Nonsubject sources | 115,118 | 70,712 | 84,391 | 40,656 | 310,878 |
| All import sources | 131,406 | 73,805 | 88,024 | 47,596 | 340,830 |
| | Share across (percent) | | | | |
| Imports from.-- | | | | | |
| India | 47.2 | 21.7 | 21.3 | 9.8 | 100.0 |
| Taiwan | 59.0 | 3.0 | 6.2 | 31.8 | 100.0 |
| Subject sources | 54.4 | 10.3 | 12.1 | 23.2 | 100.0 |
| Nonsubject sources | 37.0 | 22.7 | 27.1 | 13.1 | 100.0 |
| All import sources | 38.6 | 21.7 | 25.8 | 14.0 | 100.0 |
| | Share down (percent) | | | | |
| Imports from.-- | | | | | |
| India | 4.2 | 3.5 | 2.8 | 2.4 | 3.4 |
| Taiwan | 8.2 | 0.7 | 1.3 | 12.2 | 5.3 |
| Subject sources | 12.4 | 4.2 | 4.1 | 14.6 | 8.8 |
| Nonsubject sources | 87.6 | 95.8 | 95.9 | 85.4 | 91.2 |
| All import sources | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Note: PET plates, sheets, film, foil, and strip includes in-scope PET FSS as well as out-of-scope products such as PET foil, equivalent PET film, or tracing and drafting film.

Note: The “East” border of entry includes the following Customs entry districts: Baltimore, MD; Boston, MA; Buffalo, NY; Charleston, SC; Charlotte, NC; New York, NY; Norfolk, VA; Ogdensburg, NY; Philadelphia, PA; Portland, ME; San Juan, PR; Savannah, GA; St. Albans, VT; and Washington, DC. The “North” border of entry includes the following Customs entry districts: Chicago, IL; Cleveland, OH; Detroit, MI; Duluth, MN; Great Falls, MT; Minneapolis, MN; Pembina, ND; and St. Louis, MO. The “South” border of entry includes the following Customs entry districts: Dallas-Fort Worth, TX; El Paso, TX; Houston-Galveston, TX; Laredo, TX; Miami, FL; Mobile, AL; New Orleans, LA; and Tampa, FL. The “West” border of entry includes the following Customs entry districts: Anchorage, AK; Columbia-Snake, OR; Honolulu, HI; Los Angeles, CA; Nogales, AZ; San Diego, CA; San Francisco, CA; and Seattle, WA.

Source: Official U.S. import statistics less Canada and Oman using HTS statistical reporting numbers 3920.62.0090, accessed June 24, 2020.

## Presence in the market

Table IV-5 and figures IV-4 and IV-5 present imports of PET plates, sheets, film, foil, and strip between January 2017 and April 2020 as reported under HTS statistical reporting number 3920.62.0090 less Canada and Oman. Imports from India, Taiwan, and nonsubject sources entered the United States in all 40 months between January 2017 and April 2020.

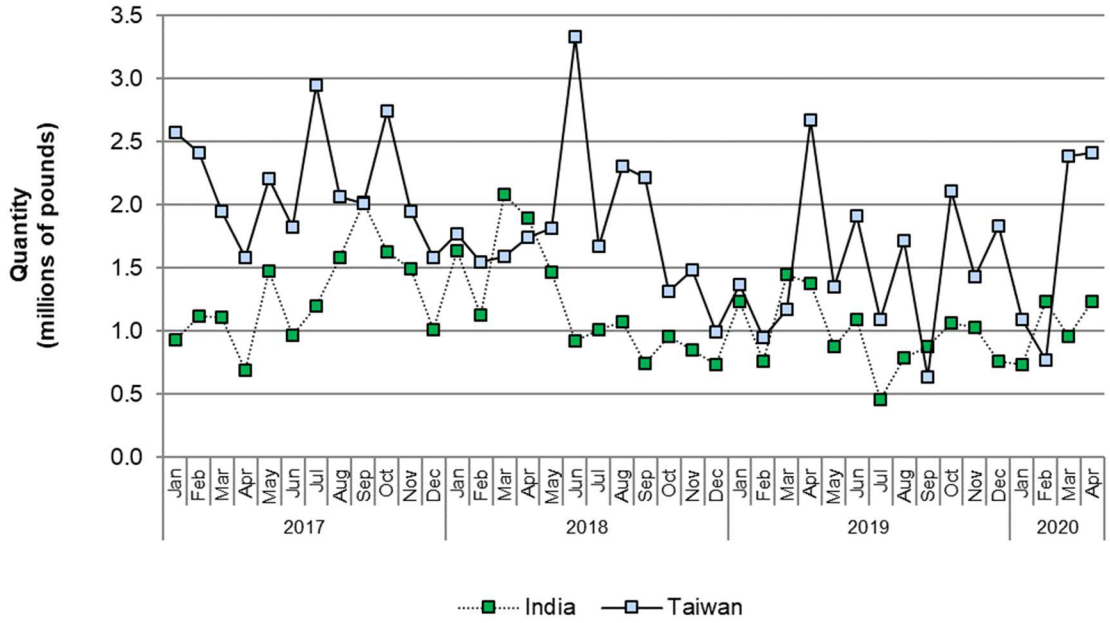
**Table IV-5**
**PET, plates, sheets, film, foil and strip of plastics: U.S. imports by month, January 2017 through April 2020**

| U.S. imports | India | Taiwan | Subject sources | Nonsubject sources | All import sources |
|---|---|---|---|---|---|
| | Quantity (1,000 pounds) | | | | |
| 2017: | | | | | |
| January | 928 | 2,569 | 3,497 | 17,260 | 20,756 |
| February | 1,120 | 2,415 | 3,535 | 13,648 | 17,183 |
| March | 1,105 | 1,945 | 3,049 | 20,506 | 23,555 |
| April | 691 | 1,583 | 2,275 | 18,584 | 20,859 |
| May | 1,470 | 2,203 | 3,674 | 22,710 | 26,384 |
| June | 966 | 1,825 | 2,790 | 18,347 | 21,137 |
| July | 1,200 | 2,951 | 4,151 | 15,898 | 20,049 |
| August | 1,585 | 2,063 | 3,648 | 17,306 | 20,954 |
| September | 2,016 | 2,011 | 4,027 | 19,699 | 23,726 |
| October | 1,629 | 2,744 | 4,372 | 21,042 | 25,414 |
| November | 1,491 | 1,951 | 3,442 | 19,529 | 22,971 |
| December | 1,009 | 1,585 | 2,594 | 21,405 | 24,000 |
| 2018: | | | | | |
| January | 1,632 | 1,771 | 3,403 | 21,811 | 25,214 |
| February | 1,129 | 1,542 | 2,670 | 19,741 | 22,411 |
| March | 2,079 | 1,588 | 3,667 | 22,494 | 26,161 |
| April | 1,897 | 1,746 | 3,643 | 23,487 | 27,129 |
| May | 1,465 | 1,817 | 3,282 | 29,373 | 32,655 |
| June | 920 | 3,330 | 4,250 | 21,895 | 26,145 |
| July | 1,012 | 1,671 | 2,684 | 26,320 | 29,003 |
| August | 1,072 | 2,305 | 3,377 | 23,218 | 26,595 |
| September | 745 | 2,217 | 2,962 | 24,563 | 27,525 |
| October | 953 | 1,316 | 2,269 | 29,177 | 31,446 |
| November | 853 | 1,487 | 2,340 | 28,420 | 30,760 |
| December | 735 | 992 | 1,727 | 26,948 | 28,675 |
| 2019: | | | | | |
| January | 1,237 | 1,364 | 2,601 | 31,467 | 34,068 |
| February | 757 | 944 | 1,701 | 31,126 | 32,826 |
| March | 1,444 | 1,167 | 2,610 | 31,107 | 33,717 |
| April | 1,374 | 2,674 | 4,048 | 24,811 | 28,860 |
| May | 874 | 1,346 | 2,220 | 26,652 | 28,872 |
| June | 1,090 | 1,911 | 3,001 | 24,699 | 27,700 |
| July | 455 | 1,087 | 1,542 | 28,922 | 30,464 |
| August | 787 | 1,716 | 2,503 | 24,662 | 27,165 |
| September | 876 | 635 | 1,511 | 21,555 | 23,066 |
| October | 1,063 | 2,112 | 3,174 | 21,608 | 24,782 |
| November | 1,025 | 1,427 | 2,453 | 23,024 | 25,477 |
| December | 757 | 1,831 | 2,588 | 21,245 | 23,833 |
| 2020: | | | | | |
| January | 737 | 1,095 | 1,831 | 23,580 | 25,411 |
| February | 1,235 | 766 | 2,001 | 21,241 | 23,242 |
| March | 958 | 2,386 | 3,343 | 32,086 | 35,429 |
| April | 1,229 | 2,414 | 3,643 | 29,554 | 33,197 |

Note: PET plates, sheets, film, foil, and strip includes in-scope PET FSS as well as out-of-scope products such as PET foil, equivalent PET film, or tracing and drafting film.

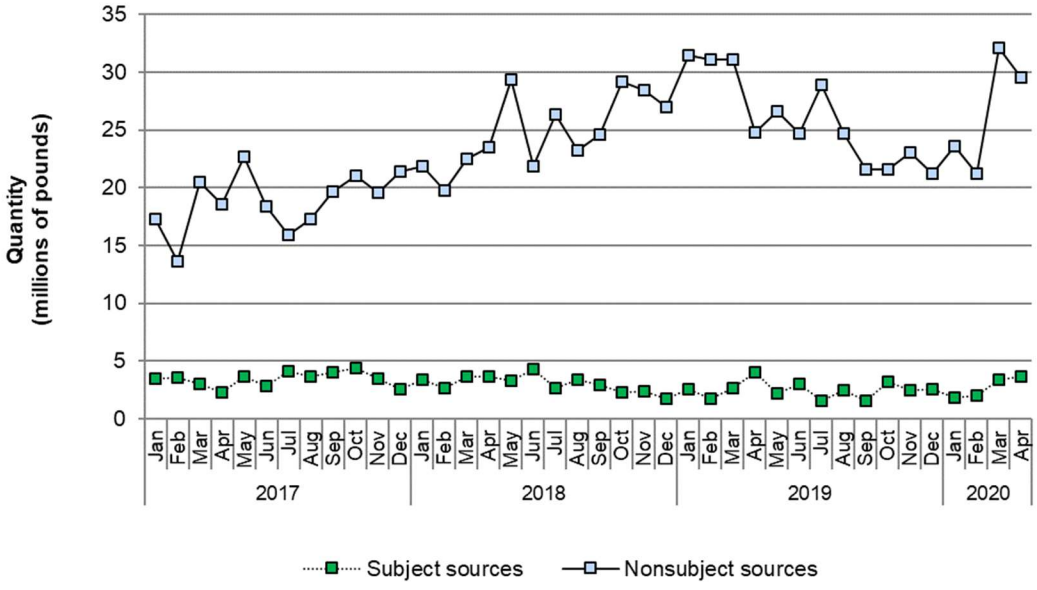
Source: Official U.S. import statistics less Canada and Oman using HTS statistical reporting numbers 3920.62.0090, accessed June 24, 2020.

**Figure IV-4**
**PET, plates, sheets, film, foil and strip of plastics: U.S. imports from India and Taiwan, by month, January 2017 through April 2020**




Source: Official U.S. import statistics for HTS statistical reporting number 3920.62.0090 less Canada and Oman, accessed June 24, 2020.

**Figure IV-5**
**PET, plates, sheets, film, foil and strip of plastics: U.S. imports from aggregated subject and nonsubject sources, by month, January 2017 through April 2020**




Source: Official U.S. import statistics for HTS statistical reporting number 3920.62.0090 less Canada and Oman, accessed June 24, 2020.

## U.S. importers' imports subsequent to December 31, 2019

The Commission requested importers to indicate whether they had imported or arranged for the importation of PET FSS from India, Taiwan, or nonsubject sources for delivery after December 31, 2019. Of the 21 responding importers, 13 indicated that they had arranged such imports subsequent to that date. Table IV-6 presents reported arranged imports from India, Taiwan, and nonsubject sources by quarter in 2020.

**Table IV-6**
**PET FSS: U.S. importers' arranged imports**

| | Period | | | | |
|---|---|---|---|---|---|
| Arranged U.S. imports from | Jan-Mar 2020 | Apr-Jun 2020 | Jul-Sep 2020 | Oct-Dec 2020 | Total |
| India | *** | *** | *** | *** | *** |
| Taiwan | *** | *** | *** | *** | *** |
| Subject sources | *** | *** | *** | *** | *** |
| Nonsubject sources | *** | *** | *** | *** | *** |
| Total arranged imports | *** | *** | *** | *** | *** |

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

## U.S. importers' inventories

Table IV-7 presents data for inventories of U.S. imports of PET FSS from India, Taiwan, and all other sources held in the United States. Overall inventories of imports from India declined *** percent between 2017 and 2019, while overall inventories of imports from Taiwan increased *** percent over the period. This led to an overall increase of inventories of imports from subject sources by *** percent over the period. Comparatively, inventories of imports from nonsubject sources increased by *** percent over the period.

