

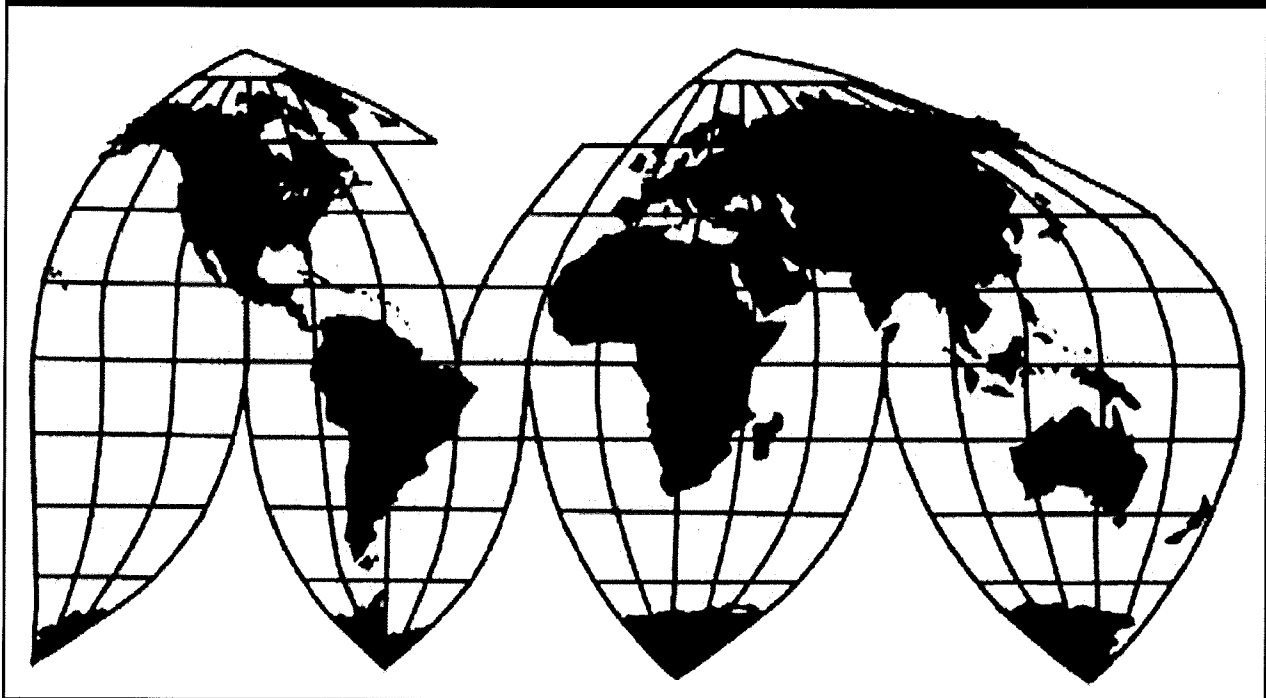
# **Polyethylene Terephthalate Film, Sheet, and Strip from Brazil, China, and the United Arab Emirates**

Investigation Nos. 731-TA-1131-1132, and 1134 (Review)

Publication 4512

January 2015

**U.S. International Trade Commission**



Washington, DC 20436

# U.S. International Trade Commission

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Note.—Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted. Such deletions are indicated by asterisks.



## UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation No. 731-TA-1131-1132, and 1134 (Review)

POLYETHYLENE TEREPHTHALATE FILM, SHEET, AND STRIP FROM BRAZIL, CHINA, AND THE UNITED ARAB EMIRATES

### DETERMINATION

On the basis of the record<sup>1</sup> developed in the subject five-year reviews, the United States International Trade Commission (“Commission”) determines, pursuant to section 751(c) of the Tariff Act of 1930 (19 U.S.C. § 1675(c)), that revocation of the antidumping duty orders on polyethylene terephthalate film, sheet, and strip (“PET film”) from China and the United Arab Emirates would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time. The Commission further determines that revocation of the antidumping duty order on PET film from Brazil would not be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.<sup>2</sup>

### BACKGROUND

The Commission instituted these reviews on October 1, 2013 (78 F.R. 60311) and determined on January 23, 2014 that it would conduct full reviews (79 F.R. 9276, February 18, 2014). 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 July 25, 2014 (79 F.R. 43509). The hearing was held in Washington, DC, on November 18, 2014, and all persons who requested the opportunity were permitted to appear in person or by counsel.