The ratio of end-of-period inventories from both India and Taiwan to U.S. imports, U.S. shipments of imports, and total shipments of imports increased between 2017 and 2019 (for India by ***, ***, and *** percentage points and for Taiwan by ***, ***, and *** percentage points, respectively). The ratio of end-of-period inventories for nonsubject sources to U.S. imports, U.S. shipments of imports, and total shipments of imports also increased between 2017 and 2019 (by ***, ***, and *** percentage points, respectively).

**Table IV-7**
**PET FSS: U.S. importers' end-of-period inventories of imports by source, 2017-19**

| Item | Calendar year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Inventories (1,000 pounds); Ratios (percent) | | |
| Imports from India: Inventories | *** | *** | *** |
| Ratio to U.S. imports | *** | *** | *** |
| Ratio to U.S. shipments of imports | *** | *** | *** |
| Ratio to total shipments of imports | *** | *** | *** |
| Imports from Taiwan: Inventories | *** | *** | *** |
| Ratio to U.S. imports | *** | *** | *** |
| Ratio to U.S. shipments of imports | *** | *** | *** |
| Ratio to total shipments of imports | *** | *** | *** |
| Imports from subject sources: Inventories | *** | *** | *** |
| Ratio to U.S. imports | *** | *** | *** |
| Ratio to U.S. shipments of imports | *** | *** | *** |
| Ratio to total shipments of imports | *** | *** | *** |
| Imports from nonsubject sources: Inventories | *** | *** | *** |
| Ratio to U.S. imports | *** | *** | *** |
| Ratio to U.S. shipments of imports | *** | *** | *** |
| Ratio to total shipments of imports | *** | *** | *** |
| Imports from all import sources: Inventories | *** | *** | *** |
| Ratio to U.S. imports | *** | *** | *** |
| Ratio to U.S. shipments of imports | *** | *** | *** |
| Ratio to total shipments of imports | *** | *** | *** |

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

## Subject country producers

According to industry sources, in 2018, the latest year available, installed PET film capacity in India was *** larger than PET film capacity in Taiwan (table IV-8).

**Table IV-8**
**PET film: India and Taiwan capacity, 2018**

| Country and Firm | Capacity (1,000 metric tons) | Capacity (1,000 pounds) |
|---|---|---|
| **India:** | | |
| Jindal Poly Films Ltd. | *** | *** |
| SRF Ltd. | *** | *** |
| Vacmet Packagings Ltd. | *** | *** |
| Ester Industries Ltd. | *** | *** |
| Polyplex Corporation | *** | *** |
| Uflex Ltd. | *** | *** |
| Garware Polyester Ltd. | *** | *** |
| Chiripal Poly Films Ltd. | *** | *** |
| Sumilon Industries Ltd. | *** | *** |
| Venlon Enterprises Ltd. | *** | *** |
| **Total India** | *** | *** |
| **Taiwan:** | | |
| Nan Ya Plastics Corporation | *** | *** |
| Shinkong Materials Technology (trademark SHINDEX) | *** | *** |
| **Total Taiwan** | *** | *** |

Note: PET film is an in-scope product that does not include other in-scope products such as sheet or strip.

Source: IHS, Chemical Economics Handbook, Polyester Film, November 2018, pp. 46, 62.

# The industry in India

## Overview

The Commission sent questionnaires to 13 Indian firms believed to be producers of PET FSS: Assam Industrial Development Corp. Ltd.; Chiripal Poly Films Ltd.; Cosmo Films Ltd.; Ester Industries, Ltd. ("Ester"); Garware Polyester Ltd.; Jindal Poly Films, Ltd. ("Jindal Poly"); MTZ Polyfilms Ltd.; Polyplex Corporation Limited ("Polyplex"); SRF Ltd.; Sumilon Industries Ltd.; Uflex Ltd. ("Uflex"); Vacmet India Ltd.; and Venlon Enterprises. Four firms provided questionnaire responses and provided the following information about the Indian PET FSS industry:

- Ester: ***
- Jindal Poly: ***

***.

- Polyplex: ***
- Uflex: ***

Ester estimated that its 2019 share of PET FSS production in India was *** percent; Jindal Poly estimated an *** percent share; Polyplex estimated an *** share; and Uflex estimated a *** percent share. Based on these estimates, questionnaire responses are believed to account for *** percent of total 2019 PET FSS production in India.[9] Table IV-9 presents information on the PET FSS operations of the responding producers and exporters in India.

**Table IV-9**
**PET FSS: Summary data on producers in India, 2019**

| Firm | 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) |
|---|---|---|---|---|---|---|
| Ester | *** | *** | *** | *** | *** | *** |
| Jindal Poly | *** | *** | *** | *** | *** | *** |
| Polyplex | *** | *** | *** | *** | *** | *** |
| Uflex | *** | *** | *** | *** | *** | *** |
| Total | *** | 100.0 | *** | 100.0 | *** | *** |

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

## Changes in operations

As presented in table IV-10, producers in India reported several operational and organizational changes since January 1, 2014.

[9] Additionally, *** estimated that its share of exports of subject merchandise from India to the United States in 2019 was *** percent, while *** estimated its 2019 share to be *** percent. *** did not provide estimates of their 2019 share of exports of subject merchandise from India to the United States.

**Table IV-10**
**PET FSS: Reported changes in operations by firms in India, since January 1, 2014**

| Item / Firm | Narrative |
|---|---|
| **Expansions:** | |
| *** | *** |
| **Prolonged shutdowns or curtailments:** | |
| *** | *** |
| **Revised labor agreements:** | |
| *** | *** |
| **Other:** | |
| *** | *** |
| *** | *** |

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

## Operations on PET FSS

Table IV-11 presents information on the PET FSS operations of the responding producers and exporters in India. Responding Indian producers' PET FSS capacity and production increased between 2017 and 2019 (by *** percent and *** percent, respectively). The capacity utilization of the responding Indian producers was between *** and *** percent during the same period.

Responding producers' total shipments increased *** percent during 2017-19, driven by home market shipments, which increased by *** percent, while exports declined by *** percent. The Indian industry exported between *** and *** percent of its total shipments between 2017 and 2019. The responding Indian producers' exports to the United States decreased by *** percent during 2017-19. Exports to the United States as a share of shipments also fell by *** percentage points between 2017 and 2019 (from *** to *** percent). ***. *** exported PET FSS to related firms in the United States, accounting for *** percent of total reported exports to the United States during 2017-19. Total exports as a share of total shipments fell by *** percentage points during this same period (from *** to *** percent).

*** indicated its PET FSS exports had increased to ***. *** reported increased exports to ***

***. *** reported increased exports to ***

Regarding production constraints, *** cited ***, *** cited ***, and *** cited ***. *** further noted, "***."

**Table IV-11**
**PET FSS: Data on industry in India, 2017-19**

| Item | Calendar year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Quantity (1,000 pounds) | | |
| Capacity | *** | *** | *** |
| Production | *** | *** | *** |
| End-of-period inventories | *** | *** | *** |
| Shipments: Internal consumption/ transfers | *** | *** | *** |
| Commercial home market shipments | *** | *** | *** |
| Total home market shipments | *** | *** | *** |
| Export shipments to: United States | *** | *** | *** |
| European Union | *** | *** | *** |
| Asia | *** | *** | *** |
| All other markets | *** | *** | *** |
| Total exports | *** | *** | *** |
| Total shipments | *** | *** | *** |
| | Value (1,000 dollars) | | |
| Shipments: Internal consumption/ transfers | *** | *** | *** |
| Commercial home market shipments | *** | *** | *** |
| Total home market shipments | *** | *** | *** |
| Export shipments to: United States | *** | *** | *** |
| European Union | *** | *** | *** |
| Asia | *** | *** | *** |
| All other markets | *** | *** | *** |
| Total exports | *** | *** | *** |
| Total shipments | *** | *** | *** |

Table continued.

**Table IV-11--Continued**
**PET FSS: Data on industry in India, 2017-19**

| Item | Calendar year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Unit value (dollars per pound) | | |
| Shipments: Internal consumption/ transfers | *** | *** | *** |
| Commercial home market shipments | *** | *** | *** |
| Total home market shipments | *** | *** | *** |
| Export shipments to: United States | *** | *** | *** |
| European Union | *** | *** | *** |
| Asia | *** | *** | *** |
| All other markets | *** | *** | *** |
| Total exports | *** | *** | *** |
| Total shipments | *** | *** | *** |
| | Ratios and shares (percent) | | |
| Capacity utilization | *** | *** | *** |
| Inventories/production | *** | *** | *** |
| Inventories/total shipments | *** | *** | *** |
| Share of total shipments: Internal consumption/ transfers | *** | *** | *** |
| Commercial home market shipments | *** | *** | *** |
| Total home market shipments | *** | *** | *** |
| Export shipments to: United States | *** | *** | *** |
| European Union | *** | *** | *** |
| Asia | *** | *** | *** |
| All other markets | *** | *** | *** |
| Total exports | *** | *** | *** |
| Total shipments | *** | *** | *** |

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

## Alternative products

Table IV-12 presents responding Indian firms' production of other products on the same equipment and machinery used to produce PET FSS.

**Table IV-12**
**PET FSS: Overall capacity and production on the same equipment as in-scope production for firms in India, 2017-19**

| Item | Calendar year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Quantity (1,000 pounds) | | |
| Overall capacity | *** | *** | *** |
| Production: PET FSS | *** | *** | *** |
| Out-of-scope production | *** | *** | *** |
| Total same machinery | *** | *** | *** |
| | Ratios and shares (percent) | | |
| Capacity utilization | *** | *** | *** |
| Share of production: PET FSS | *** | *** | *** |
| Out-of-scope production | *** | *** | *** |
| Total same machinery | 100.0 | 100.0 | 100.0 |

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

## Exports

According to GTA, the leading export markets by quantity for PET plates, sheets, film, foil and strip of plastics from India in 2019 were Germany, Italy, and Bangladesh (table IV-13), and the leading export markets by value were Germany, Italy, and the United States. During 2019, the United States was the ninth biggest export market by quantity, accounting for 3.7 percent, and the third biggest market by value, accounting for 5.6 percent, for PET plates, sheets, film, foil, and strip of plastics from India.

**Table IV-13**
**PET plates, sheets, film, foil, and strip, noncellular and not reinforced, laminated, supported or similarly combined with other materials: India exports by destination market, 2017-19**

| Destination market | Calendar year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Quantity (1,000 pounds) | | |
| United States | 23,369 | 15,895 | 14,297 |
| Germany | 33,625 | 46,943 | 44,031 |
| Italy | 37,728 | 33,717 | 34,595 |
| Bangladesh | 23,382 | 30,505 | 22,769 |
| Nigeria | 15,315 | 22,099 | 17,582 |
| Russia | 12,939 | 13,360 | 17,536 |
| Spain | 12,306 | 17,985 | 17,348 |
| Belgium | 21,021 | 21,012 | 17,017 |
| China | 14,731 | 15,071 | 14,562 |
| All other destination markets | 150,613 | 183,583 | 184,895 |
| Total exports | 345,030 | 400,172 | 384,631 |
| | Value (1,000 dollars) | | |
| United States | 21,212 | 18,856 | 18,468 |
| Germany | 23,519 | 39,752 | 34,600 |
| Italy | 26,201 | 27,572 | 27,944 |
| Bangladesh | 14,551 | 24,469 | 17,299 |
| Nigeria | 9,783 | 17,807 | 12,932 |
| Russia | 8,660 | 11,205 | 13,806 |
| Spain | 9,062 | 15,648 | 14,151 |
| Belgium | 15,117 | 19,042 | 13,964 |
| China | 15,587 | 16,172 | 17,240 |
| All other destination markets | 114,062 | 163,329 | 156,665 |
| Total exports | 257,754 | 353,852 | 327,069 |

Table continued.

**Table IV-13--Continued**
**PET plates, sheets, film, foil and strip, noncellular and not reinforced, laminated, supported or similarly combined with other materials: India exports by destination market, 2017-19**

| Destination market | Calendar year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Unit value (dollars per pound) | | |
| United States | 0.91 | 1.19 | 1.29 |
| Germany | 0.70 | 0.85 | 0.79 |
| Italy | 0.69 | 0.82 | 0.81 |
| Bangladesh | 0.62 | 0.80 | 0.76 |
| Nigeria | 0.64 | 0.81 | 0.74 |
| Russia | 0.67 | 0.84 | 0.79 |
| Spain | 0.74 | 0.87 | 0.82 |
| Belgium | 0.72 | 0.91 | 0.82 |
| China | 1.06 | 1.07 | 1.18 |
| All other destination markets | 0.76 | 0.89 | 0.85 |
| Total exports | 0.75 | 0.88 | 0.85 |
| | Share of quantity (percent) | | |
| United States | 6.8 | 4.0 | 3.7 |
| Germany | 9.7 | 11.7 | 11.4 |
| Italy | 10.9 | 8.4 | 9.0 |
| Bangladesh | 6.8 | 7.6 | 5.9 |
| Nigeria | 4.4 | 5.5 | 4.6 |
| Russia | 3.8 | 3.3 | 4.6 |
| Spain | 3.6 | 4.5 | 4.5 |
| Belgium | 6.1 | 5.3 | 4.4 |
| China | 4.3 | 3.8 | 3.8 |
| All other destination markets | 43.7 | 45.9 | 48.1 |
| Total exports | 100.0 | 100.0 | 100.0 |

Note.-- United States is shown at the top, all remaining top export destinations shown in descending order of 2019 quantities.

Source: Official exports statistics under HS subheading 3920.62 as reported by Ministry of Commerce in the Global Trade Atlas database, accessed May 6th, 2020.

# The industry in Taiwan

## Overview

The Commission sent questionnaires to four Taiwanese firms believed to be producers of PET FSS: Entire Technology Ltd., Nan Ya Plastics Corp., Vast Plastic Corp., and Shinkong Materials Technology. One firm, Nan Ya, provided a questionnaire response. In its response, Nan Ya stated, "***." Nan Ya estimated that its

2019 share of PET FSS production in Taiwan was *** percent. Table IV-14 presents information on the PET FSS operations of the responding producer and exporter in Taiwan.

**Table IV-14**
**PET FSS: Summary data on producers in Taiwan, 2019**

| Firm | 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) |
|---|---|---|---|---|---|---|
| Nan Ya | *** | *** | *** | *** | *** | *** |
| Total | *** | *** | *** | *** | *** | *** |

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

## Changes in operations

Table IV-15 presents operational and organizational changes since January 1, 2014. ***

**Table IV-15**
**PET FSS: Reported changes in operations by firms in Taiwan, since January 1, 2014**

| Item / Firm | Narrative |
|---|---|
| **Expansions:** | |
| *** | *** |
| **Other:** | |
| *** | *** |

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

## Operations on PET FSS

Table IV-16 presents information on the PET FSS operations of the responding producer and exporter in Taiwan, Nan Ya. Nan Ya's capacity was ***, while its production *** during 2017-19 (*** percent between 2017 and 2018, then *** percent between 2018 and 2019, for a total *** of *** percent over the period).

Nan Ya's capacity utilization was between *** and *** during the same period.

Nan Ya's total exports as a share of total shipments *** by *** percentage points during 2017-19 (from *** to *** percent). The company exported primarily *** during the period (*** percent of total shipments in 2019). Nan Ya's exports to the United States *** by *** percent during this period, and its exports to the United States as a share of its shipments also *** by *** percentage points.

With regards to its future expected changes in operations, Nan Ya noted, ***. Nan Ya commented, "***."

With regards to production constraints, Nan Ya noted, "***."

**Table IV-16**
**PET FSS: Data on industry in Taiwan, 2017-19**

| Item | Calendar year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Quantity (1,000 pounds) | | |
| Capacity | *** | *** | *** |
| Production | *** | *** | *** |
| End-of-period inventories | *** | *** | *** |
| Shipments: Internal consumption/ transfers | *** | *** | *** |
| Commercial home market shipments | *** | *** | *** |
| Total home market shipments | *** | *** | *** |
| Export shipments to: United States | *** | *** | *** |
| European Union | *** | *** | *** |
| Asia | *** | *** | *** |
| All other markets | *** | *** | *** |
| Total exports | *** | *** | *** |
| Total shipments | *** | *** | *** |
| | Value (1,000 dollars) | | |
| Shipments: Internal consumption/ transfers | *** | *** | *** |
| Commercial home market shipments | *** | *** | *** |
| Total home market shipments | *** | *** | *** |
| Export shipments to: United States | *** | *** | *** |
| European Union | *** | *** | *** |
| Asia | *** | *** | *** |
| All other markets | *** | *** | *** |
| Total exports | *** | *** | *** |
| Total shipments | *** | *** | *** |

Table continued.

**Table IV-16--Continued**
**PET FSS: Data on industry in Taiwan, 2017-19**

| Item | Calendar year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Unit value (dollars per pound) | | |
| Shipments: Internal consumption/ transfers | *** | *** | *** |
| Commercial home market shipments | *** | *** | *** |
| Total home market shipments | *** | *** | *** |
| Export shipments to: United States | *** | *** | *** |
| European Union | *** | *** | *** |
| Asia | *** | *** | *** |
| All other markets | *** | *** | *** |
| Total exports | *** | *** | *** |
| Total shipments | *** | *** | *** |
| | Ratios and shares (percent) | | |
| Capacity utilization | *** | *** | *** |
| Inventories/production | *** | *** | *** |
| Inventories/total shipments | *** | *** | *** |
| Share of total shipments: Internal consumption/ transfers | *** | *** | *** |
| Commercial home market shipments | *** | *** | *** |
| Total home market shipments | *** | *** | *** |
| Export shipments to: United States | *** | *** | *** |
| European Union | *** | *** | *** |
| Asia | *** | *** | *** |
| All other markets | *** | *** | *** |
| Total exports | *** | *** | *** |
| Total shipments | 100.0 | 100.0 | 100.0 |

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

## Alternative products

Table IV-17 shows alternative products made on the same machinery by Nan Ya.

**Table IV-17**
**PET FSS: Overall capacity and production on the same equipment as in-scope production for firms in Taiwan, 2017-19**

| Item | Calendar year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Quantity (1,000 pounds) | | |
| Overall capacity | *** | *** | *** |
| Production: PET FSS | *** | *** | *** |
| Out-of-scope production | *** | *** | *** |
| Total same machinery | *** | *** | *** |
| | Ratios and shares (percent) | | |
| Capacity utilization | *** | *** | *** |
| Share of production: PET FSS | *** | *** | *** |
| Out-of-scope production | *** | *** | *** |
| Total same machinery | 100.0 | 100.0 | 100.0 |

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

## Exports

According to GTA, the leading export markets for PET plates, sheets, film, foil, and strip of plastics from Taiwan in 2019 by quantity were China, Japan, and the United States (table IV-18). During 2019, the United States was the third largest export market for PET plates, sheets, film, foil and strip of plastics from Taiwan by quantity, accounting for 7.1 percent, and the fourth largest export market from Taiwan by value, accounting for 5.3 percent (behind China, Japan, and Hong Kong).

**Table IV-18**
**PET plates, sheets, film, foil and strip, noncellular and not reinforced, laminated, supported or similarly combined with other materials: Taiwan exports by destination market, 2017-19**

| Destination market | Calendar year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Quantity (1,000 pounds) | | |
| United States | 30,228 | 24,432 | 19,641 |
| China | 115,328 | 120,434 | 110,844 |
| Japan | 50,470 | 57,633 | 61,101 |
| Australia | 12,117 | 16,568 | 12,765 |
| India | 8,497 | 9,819 | 10,512 |
| Mexico | 4,647 | 6,799 | 8,417 |
| Vietnam | 6,047 | 9,182 | 8,236 |
| Malaysia | 5,979 | 8,089 | 7,156 |
| Thailand | 1,940 | 2,546 | 4,493 |
| All other destination markets | 30,940 | 36,026 | 32,489 |
| Total exports | 266,192 | 291,528 | 275,655 |
| | Value (1,000 dollars) | | |
| United States | 27,100 | 26,556 | 23,600 |
| China | 228,850 | 247,254 | 233,650 |
| Japan | 55,879 | 60,897 | 66,831 |
| Australia | 8,131 | 11,404 | 8,071 |
| India | 9,992 | 12,286 | 11,738 |
| Mexico | 6,089 | 8,254 | 8,524 |
| Vietnam | 5,100 | 9,226 | 9,350 |
| Malaysia | 6,055 | 10,158 | 7,933 |
| Thailand | 2,278 | 3,002 | 5,321 |
| All other destination markets | 62,510 | 78,428 | 73,801 |
| Total exports | 411,984 | 467,465 | 448,819 |

Table continued.

**Table IV-18--Continued**
**PET plates, sheets, film, foil and strip, noncellular and not reinforced, laminated, supported or similarly combined with other materials: Taiwan exports by destination market, 2017-19**

| Destination market | Calendar year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Unit value (dollars per pound) | | |
| United States | 0.90 | 1.09 | 1.20 |
| China | 1.98 | 2.05 | 2.11 |
| Japan | 1.11 | 1.06 | 1.09 |
| Australia | 0.67 | 0.69 | 0.63 |
| India | 1.18 | 1.25 | 1.12 |
| Mexico | 1.31 | 1.21 | 1.01 |
| Vietnam | 0.84 | 1.00 | 1.14 |
| Malaysia | 1.01 | 1.26 | 1.11 |
| Thailand | 1.17 | 1.18 | 1.18 |
| All other destination markets | 2.02 | 2.18 | 2.27 |
| Total exports | 1.55 | 1.60 | 1.63 |
| | Share of quantity (percent) | | |
| United States | 11.4 | 8.4 | 7.1 |
| China | 43.3 | 41.3 | 40.2 |
| Japan | 19.0 | 19.8 | 22.2 |
| Australia | 4.6 | 5.7 | 4.6 |
| India | 3.2 | 3.4 | 3.8 |
| Mexico | 1.7 | 2.3 | 3.1 |
| Vietnam | 2.3 | 3.1 | 3.0 |
| Malaysia | 2.2 | 2.8 | 2.6 |
| Thailand | 0.7 | 0.9 | 1.6 |
| All other destination markets | 11.6 | 12.4 | 11.8 |
| Total exports | 100.0 | 100.0 | 100.0 |

Note.-- United States is shown at the top, all remaining top export destinations shown in descending order of 2019 quantities.

Source: Official exports statistics under HS subheading 3920.62 as reported by Taiwan Directorate General of Customs in the Global Trade Atlas database, accessed May 6th, 2020.

## Subject countries combined

Table IV-19 presents summary data on PET FSS operations of the reporting producers in the subject countries.

**Table IV-19**
**PET FSS: Data on industry in subject countries, 2017-19**

| Item | Calendar year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Quantity (1,000 pounds) | | |
| Capacity | *** | *** | *** |
| Production | *** | *** | *** |
| End-of-period inventories | *** | *** | *** |
| Shipments: Internal consumption/ transfers | *** | *** | *** |
| Commercial home market shipments | *** | *** | *** |
| Total home market shipments | *** | *** | *** |
| Export shipments to: United States | *** | *** | *** |
| European Union | *** | *** | *** |
| Asia | *** | *** | *** |
| All other markets | *** | *** | *** |
| Total exports | *** | *** | *** |
| Total shipments | *** | *** | *** |
| | Value (1,000 dollars) | | |
| Shipments: Internal consumption/ transfers | *** | *** | *** |
| Commercial home market shipments | *** | *** | *** |
| Total home market shipments | *** | *** | *** |
| Export shipments to: United States | *** | *** | *** |
| European Union | *** | *** | *** |
| Asia | *** | *** | *** |
| All other markets | *** | *** | *** |
| Total exports | *** | *** | *** |
| Total shipments | *** | *** | *** |

Table continued.

**Table IV-19--Continued**
**PET FSS: Data on industry in subject countries, 2017-19**

| Item | Calendar year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Unit value (dollars per pound) | | |
| Shipments: | | | |
| Internal consumption/ transfers | *** | *** | *** |
| Commercial home market shipments | *** | *** | *** |
| Total home market shipments | *** | *** | *** |
| Export shipments to: | | | |
| United States | *** | *** | *** |
| European Union | *** | *** | *** |
| Asia | *** | *** | *** |
| All other markets | *** | *** | *** |
| Total exports | *** | *** | *** |
| Total shipments | *** | *** | *** |
| | Ratios and shares (percent) | | |
| Capacity utilization | *** | *** | *** |
| Inventories/production | *** | *** | *** |
| Inventories/total shipments | *** | *** | *** |
| Share of total shipments: | | | |
| Internal consumption/ transfers | *** | *** | *** |
| Commercial home market shipments | *** | *** | *** |
| Total home market shipments | *** | *** | *** |
| Export shipments to: | | | |
| United States | *** | *** | *** |
| European Union | *** | *** | *** |
| Asia | *** | *** | *** |
| All other markets | *** | *** | *** |
| Total exports | *** | *** | *** |
| Total shipments | *** | *** | *** |

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

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

## Antidumping or countervailing duty orders in third-country markets

Korea applies antidumping duties to imports of PET film from India and Taiwan.[10] [11] Indonesia applies antidumping duties only, while Turkey applies countervailing duties only, to imports of PET film from India.[12] Brazil applies antidumping and countervailing duties on imports of PET film from India.[13] [14]

## Global market

The PET FSS industry is global in nature with operations in many countries. In 2017, 12 percent of the global PET solid-state resin demand was related to PET film and sheet applications.[15] One published source forecasts the global biaxially oriented PET film market will grow almost 6 percent annually by 2023.[16] Another source forecasts an average annual consumption growth rate for biaxially oriented PET film for 2018-23 of *** percent, while in the United States, it is forecasted at *** percent.[17] The countries with the largest annual capacities of biaxially oriented PET film are China (***), India (***), and Korea

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[10] Republic of Korea, Semi-Annual Report Under Article 16.4 of the Agreement, WTO Doc. G/ADP/N/322/KOR, Apr. 8, 2019. Also, in domestic interested parties' response to notice of institution, July 31, 2019, attached as Attachment 3.

[11] Terphane, response to the notice of institution, February 3, 2020, p. 13.

[12] Jindal Poly's Foreign Producer Questionnaire Response.

[13] Domestic interested parties' response to the notice of institution, July 31, 2019, attached as Attachment 4. 84 FR 31343, July 1, 2019; Committee on Anti-Dumping Practices - Semi-Annual Report under Article 16.4 of the Agreement - Brazil, G/ADP/N/322/BRA (Mar. 15, 2019). Terphane's response to the notice of institution, February 3, 2020, exhibit 6 and Committee on Subsidies and Countervailing Measures - Semi-annual report under Article 25.11 of the Agreement – Brazil, G/SCM/N/342/BRA (Apr. 9, 2019), attached as Exhibit 7.

[14] For Jindal Poly of India, orders instituted by Korea: Product - BOPET Films, Date of last finding - 20.06.2019, Anti-dumping Duty - 34.90 percent; Orders instituted by Brazil: Product - BOPET Films between thickness 5-50 microns (both inclusive), Date of last finding - 22.04.2016, Countervailing Duty - 15.06 USD/ton; Orders instituted by Brazil; Product - BOPET Films between thickness 5-50 microns (both inclusive), Date of last finding - 22.05.2015; Anti-dumping duty - 248.09 USD/ton. Orders instituted by Indonesia: Product - BOPET Films, Date of last finding - 17.12.2015, Anti-dumping duty - 6.8 percent. Orders instituted by Turkey: Product - PET Films; Date of last finding - 16.09.2015; Countervailing duty - 21.61 percent. Jindal Poly's Foreign Producer Questionnaire Response.

[15] IHS, Chemical Economics Handbook, Polyethylene Terephthalate (PET) Solid-State Resins, March 2018, p. 36.

[16] Wood Mackenzie, "Global BOPET film market to grow almost 6% p.a. by 2023," May 15, 2019. https://www.woodmac.com/press-releases/global-bopet-film-market-to-grow-almost-6-p.a.-by-2023.

[17] IHS, Chemical Economics Handbook, Polyester Film, November 2018, p. 6.

(***).[18] The domestic interested parties indicated in their responses that foreign producers in India and the Taiwan have continued to increase production capacity since the last sunset review.[19] Global capacity and production are shown in table IV-20 and global consumption is shown in table IV-21.

**Table IV-20**
**PET film: Global capacity and production, 2017, 2018, and 2023**

| Country/region | Annual nameplate capacity | | | Production |
|---|---|---|---|---|
| | 2017 | 2018p | 2023p | 2018 |
| | Quantity (1,000 pounds) | | | |
| North America: | | | | |
| United States | *** | *** | *** | *** |
| Canada | *** | *** | *** | *** |
| Mexico | *** | *** | *** | *** |
| **Total North America** | *** | *** | *** | *** |
| South America | *** | *** | *** | *** |
| EMEA: | | | | |
| Western Europe | *** | *** | *** | *** |
| Central Eastern Europe | *** | *** | *** | *** |
| CIS countries | *** | *** | *** | *** |
| Africa | *** | *** | *** | *** |
| Middle East | *** | *** | *** | *** |
| **Total EMEA** | *** | *** | *** | *** |
| Asia and Oceania: | | | | |
| Australia | *** | *** | *** | *** |
| China | *** | *** | *** | *** |
| Indian subcontinent | *** | *** | *** | *** |
| Indonesia | *** | *** | *** | *** |
| Japan | *** | *** | *** | *** |
| Malaysia | *** | *** | *** | *** |
| Philippines | *** | *** | *** | *** |
| Singapore | *** | *** | *** | *** |
| Korea | *** | *** | *** | *** |
| Taiwan | *** | *** | *** | *** |
| Thailand | *** | *** | *** | *** |
| **Total Asia and Oceania** | *** | *** | *** | *** |
| **Total global** | *** | *** | *** | *** |

Note: PET film is an in-scope product that does not include other in-scope products such as sheet or strip. The Middle East comprises producing plants in Bahrain, Turkey, and the UAE.

Source: IHS, Chemical Economics Handbook, Polyester Film, November 2018, p. 6.

[18] Ibid.

[19] Domestic interested parties' response to the notice of institution, July 31, 2019, pp. 4-5.

**Table IV-21**
**PET film: Consumption of global supply, 2017, 2018, and 2023**

| Country/region | Consumption | | | Average annual consumption growth rate 2018-23 |
|---|---|---|---|---|
| | 2017 | 2018p | 2023p | |
| | Quantity (1,000 pounds) | | | Rate (percent) |
| North America: | | | | |
| United States | *** | *** | *** | *** |
| Canada | *** | *** | *** | *** |
| Mexico | *** | *** | *** | *** |
| **Total North America** | *** | *** | *** | *** |
| South America | *** | *** | *** | *** |
| EMEA: | | | | |
| Western Europe | *** | *** | *** | *** |
| Central Eastern Europe | *** | *** | *** | *** |
| CIS countries | *** | *** | *** | *** |
| Africa | *** | *** | *** | *** |
| Middle East | *** | *** | *** | *** |
| **Total EMEA** | *** | *** | *** | *** |
| Asia and Oceania: | | | | |
| Australia | *** | *** | *** | *** |
| China | *** | *** | *** | *** |
| Indian subcontinent | *** | *** | *** | *** |
| Indonesia | *** | *** | *** | *** |
| Japan | *** | *** | *** | *** |
| Malaysia | *** | *** | *** | *** |
| Philippines | *** | *** | *** | *** |
| Singapore | *** | *** | *** | *** |
| Korea | *** | *** | *** | *** |
| Taiwan | *** | *** | *** | *** |
| Thailand | *** | *** | *** | *** |
| **Total Asia and Oceania** | *** | *** | *** | *** |
| **Total global** | *** | *** | *** | *** |

Note: PET film is an in-scope product that does not include other in-scope products such as sheet or strip. The Middle East comprises producing plants in Bahrain, Turkey, and the UAE.

Source: IHS, Chemical Economics Handbook, Polyester Film, November 2018, p. 6.

In 2018, the largest end-use segment globally for PET film was packaging (*** percent), and it has a forecasted average annual growth rate from 2018 to 2023 of *** percent, as shown in table IV-22.

Table IV-23 presents global export data for HTS 3920.62, a category that includes PET FSS and out-of-scope products. Asia dominates the global export market for products under HTS 3920.62. In 2019, China was the largest global exporter (970 million pounds), followed by Korea (488 million pounds), and India (385 million pounds). India increased its exports from 345 million pounds in 2017 to 385 million pounds in 2019. Taiwan increased its exports from 266 million pounds in 2017 to 276 million pounds in 2019.

**Table IV-22**
**PET film: Global consumption by region and major end use, 2018**

| Item | Packaging | Flat Panel Displays | Electrical/ electronic | Photo-graphic films/ imaging/ X-ray | Industrial uses and other | Magnetic media | Total |
|---|---|---|---|---|---|---|---|
| | Quantity (1,000 pounds) | | | | | | |
| North America | *** | *** | *** | *** | *** | *** | *** |
| EMEA | *** | *** | *** | *** | *** | *** | *** |
| Japan | *** | *** | *** | *** | *** | *** | *** |
| China | *** | *** | *** | *** | *** | *** | *** |
| Other Asia | *** | *** | *** | *** | *** | *** | *** |
| Rest of the world | *** | *** | *** | *** | *** | *** | *** |
| Total | *** | *** | *** | *** | *** | *** | *** |
| Percent of total | *** | *** | *** | *** | *** | *** | *** |
| Average annual growth rate 2018-23 (percent) | *** | *** | *** | *** | *** | *** | *** |

Note: PET film is an in-scope product that does not include other in-scope products such as sheet or strip. The “rest of the world” includes mainly Oceania.

Note: “Electrical/electronic” includes solar cells as well as flexible panel displays for the United States and EMEA.

Note: “Industrial uses and other” includes reprographics, labels and decals, and release films for the United States and EMEA. Also includes solar cells for China (about 220,462,000 pounds) and Japan.

Source: IHS, Chemical Economics Handbook, Polyester Film, November 2018, p. 7.

**Table IV-23**

**PET, plates, sheets, film, foil and strip of plastics: Global exports by major sources, 2017-19**

| Destination market | Calendar year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Quantity (1,000 pounds) | | |
| United States | 204,441 | 198,226 | 188,524 |
| India | 345,030 | 400,172 | 384,631 |
| Taiwan | 266,194 | 291,528 | 275,654 |
| Subject sources | 611,224 | 691,700 | 660,285 |
| China | 827,936 | 904,472 | 970,375 |
| Korea | 441,058 | 489,116 | 488,100 |
| Germany | 306,742 | 324,693 | 326,309 |
| Japan | 277,217 | 308,839 | 292,546 |
| Turkey | 112,187 | 165,631 | 271,737 |
| Thailand | 230,738 | 261,134 | 266,734 |
| All other destination markets | 1,540,753 | 1,745,309 | 1,673,778 |
| Total exports | 4,552,296 | 5,089,121 | 5,138,389 |
| | Value (1,000 dollars) | | |
| United States | 548,792 | 561,888 | 506,339 |
| India | 257,754 | 353,852 | 327,069 |
| Taiwan | 411,984 | 467,465 | 448,819 |
| Subject sources | 669,738 | 821,317 | 775,888 |
| China | 1,193,356 | 1,211,400 | 1,159,383 |
| Korea | 966,082 | 1,112,219 | 1,234,717 |
| Germany | 539,732 | 602,728 | 576,609 |
| Japan | 1,117,947 | 1,147,638 | 1,043,746 |
| Turkey | 80,719 | 121,328 | 228,857 |
| Thailand | 182,684 | 234,829 | 230,832 |
| All other destination markets | 2,221,915 | 2,459,356 | 2,312,637 |
| Total exports | 7,520,965 | 8,272,704 | 8,069,008 |

Table continued.

**Table IV-23--Continued**

**PET, plates, sheets, film, foil and strip of plastics: Global exports by major sources, 2017-19**

| Destination market | Calendar year | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | Unit value (dollars per pound) | | |
| United States | 2.68 | 2.83 | 2.69 |
| India | 0.75 | 0.88 | 0.85 |
| Taiwan | 1.55 | 1.60 | 1.63 |
| Subject sources | 1.10 | 1.19 | 1.18 |
| China | 1.44 | 1.34 | 1.19 |
| Korea | 2.19 | 2.27 | 2.53 |
| Germany | 1.76 | 1.86 | 1.77 |
| Japan | 4.03 | 3.72 | 3.57 |
| Turkey | 0.72 | 0.73 | 0.84 |
| Thailand | 0.79 | 0.90 | 0.87 |
| All other destination markets | 1.44 | 1.41 | 1.38 |
| Total exports | 1.65 | 1.63 | 1.57 |
| | Share of quantity (percent) | | |
| United States | 4.5 | 3.9 | 3.7 |
| India | 7.6 | 7.9 | 7.5 |
| Taiwan | 5.8 | 5.7 | 5.4 |
| Subject sources | 13.4 | 13.6 | 12.9 |
| China | 18.2 | 17.8 | 18.9 |
| Korea | 9.7 | 9.6 | 9.5 |
| Germany | 6.7 | 6.4 | 6.4 |
| Japan | 6.1 | 6.1 | 5.7 |
| Turkey | 2.5 | 3.3 | 5.3 |
| Thailand | 5.1 | 5.1 | 5.2 |
| All other destination markets | 33.8 | 34.3 | 32.6 |
| Total exports | 100.0 | 100.0 | 100.0 |

Note.--United States is shown at the top, all remaining top export destinations shown in descending order of 2019 data.

Source: Official exports statistics under HS subheading 3920.62 reported by various national statistical authorities in the Global Trade Atlas database, accessed July 24, 2020.

# Part V: Pricing data

## Factors affecting prices

### Raw material costs

Raw materials' share of U.S. producers' costs of goods sold increased from 47.8 percent in 2017 to 51.2 percent in 2018 and then declined to 47.7 percent in 2019. The basic raw materials for producing PET FSS are (1) purified terephthalic acid ("PTA") and (2) monoethylene glycol ("MEG"), which come from xylene and ethylene, respectively. Xylene is a byproduct from oil refineries and ethylene is usually manufactured from natural gas. Thus, raw material costs are greatly affected by crude oil and natural gas prices. PTA accounted for 45 percent of U.S. producers' raw material input costs and MEG accounted for 17 percent (see Part III).

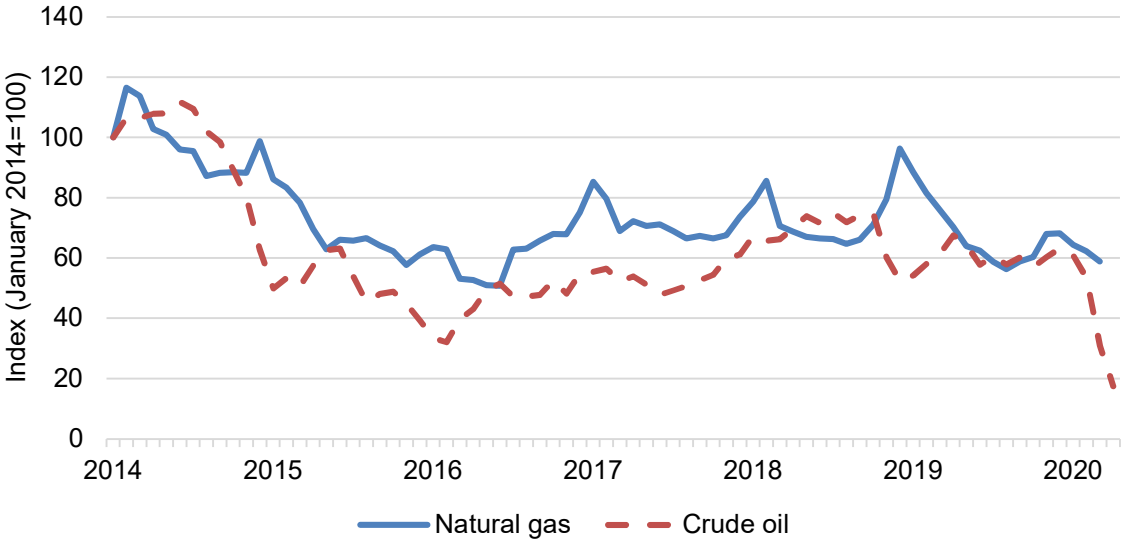
Natural gas and crude oil prices fluctuated over the review period but were lower in 2019 than in 2014 (figure V-1). MEG prices in the United States *** (figure V-2).[1] PTA prices in the United States ***.[2] Most responding U.S. producers, importers, and foreign producers reported that prices of raw materials had fluctuated since 2014 and that they anticipate that such prices will continue to fluctuate.[3]

[1] ***. ***.

[2] ***.

[3] Seven U.S. producers reported that prices of raw materials had fluctuated since 2014, one reported that they increased, and one reported that they decreased. Six producers anticipate that prices will fluctuate and two anticipate an increase. Most importers (11 of 17) reported that raw material prices had fluctuated since 2014, one reported an increase, two reported no change, and three reported a decrease. Twelve importers anticipate fluctuations in raw material prices, two anticipate increases, two anticipate no change, and one anticipates a decrease. All five responding foreign producers reported that prices of raw materials had fluctuated since 2014, and four anticipate that prices will continue to fluctuate while one anticipates no change in prices.

**Figure V-1**
**Raw materials: Crude oil and natural gas price indices, monthly, January 2014-April 2020**




Source: U.S. Energy Information Administration, www.eia.gov, retrieved June 3, 2020.

**Figure V-2**
**Raw materials: MEG and PTA, U.S. prices, annual, 2014-19**

* * * * * * *

U.S. producers stated that raw materials prices fluctuate with plant openings and closings, crude oil prices, and global geopolitical events. *** reported that raw materials prices increased in 2014 and 2015 but have generally stabilized in the past three years with occasional short-term spikes. *** and *** stated that their ability to increase prices to offset higher raw materials costs is limited by pricing pressure from unfairly traded imports. *** and *** expect continued volatility in raw materials prices, citing impacts of world politics and global supply, and stated that increased demand for PET FSS will drive up raw materials' prices as producers in India and other countries continue to invest in new production lines. *** stated that raw material prices will be impacted by the COVID-19 pandemic and the collapse of crude oil prices and that raw material prices for PET FSS will increase if oil prices escalate rapidly.

Almost all responding purchasers (16 of 18) reported familiarity with raw material prices for PET FSS, and 14 purchasers reported that raw material prices impact their negotiations to purchase PET FSS. Purchasers reported using information such as raw material prices reported by Chemical Data and crude oil prices as well as information on market and supply conditions for PET FSS to negotiate prices. *** stated that knowing raw material prices allows it to better negotiate prices for PET FSS products with long lead times. *** stated that it has asked for cost reductions from suppliers when raw material prices have declined. *** stated that in addition to using industry sources, such as the Chemical Data Index, its suppliers also provide raw material cost data. *** stated that raw materials are part of negotiations for its non-contract purchases (*** percent of its purchases) and that its contract prices include a quarterly adjustment for raw material prices.

Among foreign producers, *** reported that raw material price increases are reflected in selling prices with a lag of 15 to 90 days. *** reported that demand in the oil and polyester industries influence PTA and MEG prices. *** stated that although raw material prices impact PET FSS prices, other factors also play a large role. *** reported that it typically passes on raw material price changes to the customer if there have not been any major changes in demand and supply for PET FSS.

### Transportation costs to the U.S. market

Transportation costs for PET FSS shipped from subject countries to the United States were 7.4 percent for India and 6.5 percent for Taiwan. These estimates are derived from official import data and represent the transportation and other charges on imports.[4]

### U.S. inland transportation costs

All ten responding U.S. producers and 10 of 13 responding importers reported that they typically arrange transportation to their customers. Most responding U.S. producers reported that their U.S. inland transportation costs ranged from 3 to 10 percent while most responding importers reported costs of 1 to 8 percent.

## Pricing practices

### Pricing methods

U.S. producers and importers reported using mainly transaction-by-transaction negotiations and contracts to set PET FSS prices (table V-1). In addition, U.S. producer *** reported the use of price lists, *** has a price list for each of its customers, and *** stated that its pricing is based on competition and production cost and that it is also starting to see more quarterly RFQ bidding. Among importers, *** stated that a few large customers get discounts from its price list, *** reported setting prices every 6 months, and *** reported setting prices quarterly.

**Table V-1**
**PET FSS: U.S. producers' and importers' reported price setting methods, by number of responding firms[1]**

| Method | U.S. producers | Importers |
|---|---|---|
| Transaction-by-transaction | 7 | 9 |
| Contract | 6 | 5 |
| Set price list | 1 | 3 |
| Other | 2 | 6 |
| Responding firms | 9 | 16 |

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.

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

[4] The estimated transportation costs were obtained by subtracting the customs value from the c.i.f. value of the imports for 2019 and then dividing by the customs value based on HTS 3920.62.0090.

U.S. producers reported that about one-third of their sales of PET FSS in 2019 were under annual or long-term contracts and the remainder were via short-term contracts or spot sales (table V-2). Nearly all of importers' reported sales of subject imports were on short-term contract or spot basis.

**Table V-2**
**PET FSS: U.S. producers' and importers' shares of U.S. commercial shipments by type of sale, 2019**

| Type of sale | U.S. producers | Importers |
|---|---|---|
| **Long-term contracts** | *** | *** |
| **Annual contracts** | *** | *** |
| **Short-term contracts** | *** | *** |
| **Spot sales** | *** | *** |
| Total | 100.0 | 100.0 |

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

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

U.S. producers reported long-term contract durations ranging from two to four years. Most producers reported that prices can be renegotiated during annual and long-term contracts. Two of six producers reported that long-term and annual contracts fix price, one reported that these contracts fix quantity, and one reported that these contracts fix price and quantity. All six responding U.S. producers reported that their long-term contract prices are indexed to raw material prices and five of six producers reported that their annual contract prices are indexed to raw material prices. Producers reported indexing prices to PTA and MEG prices published by Chemical Data and Wood Mackenzie.

Three purchasers reported that they purchase product daily, five purchase weekly, five purchase monthly, and two purchase quarterly. Most (16 of 18) responding purchasers reported that they did not expect their purchasing patterns to change in the next two years. Most (10 of 18) purchasers typically contact three or fewer suppliers before making a purchase, five purchasers reported contacting up to four or five suppliers, and three reported contacting up to seven or more suppliers.

## Sales terms and discounts

Most U.S. producers (7 of 9) and importers (5 of 9) typically quote prices on a delivered basis. Five of the nine responding U.S. producers reported total volume discounts, four reported quantity discounts, five reported other discounts, and two reported no discount policy. Eight of 16 responding importers reported no discount policy, 4 reported total volume discounts, two reported quantity discounts, and four reported other discounts such as discounts for early payment. U.S. producers *** and *** have rebate

programs for a few large accounts. *** offers some discounts for qualification or new products and stated that longer payment terms such as 60 or 90 days have become more common. Importer *** reported that a few large customers have negotiated discounts.

### Price leadership

Ten of 18 purchasers listed one or more price leaders in the U.S. market, with firms most often listing suppliers that have domestic production facilities. DuPont Teijin, Flex Films, and Mitsubishi were each listed by four purchasers; Toray was listed by three purchasers; and JBF, SKC, Polyplex USA, PPG, and Jiangsu Shuangxing were each listed by one purchaser. *** stated that DuPont Teijin is usually the first to announce price increases when input costs increase and that other suppliers soon follow, and *** stated that Flex Films, Polyplex USA, Mitsubishi, and Toray have a large share of the U.S. market and provide competitive pricing, comparable quality and availability. *** stated that DuPont Teijin, Flex Films, Polyplex USA, and Toray will announce a price increase even if PET resin prices go up but then often rescind the price increase. *** reported that Dupont Teijin, Mitsubishi, and Toray offer competitive pricing tied to feedstocks index data for MEG and PTA. *** stated that Flex Films offered low prices and JBF adjusted prices based on market trends and oil prices. *** stated that Flex Films "command{s}" the U.S. PET FSS market. *** stated that PPG and Mitsubishi are the first to request price increases and last to offer price decreases.

*** stated that although PET FSS produced by Jiangsu Shuangxing in China is subject to antidumping duties in the U.S. market, *** competitors purchase PET FSS from Jiangsu Shuangxing in non-U.S. markets at very low prices and can sell the downstream products at much lower prices than *** can sell its downstream products.

## 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 PET FSS products shipped to unrelated U.S. customers during January 2017-December 2019.

**Product 1.**-- 48 gauge plain film for packaging/industrial markets.

**Product 2.**-- 48 gauge corona-treated film for packaging/industrial markets.

**Product 3.**-- 48 gauge chemically treated film for packaging/industrial markets (*includes chemical coatings applied post-extrusion and during the extrusion process*).

**Product 4.**-- 92 gauge plain film for packaging/industrial markets.

**Product 5.**-- 500-1000 gauge plain film for industrial/electrical markets.

Seven U.S. producers and four importers provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.[5] [6] Pricing data reported by these firms accounted for approximately 23.9 percent of U.S. producers' commercial U.S. shipments of PET FSS, 69.7 percent of commercial U.S. shipments of subject imports from India, and 95.7 percent of commercial U.S. shipments of subject imports from Taiwan in 2019.

Price data for products 1-5 are presented in tables V-3 to V-7 and figures V-3 to V-7.

[5] 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.

[6] Two U.S. producers (***) did not provide data because they had no or almost no commercial shipments. One U.S. producer (***) provided unusable data and reported that it was not able to report its data by pricing product or on a quarterly basis.

Import price data for India were reported by *** and *** and useable import data for Taiwan were reported by ***. ***.

***.

**Table V-3**
**PET FSS: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 and margins of underselling/(overselling), by quarter, 2017-2019**

| | United States | | India | | | Taiwan | | |
|---|---|---|---|---|---|---|---|---|
| Period | Price (per pound) | Quantity (1,000 pounds) | Price (per pound) | Quantity (1,000 pounds) | Margin (percent) | Price (per pound) | Quantity (1,000 pounds) | Margin (percent) |
| **2017:** Jan.-Mar. | *** | *** | *** | *** | *** | *** | *** | *** |
| Apr.-June | *** | *** | *** | *** | *** | *** | *** | *** |
| July-Sept. | *** | *** | *** | *** | *** | *** | *** | *** |
| Oct.-Dec. | *** | *** | *** | *** | *** | *** | *** | *** |
| **2018:** Jan.-Mar. | *** | *** | *** | *** | *** | *** | *** | *** |
| Apr.-June | *** | *** | *** | *** | *** | *** | *** | *** |
| July-Sept. | *** | *** | *** | *** | *** | *** | *** | *** |
| Oct.-Dec. | *** | *** | *** | *** | *** | *** | *** | *** |
| **2019:** Jan.-Mar. | *** | *** | *** | *** | *** | *** | *** | *** |
| Apr.-June | *** | *** | *** | *** | *** | *** | *** | *** |
| July-Sept. | *** | *** | *** | *** | *** | *** | *** | *** |
| Oct.-Dec. | *** | *** | *** | *** | *** | *** | *** | *** |

Note: Product 1: 48 gauge plain film for packaging/industrial markets.

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

**Table V-4**
**PET FSS: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 and margins of underselling/(overselling), by quarter, 2017-2019**

| | United States | | India | | | Taiwan | | |
|---|---|---|---|---|---|---|---|---|
| Period | Price (per pound) | Quantity (1,000 pounds) | Price (per pound) | Quantity (1,000 pounds) | Margin (percent) | Price (per pound) | Quantity (1,000 pounds) | Margin (percent) |
| **2017:** Jan.-Mar. | *** | *** | *** | *** | *** | *** | *** | *** |
| Apr.-June | *** | *** | *** | *** | *** | *** | *** | *** |
| July-Sept. | *** | *** | *** | *** | *** | *** | *** | *** |
| Oct.-Dec. | *** | *** | *** | *** | *** | *** | *** | *** |
| **2018:** Jan.-Mar. | *** | *** | *** | *** | *** | *** | *** | *** |
| Apr.-June | *** | *** | *** | *** | *** | *** | *** | *** |
| July-Sept. | *** | *** | *** | *** | *** | *** | *** | *** |
| Oct.-Dec. | *** | *** | *** | *** | *** | *** | *** | *** |
| **2019:** Jan.-Mar. | *** | *** | *** | *** | *** | *** | *** | *** |
| Apr.-June | *** | *** | *** | *** | *** | *** | *** | *** |
| July-Sept. | *** | *** | *** | *** | *** | *** | *** | *** |
| Oct.-Dec. | *** | *** | *** | *** | *** | *** | *** | *** |

Note: Product 2: 48 gauge corona-treated film for packaging/industrial markets.

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

**Table V-5**
**PET FSS: Weighted-average f.o.b. prices and quantities of domestic and imported product 3 and margins of underselling/(overselling), by quarter, 2017-2019**

| | United States | | India | | | Taiwan | | |
|---|---|---|---|---|---|---|---|---|
| Period | Price (per pound) | Quantity (1,000 pounds) | Price (per pound) | Quantity (1,000 pounds) | Margin (percent) | Price (per pound) | Quantity (1,000 pounds) | Margin (percent) |
| **2017:** Jan.-Mar. | *** | *** | *** | *** | *** | *** | *** | *** |
| Apr.-June | *** | *** | *** | *** | *** | *** | *** | *** |
| July-Sept. | *** | *** | *** | *** | *** | *** | *** | *** |
| Oct.-Dec. | *** | *** | *** | *** | *** | *** | *** | *** |
| **2018:** Jan.-Mar. | *** | *** | *** | *** | *** | *** | *** | *** |
| Apr.-June | *** | *** | *** | *** | *** | *** | *** | *** |
| July-Sept. | *** | *** | *** | *** | *** | *** | *** | *** |
| Oct.-Dec. | *** | *** | *** | *** | *** | *** | *** | *** |
| **2019:** Jan.-Mar. | *** | *** | *** | *** | *** | *** | *** | *** |
| Apr.-June | *** | *** | *** | *** | *** | *** | *** | *** |
| July-Sept. | *** | *** | *** | *** | *** | *** | *** | *** |
| Oct.-Dec. | *** | *** | *** | *** | *** | *** | *** | *** |

Note: Product 3: 48 gauge chemically treated film for packaging/industrial markets (*includes chemical coatings applied post-extrusion and during the extrusion process*).

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

**Table V-6**
**PET FSS: Weighted-average f.o.b. prices and quantities of domestic and imported product 4 and margins of underselling/(overselling), by quarter, 2017-2019**

| Period | United States | | India | | | Taiwan | | |
|---|---|---|---|---|---|---|---|---|
| | Price (per pound) | Quantity (1,000 pounds) | Price (per pound) | Quantity (1,000 pounds) | Margin (percent) | Price (per pound) | Quantity (1,000 pounds) | Margin (percent) |
| **2017:** Jan.-Mar. | *** | *** | *** | *** | *** | *** | *** | *** |
| Apr.-June | *** | *** | *** | *** | *** | *** | *** | *** |
| July-Sept. | *** | *** | *** | *** | *** | *** | *** | *** |
| Oct.-Dec. | *** | *** | *** | *** | *** | *** | *** | *** |
| **2018:** Jan.-Mar. | *** | *** | *** | *** | *** | *** | *** | *** |
| Apr.-June | *** | *** | *** | *** | *** | *** | *** | *** |
| July-Sept. | *** | *** | *** | *** | *** | *** | *** | *** |
| Oct.-Dec. | *** | *** | *** | *** | *** | *** | *** | *** |
| **2019:** Jan.-Mar. | *** | *** | *** | *** | *** | *** | *** | *** |
| Apr.-June | *** | *** | *** | *** | *** | *** | *** | *** |
| July-Sept. | *** | *** | *** | *** | *** | *** | *** | *** |
| Oct.-Dec. | *** | *** | *** | *** | *** | *** | *** | *** |

Note: Product 4: 92 gauge plain film for packaging/industrial markets.

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

**Table V-7**
**PET FSS: Weighted-average f.o.b. prices and quantities of domestic and imported product 5 and margins of underselling/(overselling), by quarter, 2017-2019**

| Period | United States | | India | | | Taiwan | | |
|---|---|---|---|---|---|---|---|---|
| | Price (per pound) | Quantity (1,000 pounds) | Price (per pound) | Quantity (1,000 pounds) | Margin (percent) | Price (per pound) | Quantity (1,000 pounds)) | Margin (percent) |
| **2017:** Jan.-Mar. | *** | *** | *** | *** | *** | *** | *** | *** |
| Apr.-June | *** | *** | *** | *** | *** | *** | *** | *** |
| July-Sept. | *** | *** | *** | *** | *** | *** | *** | *** |
| Oct.-Dec. | *** | *** | *** | *** | *** | *** | *** | *** |
| **2018:** Jan.-Mar. | *** | *** | *** | *** | *** | *** | *** | *** |
| Apr.-June | *** | *** | *** | *** | *** | *** | *** | *** |
| July-Sept. | *** | *** | *** | *** | *** | *** | *** | *** |
| Oct.-Dec. | *** | *** | *** | *** | *** | *** | *** | *** |
| **2019:** Jan.-Mar. | *** | *** | *** | *** | *** | *** | *** | *** |
| Apr.-June | *** | *** | *** | *** | *** | *** | *** | *** |
| July-Sept. | *** | *** | *** | *** | *** | *** | *** | *** |
| Oct.-Dec. | *** | *** | *** | *** | *** | *** | *** | *** |

Note: Product 5: 500-1000 gauge plain film for industrial/electrical markets.

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

**Figure V-3**
**PET FSS: Weighted-average prices and quantities of domestic and imported product 1, by quarter, 2017-2019**

* * * * * * *

**Figure V-4**
**PET FSS: Weighted-average prices and quantities of domestic and imported product 2, by quarter, 2017-2019**

* * * * * * *

**Figure V-5**
**PET FSS: Weighted-average prices and quantities of domestic and imported product 3, by quarter, 2017-2019**

* * * * * * *

**Figure V-6**
**PET FSS: Weighted-average prices and quantities of domestic and imported product 4, by quarter, 2017-2019**

* * * * * * *

**Figure V-7**
**PET FSS: Weighted-average prices and quantities of domestic and imported product 5, by quarter, 2017-2019**

* * * * * * *

## Price trends

In general, U.S. producers' prices increased in 2017 and 2018 and decreased in 2019. Table V-8 summarizes the price trends, by country and by product. As shown in the table, during 2017-19, domestic price increases for products 1-3 ranged from 14.5 to 19.3 percent and decreases for products 4 and 5 ranged from 15.1 to 18.1 percent. Reported data for subject imports were limited and generally had small quantities or no sales in each quarter. Domestic interested parties stated that PET film prices in the U.S. market have declined in 2020, driven by low-priced imports, decreasing raw material costs, and competition from new market entrants.[7]

**Table V-8**
**PET FSS: Summary of weighted-average f.o.b. prices for products 1-4 from the United States and India and Taiwan, 2017-19**

| Item | Number of quarters | Low price (per pound) | High price (per pound) | Change in price[1] (percent) |
|---|---|---|---|---|
| **Product 1:** | | | | |
| United States | 12 | *** | *** | *** |
| India | 12 | *** | *** | *** |
| Taiwan | --- | *** | *** | *** |
| **Product 2:** | | | | |
| United States | 12 | *** | *** | *** |
| India | 10 | *** | *** | *** |
| Taiwan | --- | *** | *** | *** |
| **Product 3:** | | | | |
| United States | 12 | *** | *** | *** |
| India | 12 | *** | *** | *** |
| Taiwan | --- | *** | *** | *** |
| **Product 4:** | | | | |
| United States | 12 | *** | *** | *** |
| India | 9 | *** | *** | *** |
| Taiwan | 12 | *** | *** | *** |
| **Product 5:** | | | | |
| United States | 12 | *** | *** | *** |
| India | 12 | *** | *** | *** |
| Taiwan | 12 | *** | *** | *** |

Note: Percentage change from the first quarter in which data were available to the last quarter in which price data were available.

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

[7] Domestic interested parties' posthearing brief, p. 35.

### Price comparisons

As shown in table V-9, prices for PET FSS imported from India and Taiwan were below those for U.S.-produced product in 10 of 79 instances; margins of underselling ranged from 4.1 to 29.0 percent. In the remaining 69 instances, prices for PET FSS from India and Taiwan were between 2.3 and 162.3 percent above prices for the domestic product.

## Prices in markets outside of the United States

In comparing prices of PET FSS in the U.S. market to prices in other markets, U.S. producers reported that prices in the United States are generally higher than in other markets such as Europe and Asia. *** stated that prices for thin (48-gauge) PET film in the U.S. market are $0.30 to $0.40 per pound higher than in China and Europe. *** stated that prices for pressure sensitive PET FSS industrial product are 3 to 4 percent lower in Europe than in the United States.

Importers generally did not have information on prices in other markets, although *** stated that prices in other countries (for example Canada, China, and India) are generally lower if the market is not restricted. *** stated that prices in the U.S. market “are very competitive and generally on higher side as compared to non-U.S. markets.” Price comparisons reported by foreign producers are discussed in the subject imports supply section in Part II.

**Table V-9**
**PET FSS: Instances of underselling/overselling and the range and average of margins, by country, 2017-19**

| Source | Underselling | | | | |
|---|---|---|---|---|---|
| | Number of quarters | Quantity (1,000 pounds) | Average margin (percent) | Margin Range (percent) | |
| | | | | Min | Max |
| Product 1 | 3 | *** | *** | *** | *** |
| Product 2 | 1 | *** | *** | *** | *** |
| Product 3 | 4 | *** | *** | *** | *** |
| Product 4 | 1 | *** | *** | *** | *** |
| Product 5 | 1 | *** | *** | *** | *** |
| Total, underselling | 10 | *** | *** | *** | *** |
| India | 9 | *** | *** | *** | *** |
| Taiwan | 1 | *** | *** | *** | *** |
| Total, underselling | 10 | 3,196 | 13.2 | 4.1 | 29.0 |
| **Source** | **(Overselling)** | | | | |
| | Number of quarters | Quantity (1,000 pounds) | Average margin (percent) | Margin Range (percent) | |
| | | | | Min | Max |
| Product 1 | 9 | *** | *** | *** | *** |
| Product 2 | 9 | *** | *** | *** | *** |
| Product 3 | 8 | *** | *** | *** | *** |
| Product 4 | 20 | *** | *** | *** | *** |
| Product 5 | 23 | *** | *** | *** | *** |
| Total, overselling | 69 | *** | *** | *** | *** |
| India | 46 | *** | *** | *** | *** |
| Taiwan | 23 | *** | *** | *** | *** |
| Total, overselling | 69 | 11,484 | (55.5) | (2.3) | (162.3) |

Note: In the original investigations, subject imports from India were priced lower than domestic product in 132 of 157 comparisons, with underselling margins ranging from *** percent; and subject imports from Taiwan were priced lower than domestic product in 51 of 82 comparisons, with underselling margins ranging from *** percent. Original investigation confidential report, appendix E. In the first reviews, subject imports from India were priced lower than domestic product in 30 of 41 comparisons, with an average underselling margin of 10.3 percent; and subject imports from Taiwan were priced lower than domestic product in 59 of 72 comparisons, with an average underselling margin of 22.8 percent. First review publication, p. V-12. In the second reviews, subject imports from India were priced lower than domestic product in 22 of 42 comparisons, with underselling margins ranging from 0.6 to 28.0 percent; and subject imports from Taiwan were priced lower than domestic product in 35 of 94 comparisons, with underselling margins ranging from 0.1 to 69.6 percent. Second review publication, p. V-8.

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

# 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 |
|---|---|---|
| 84 FR 31304, July 1, 2019 | *Initiation of Five-Year (Sunset) Reviews* | https://www.govinfo.gov/content/pkg/FR-2019-07-01/pdf/2019-13984.pdf |
| 84 FR 31343, July 1, 2019 | *Polyethylene Terephthalate Film, Sheet, and Strip From India and Taiwan; Institution of Five-Year Reviews* | https://www.govinfo.gov/content/pkg/FR-2019-07-01/pdf/2019-13856.pdf |
| 84 FR 67960, December 12, 2019 | *Polyethylene Terephthalate Film, Sheet, and Strip From India and Taiwan; Notice of Commission Determination To Conduct Full Five-Year Reviews* | https://www.govinfo.gov/content/pkg/FR-2019-12-12/pdf/2019-26725.pdf |
| 84 FR 59355, November 4, 2019 | *Polyethylene Terephthalate Film, Sheet and Strip From India and Taiwan: Final Results of the Expedited Third Sunset Reviews of the Antidumping Duty Order* | https://www.govinfo.gov/content/pkg/FR-2019-11-04/pdf/2019-24044.pdf |
| 85 FR 16957, March 25, 2020 | *Polyethylene Terephthalate (PET) Film From India and Taiwan; Scheduling of Full Five-Year Reviews* | https://www.govinfo.gov/content/pkg/FR-2020-03-25/pdf/2020-06199.pdf |
| 85 FR 43602, July 17, 2020 | *Polyethylene Terephthalate (PET) Film From India and Taiwan; Cancellation of Hearing for Third Full Five-Year Reviews* | https://www.govinfo.gov/content/pkg/FR-2020-07-17/pdf/2020-15460.pdf |

Note.–The press release announcing the Commission's determinations concerning adequacy and the conduct of a full review, a summary of the Commission's votes concerning adequacy and the conduct of a full review, and the Commission's explanation of its determinations can be found at https://www.usitc.gov/investigations/701731/2019/polyethylene_terephthalate_pet_film_india_and/third_review_full.htm.

# APPENDIX B

# HEARING CANCELLATION REQUEST

July 9, 2020

Inv. Nos. 701-TA-415 and 731-TA-933 and 934 (Third Review)

**PUBLIC DOCUMENT**

**VIA ELECTRONIC FILING (EDIS)**

The Honorable Lisa R. Barton
Secretary to the Commission
U.S. International Trade Commission
500 E Street, SW, Room 112
Washington, DC 20436

**Re:** ***Polyethylene Terephthalate Film, Sheet, and Strip from India and Taiwan*:**
**Request to Consider Cancellation of Hearing**

Dear Secretary Barton:

On behalf of DuPont Teijin Films, Mitsubishi Polyester Film, Inc., SKC, Inc., and Toray Plastics (America), Inc. (collectively, "Petitioners"), and in conjunction with counsel for Polyplex USA, LLC ("Polyplex"), we hereby respectfully request that the Commission consider cancelling the hearing in the above-captioned five-year (sunset) reviews of the antidumping duty orders on Polyethylene Terephthalate Film, Sheet, and Strip from India and Taiwan and the countervailing duty order on Polyethylene Terephthalate Film, Sheet, and Strip from India (the "Orders").

The Commission previously scheduled a hearing for 9:30 a.m. on July 16, 2020, and asked that requests to appear at the hearing be filed by July 8, 2020.[1] On July 8, Petitioners and Polyplex timely submitted requests to appear at the hearing.[2] Both Petitioners and Polyplex

[1] *See Polyethylene Terephthalate (PET) Film from India and Taiwan; Scheduling of Full Five-Year Reviews*, 85 Fed. Reg. 16,957 (US Int'l Trade Commn. Mar. 25, 2020).

[2] *See* DuPont Teijin Films et al., Request to Appear at Hearing (July 8, 2020); Polyplex USA, Request to Appear at Hearing (July 8, 2020).

support continuation of the Orders. To the best of our knowledge, no other party, and notably no interested party opposing continuation of the Orders, has submitted a request to appear at the hearing.

In the previous reviews of the Orders, the Commission decided to cancel its scheduled hearing under similar circumstances.[3] Accordingly, and in the interest of conserving the Commission's resources, as well as those of Petitioners and Polyplex, we respectfully request that the Commission consider cancelling the hearing in the instant review as well. Petitioners and Polyplex will gladly respond in writing to any questions the Commission may have. Alternatively, if the Commission decides to move forward with the scheduled hearing, Petitioners and Polyplex will participate as previously indicated.

We are serving this submission in accordance with the attached certificate of service. Please contact us if you have any questions.

Sincerely,

/s/ Patrick J. McLain
Patrick J. McLain
Sarah S. Sprinkle
Stephanie E. Hartmann
Semira Nikou
WILMER CUTLER PICKERING
HALE and DORR LLP

*Counsel to DuPont Teijin Films, Mitsubishi Polyester Film, Inc., SKC, Inc., and Toray Plastics (America), Inc.*

/s/ Aman Kakar
Aman Kakar
Leah N. Scarpelli
ARENT FOX LLP

*Counsel to Polyplex USA, LLC*

[3] *See* Polyethylene Terephthalate Film, Sheet, and Strip from India and Taiwan: Revised Schedule for the Subject Reviews (May 14, 2014).

# APPENDIX C

# SUMMARY DATA

**Table C-1**
**PET FSS: Summary data concerning the U.S. market, 2017-19**

(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 | | | Comparison years | | |
| | 2017 | 2018 | 2019 | 2017-19 | 2017-18 | 2018-19 |
| U.S. consumption quantity: | | | | | | |
| Amount | 633,785 | 631,178 | 613,830 | ▼(3.1) | ▼(0.4) | ▼(2.7) |
| Producers' share (fn1) | 88.8 | 88.3 | 87.8 | ▼(1.0) | ▼(0.6) | ▼(0.4) |
| Importers' share (fn1): | | | | | | |
| India | 1.5 | 0.7 | 0.4 | ▼(1.1) | ▼(0.7) | ▼(0.3) |
| Taiwan | 1.1 | 1.7 | 1.6 | ▲0.5 | ▲0.6 | ▼(0.1) |
| Subject sources | 2.5 | 2.4 | 1.9 | ▼(0.6) | ▼(0.2) | ▼(0.4) |
| Nonsubject sources | 8.6 | 9.4 | 10.2 | ▲1.6 | ▲0.7 | ▲0.9 |
| All import sources | 11.2 | 11.7 | 12.2 | ▲1.0 | ▲0.6 | ▲0.4 |
| U.S. consumption value: | | | | | | |
| Amount | 996,421 | 1,045,507 | 992,564 | ▼(0.4) | ▲4.9 | ▼(5.1) |
| Producers' share (fn1) | 90.4 | 89.8 | 89.0 | ▼(1.4) | ▼(0.6) | ▼(0.8) |
| Importers' share (fn1): | | | | | | |
| India | 1.0 | 0.6 | 0.4 | ▼(0.5) | ▼(0.4) | ▼(0.2) |
| Taiwan | 1.3 | 1.6 | 1.6 | ▲0.3 | ▲0.4 | ▼(0.0) |
| Subject sources | 2.2 | 2.2 | 2.0 | ▼(0.2) | ▼(0.0) | ▼(0.2) |
| Nonsubject sources | 7.3 | 8.0 | 8.9 | ▲1.6 | ▲0.6 | ▲1.0 |
| All import sources | 9.6 | 10.2 | 11.0 | ▲1.4 | ▲0.6 | ▲0.8 |
| U.S. importers' U.S. shipments of imports from: | | | | | | |
| India: | | | | | | |
| Quantity | 9,213 | 4,457 | 2,241 | ▼(75.7) | ▼(51.6) | ▼(49.7) |
| Value | 9,612 | 6,005 | 4,143 | ▼(56.9) | ▼(37.5) | ▼(31.0) |
| Unit value | $1.04 | $1.35 | $1.85 | ▲77.2 | ▲29.1 | ▲37.2 |
| Ending inventory quantity | *** | *** | *** | ▼*** | ▼*** | ▲*** |
| Taiwan: | | | | | | |
| Quantity | 6,792 | 10,422 | 9,584 | ▲41.1 | ▲53.4 | ▼(8.0) |
| Value | 12,486 | 17,052 | 15,820 | ▲26.7 | ▲36.6 | ▼(7.2) |
| Unit value | $1.84 | $1.64 | $1.65 | ▼(10.2) | ▼(11.0) | ▲0.9 |
| Ending inventory quantity | *** | *** | *** | ▲*** | ▲*** | ▲*** |
| Subject sources: | | | | | | |
| Quantity | 16,005 | 14,879 | 11,825 | ▼(26.1) | ▼(7.0) | ▼(20.5) |
| Value | 22,098 | 23,057 | 19,963 | ▼(9.7) | ▲4.3 | ▼(13.4) |
| Unit value | $1.38 | $1.55 | $1.69 | ▲22.3 | ▲12.2 | ▲8.9 |
| Ending inventory quantity | *** | *** | *** | ▲*** | ▼*** | ▲*** |
| Nonsubject sources: | | | | | | |
| Quantity | 54,689 | 59,057 | 62,805 | ▲14.8 | ▲8.0 | ▲6.3 |
| Value | 73,109 | 83,173 | 88,756 | ▲21.4 | ▲13.8 | ▲6.7 |
| Unit value | $1.34 | $1.41 | $1.41 | ▲5.7 | ▲5.4 | ▲0.3 |
| Ending inventory quantity | *** | *** | *** | ▲*** | ▲*** | ▲*** |
| All import sources: | | | | | | |
| Quantity | 70,694 | 73,936 | 74,630 | ▲5.6 | ▲4.6 | ▲0.9 |
| Value | 95,207 | 106,230 | 108,719 | ▲14.2 | ▲11.6 | ▲2.3 |
| Unit value | $1.35 | $1.44 | $1.46 | ▲8.2 | ▲6.7 | ▲1.4 |
| Ending inventory quantity | *** | *** | *** | ▲*** | ▲*** | ▲*** |

Table continued on next page.

**Table C-1--Continued**
**PET FSS: Summary data concerning the U.S. market, 2017-19**

(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 | | | Comparison years | | |
| | 2017 | 2018 | 2019 | 2017-19 | 2017-18 | 2018-19 |
| U.S. producers': | | | | | | |
| Average capacity quantity | 713,967 | 712,986 | 721,476 | ▲1.1 | ▼(0.1) | ▲1.2 |
| Production quantity | 593,985 | 596,352 | 556,197 | ▼(6.4) | ▲0.4 | ▼(6.7) |
| Capacity utilization (fn1) | 83.2 | 83.6 | 77.1 | ▼(6.1) | ▲0.4 | ▼(6.5) |
| U.S. shipments: | | | | | | |
| Quantity | 563,091 | 557,242 | 539,200 | ▼(4.2) | ▼(1.0) | ▼(3.2) |
| Value | 901,214 | 939,277 | 883,845 | ▼(1.9) | ▲4.2 | ▼(5.9) |
| Unit value | $1.60 | $1.69 | $1.64 | ▲2.4 | ▲5.3 | ▼(2.8) |
| Export shipments: | | | | | | |
| Quantity | *** | *** | *** | ▼*** | ▲*** | ▼*** |
| Value | *** | *** | *** | ▲*** | ▲*** | ▼*** |
| Unit value | *** | *** | *** | ▲*** | ▲*** | ▼*** |
| Ending inventory quantity | 177,319 | 183,102 | 174,271 | ▼(1.7) | ▲3.3 | ▼(4.8) |
| Inventories/total shipments (fn1) | *** | *** | *** | ▲*** | ▲*** | ▼*** |
| Production workers | 1,698 | 1,681 | 1,620 | ▼(4.6) | ▼(1.0) | ▼(3.6) |
| Hours worked (1,000s) | 3,997 | 4,064 | 3,935 | ▼(1.6) | ▲1.7 | ▼(3.2) |
| Wages paid ($1,000) | 129,420 | 128,717 | 123,711 | ▼(4.4) | ▼(0.5) | ▼(3.9) |
| Hourly wages | $32.38 | $31.67 | $31.44 | ▼(2.9) | ▼(2.2) | ▼(0.7) |
| Productivity (pounds per hour) | 148.6 | 146.7 | 141.3 | ▼(4.9) | ▼(1.3) | ▼(3.7) |
| Unit labor costs | $0.22 | $0.22 | $0.22 | ▲2.1 | ▼(0.9) | ▲3.0 |
| Net sales: | | | | | | |
| Quantity | 562,009 | 560,773 | 561,104 | ▼(0.2) | ▼(0.2) | ▲0.1 |
| Value | 956,742 | 998,348 | 947,916 | ▼(0.9) | ▲4.3 | ▼(5.1) |
| Unit value | $1.70 | $1.78 | $1.69 | ▼(0.8) | ▲4.6 | ▼(5.1) |
| Cost of goods sold (COGS) | 808,580 | 861,840 | 838,727 | ▲3.7 | ▲6.6 | ▼(2.7) |
| Gross profit of (loss) (fn2) | 148,162 | 136,508 | 109,189 | ▼(26.3) | ▼(7.9) | ▼(20.0) |
| SG&A expenses | 86,660 | 89,665 | 87,484 | ▲1.0 | ▲3.5 | ▼(2.4) |
| Operating income or (loss) (fn2) | 61,502 | 46,843 | 21,705 | ▼(64.7) | ▼(23.8) | ▼(53.7) |
| Net income or (loss) (fn2) | 41,918 | 22,226 | 3,328 | ▼(92.1) | ▼(47.0) | ▼(85.0) |
| Capital expenditures | *** | *** | *** | ▼*** | ▼*** | ▼*** |
| Research and development expenses | 14,283 | 14,271 | 14,420 | ▲1.0 | ▼(0.1) | ▲1.0 |
| Net assets | 793,137 | 800,231 | 771,377 | ▼(2.7) | ▲0.9 | ▼(3.6) |
| Unit COGS | $1.44 | $1.54 | $1.49 | ▲3.9 | ▲6.8 | ▼(2.7) |
| Unit SG&A expenses | $0.15 | $0.16 | $0.16 | ▲1.1 | ▲3.7 | ▼(2.5) |
| Unit operating income or (loss) (fn2) | $0.11 | $0.08 | $0.04 | ▼(64.7) | ▼(23.7) | ▼(53.7) |
| Unit net income or (loss) (fn2) | $0.07 | $0.04 | $0.01 | ▼(92.0) | ▼(46.9) | ▼(85.0) |
| COGS/sales (fn1) | 84.5 | 86.3 | 88.5 | ▲4.0 | ▲1.8 | ▲2.2 |
| Operating income or (loss)/sales (fn1) | 6.4 | 4.7 | 2.3 | ▼(4.1) | ▼(1.7) | ▼(2.4) |
| Net income or (loss)/sales (fn1) | 4.4 | 2.2 | 0.4 | ▼(4.0) | ▼(2.2) | ▼(1.9) |

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 "---". Shares preceded by a "▲" represent an increase, while shares 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.

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

# APPENDIX D

# FIRMS' NARRATIVES ON THE IMPACT OF THE ORDERS AND THE LIKELY IMPACT OF REVOCATION

**Table D-1**

**PET FSS: Firms' narratives on the impact of the orders and the likely impact of revocation**

| U.S. producers: Effect of orders: | |
|---|---|
| **Item / Firm** | **Narrative** |
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |

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**Table D-1-- Continued**

**PET FSS: Firms' narratives on the impact of the orders and the likely impact of revocation**

| U.S. producers: Likely impact of revocation: | |
|---|---|
| **Item / Firm** | **Narrative** |
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |

Table continued on next page.

**Table D-1-- Continued**

**PET FSS: Firms' narratives on the impact of the orders and the likely impact of revocation**

| U.S. producers: Likely impact of revocation: | |
|---|---|
| **Item / Firm** | **Narrative** |
| *** | *** |
| *** | *** |
| *** | *** |

Table continued on next page.

**Table D-1-- Continued**

**PET FSS: Firms' narratives on the impact of the orders and the likely impact of revocation**

| U.S. importers: Effect of orders: | |
|---|---|
| **Item / Firm** | **Narrative** |
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |
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| *** | *** |

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**Table D-1-- Continued**

**PET FSS: Firms' narratives on the impact of the orders and the likely impact of revocation**

| U.S. importers: Likely impact of revocation of orders: | |
|---|---|
| **Item / Firm** | **Narrative** |
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |

Table continued on next page.

**Table D-1-- Continued**

**PET FSS: Firms' narratives on the impact of the orders and the likely impact of revocation**

| U.S. purchasers: Anticipated changes in industry: | |
|---|---|
| **Item / Firm** | **Narrative** |
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |
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| *** | *** |
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| *** | *** |
| *** | *** |

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**Table D-1-- Continued**

**PET FSS: Firms' narratives on the impact of the orders and the likely impact of revocation**

| U.S. purchasers: Likely impact of revocation: | |
|---|---|
| **Item / Firm** | **Narrative** |
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |
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| *** | *** |
| *** | *** |
| *** | *** |

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**Table D-1-- Continued**

**PET FSS: Firms' narratives on the impact of the orders and the likely impact of revocation**

| **Foreign producers or exporters: Effect of orders:** | |
|---|---|
| **Item / Firm** | **Narrative** |
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |
| **Foreign producers or exporters: Likely effect of revocation of order:** | |
| **Item / Firm** | **Narrative** |
| *** | *** |
| *** | *** |
| *** | *** |
| *** | *** |

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

# APPENDIX E

# U.S. SHIPMENTS BY THICKNESS AND WIDTH

**Table E-1**
**PET FSS: U.S. producers' U.S. shipments by thickness and width**

| Thickness | U.S. producer shipments | | |
|---|---|---|---|
| | Widths of 3" or less | Widths greater than 3" | All Widths |
| | **Quantity (1,000 pounds)** | | |
| PET Film | *** | *** | *** |
| Thin PET sheet | *** | *** | *** |
| Thick PET sheet | *** | *** | *** |
| All Thicknesses | *** | *** | *** |
| | **Value (1,000 dollars)** | | |
| PET Film | *** | *** | *** |
| Thin PET sheet | *** | *** | *** |
| Thick PET sheet | *** | *** | *** |
| All Thicknesses | *** | *** | *** |
| | **Unit Value (dollars per pound)** | | |
| PET Film | *** | *** | *** |
| Thin PET sheet | *** | *** | *** |
| Thick PET sheet | *** | *** | *** |
| All Thicknesses | *** | *** | *** |
| | **Share of quantity down (percent)** | | |
| PET Film | *** | *** | *** |
| Thin PET sheet | *** | *** | *** |
| Thick PET sheet | *** | *** | *** |
| All Thicknesses | *** | *** | *** |
| | **Share of quantity across (percent)** | | |
| PET Film | *** | *** | *** |
| Thin PET sheet | *** | *** | *** |
| Thick PET sheet | *** | *** | *** |
| All Thicknesses | *** | *** | *** |
| | **Ratio to overall apparent consumption** | | |
| PET Film | *** | *** | *** |
| Thin PET sheet | *** | *** | *** |
| Thick PET sheet | *** | *** | *** |
| All Thicknesses | *** | *** | *** |

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

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

**Table E-2**
**PET FSS: U.S shipments imported from India by thickness and width**

| Thickness | India | | |
|---|---|---|---|
| | Widths of 3" or less | Widths greater than 3" | All Widths |
| | **Quantity (1,000 pounds)** | | |
| PET Film | *** | *** | *** |
| Thin PET sheet | *** | *** | *** |
| Thick PET sheet | *** | *** | *** |
| All Thicknesses | *** | *** | *** |
| | **Value (1,000 dollars)** | | |
| PET Film | *** | *** | *** |
| Thin PET sheet | *** | *** | *** |
| Thick PET sheet | *** | *** | *** |
| All Thicknesses | *** | *** | *** |
| | **Unit Value (dollars per pound)** | | |
| PET Film | *** | *** | *** |
| Thin PET sheet | *** | *** | *** |
| Thick PET sheet | *** | *** | *** |
| All Thicknesses | *** | *** | *** |
| | **Share of quantity down (percent)** | | |
| PET Film | *** | *** | *** |
| Thin PET sheet | *** | *** | *** |
| Thick PET sheet | *** | *** | *** |
| All Thicknesses | *** | *** | *** |
| | **Share of quantity across (percent)** | | |
| PET Film | *** | *** | *** |
| Thin PET sheet | *** | *** | *** |
| Thick PET sheet | *** | *** | *** |
| All Thicknesses | *** | *** | *** |
| | **Ratio to overall apparent consumption** | | |
| PET Film | *** | *** | *** |
| Thin PET sheet | *** | *** | *** |
| Thick PET sheet | *** | *** | *** |
| All Thicknesses | *** | *** | *** |

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

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

**Table E-3**
**PET FSS: U.S shipments imported from Taiwan by thickness and width**

| Thickness | Taiwan | | |
|---|---|---|---|
| | Widths of 3" or less | Widths greater than 3" | All Widths |
| | **Quantity (1,000 pounds)** | | |
| PET Film | *** | *** | *** |
| Thin PET sheet | *** | *** | *** |
| Thick PET sheet | *** | *** | *** |
| All Thicknesses | *** | *** | *** |
| | **Value (1,000 dollars)** | | |
| PET Film | *** | *** | *** |
| Thin PET sheet | *** | *** | *** |
| Thick PET sheet | *** | *** | *** |
| All Thicknesses | *** | *** | *** |
| | **Unit Value (dollars per pound)** | | |
| PET Film | *** | *** | *** |
| Thin PET sheet | *** | *** | *** |
| Thick PET sheet | *** | *** | *** |
| All Thicknesses | *** | *** | *** |
| | **Share of quantity down (percent)** | | |
| PET Film | *** | *** | *** |
| Thin PET sheet | *** | *** | *** |
| Thick PET sheet | *** | *** | *** |
| All Thicknesses | *** | *** | *** |
| | **Share of quantity across (percent)** | | |
| PET Film | *** | *** | *** |
| Thin PET sheet | *** | *** | *** |
| Thick PET sheet | *** | *** | *** |
| All Thicknesses | *** | *** | *** |
| | **Ratio to overall apparent consumption** | | |
| PET Film | *** | *** | *** |
| Thin PET sheet | *** | *** | *** |
| Thick PET sheet | *** | *** | *** |
| All Thicknesses | *** | *** | *** |

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

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

**Table E-4**
**PET FSS: U.S shipments imported from subject countries by thickness and width**

| Thickness | Subject countries | | |
|---|---|---|---|
| | Widths of 3" or less | Widths greater than 3" | All Widths |
| | **Quantity (1,000 pounds)** | | |
| PET Film | *** | *** | *** |
| Thin PET sheet | *** | *** | *** |
| Thick PET sheet | *** | *** | *** |
| All Thicknesses | *** | *** | *** |
| | **Value (1,000 dollars)** | | |
| PET Film | *** | *** | *** |
| Thin PET sheet | *** | *** | *** |
| Thick PET sheet | *** | *** | *** |
| All Thicknesses | *** | *** | *** |
| | **Unit Value (dollars per pound)** | | |
| PET Film | *** | *** | *** |
| Thin PET sheet | *** | *** | *** |
| Thick PET sheet | *** | *** | *** |
| All Thicknesses | *** | *** | *** |
| | **Share of quantity down (percent)** | | |
| PET Film | *** | *** | *** |
| Thin PET sheet | *** | *** | *** |
| Thick PET sheet | *** | *** | *** |
| All Thicknesses | *** | *** | *** |
| | **Share of quantity across (percent)** | | |
| PET Film | *** | *** | *** |
| Thin PET sheet | *** | *** | *** |
| Thick PET sheet | *** | *** | *** |
| All Thicknesses | *** | *** | *** |
| | **Ratio to overall apparent consumption** | | |
| PET Film | *** | *** | *** |
| Thin PET sheet | *** | *** | *** |
| Thick PET sheet | *** | *** | *** |
| All Thicknesses | *** | *** | *** |

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

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

**Table E-5**
**PET FSS: U.S shipments imported from nonsubject countries by thickness and width**

| Thickness | Nonsubject countries | | |
|---|---|---|---|
| | Widths of 3" or less | Widths greater than 3" | All Widths |
| | **Quantity (1,000 pounds)** | | |
| PET Film | *** | *** | *** |
| Thin PET sheet | *** | *** | *** |
| Thick PET sheet | *** | *** | *** |
| All Thicknesses | *** | *** | *** |
| | **Value (1,000 dollars)** | | |
| PET Film | *** | *** | *** |
| Thin PET sheet | *** | *** | *** |
| Thick PET sheet | *** | *** | *** |
| All Thicknesses | *** | *** | *** |
| | **Unit Value (dollars per pound)** | | |
| PET Film | *** | *** | *** |
| Thin PET sheet | *** | *** | *** |
| Thick PET sheet | *** | *** | *** |
| All Thicknesses | *** | *** | *** |
| | **Share of quantity down (percent)** | | |
| PET Film | *** | *** | *** |
| Thin PET sheet | *** | *** | *** |
| Thick PET sheet | *** | *** | *** |
| All Thicknesses | *** | *** | *** |
| | **Share of quantity across (percent)** | | |
| PET Film | *** | *** | *** |
| Thin PET sheet | *** | *** | *** |
| Thick PET sheet | *** | *** | *** |
| All Thicknesses | *** | *** | *** |
| | **Ratio to overall apparent consumption** | | |
| PET Film | *** | *** | *** |
| Thin PET sheet | *** | *** | *** |
| Thick PET sheet | *** | *** | *** |
| All Thicknesses | *** | *** | *** |

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

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