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<sup>1</sup> The record is defined in sec. 207.2(f) of the Commission’s Rules of Practice and Procedure (19 CFR ‘ 207.2(f)).

<sup>2</sup> Vice Chairman Dean A. Pinkert determines that revocation of the antidumping duty order on PET film from Brazil would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.



## 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 antidumping duty orders on polyethylene terephthalate film, sheet, and strip (“PET film”) from China and the United Arab Emirates (“UAE”) would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time and that revocation of the antidumping duty order on PET film from Brazil would not be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.<sup>1</sup>

### I. Background

In October 2008, the Commission found that a domestic industry was threatened with material injury by imports of PET film from Brazil, China, and the UAE.<sup>2</sup> The U.S. Department of Commerce (“Commerce”) issued antidumping duty orders for PET film from Brazil, China, and the UAE on November 10, 2008.<sup>3</sup>

*The Current Reviews:* The Commission instituted these reviews on October 1, 2013.<sup>4</sup> The Commission received a joint response to the notice of institution from three U.S. producers of PET film, as well as an individual response by a fourth U.S. producer of PET film, and found that the response of each of these domestic producers was individually adequate. The Commission found that the domestic interested party group response was adequate because these four companies combined accounted for a substantial share of domestic production.<sup>5</sup>

The Commission also received adequate individual responses concerning the antidumping duty order on PET film from Brazil filed jointly by a producer and exporter of PET film in Brazil and a U.S. importer of PET film from Brazil. The Commission received an adequate individual response concerning the antidumping duty order on PET film from the UAE from an importer, producer, and exporter of PET film from the UAE. The Commission found that the respondent interested party group responses were adequate with respect to the orders on PET

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<sup>1</sup> Vice Chairman Pinkert determines that revocation of the antidumping duty orders on PET film from Brazil, China and the UAE would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

<sup>2</sup> *Polyethylene Terephthalate Film, Sheet, and Strip from Brazil, China, Thailand, and the United Arab Emirates*, Inv. Nos. 731-TA-1131-1134 (Final), USITC Pub. 4040 (October 2008), at 1 (“*Original Determinations*”). The Commission also found that a domestic industry was neither materially injured nor threatened with material injury by imports of PET film from Thailand.

<sup>3</sup> *Polyethylene Terephthalate Film, Sheet, and Strip from Brazil, the People’s Republic of China and the United Arab Emirates: Antidumping Duty Orders and Amended Final Determination of Sales at Less than Fair Value for the United Arab Emirates*, 73 Fed. Reg. 66595 (Nov. 10, 2008).

<sup>4</sup> *Polyethylene Terephthalate Film, Sheet, and Strip from Brazil, China, and the United Arab Emirates; Institution of Five-Year Reviews*, 78 Fed. Reg. 60311 (Oct. 1, 2013).

<sup>5</sup> Explanation of Commission Determinations on Adequacy (EDIS Document No. 526611).

film from Brazil and the UAE because respondents from each of these countries accounted for a significant share of the production of subject merchandise in their respective countries. Because the group responses from both the domestic interested parties and the respondent interested parties were adequate, the Commission determined on January 23, 2014 to conduct full reviews of the antidumping duty orders on PET film from Brazil and the UAE.<sup>6</sup>

One importer provided information concerning subject imports from China in its response to the notice of institution. The Commission determined that, while this response was individually adequate, this importer accounted for only a small share of subject imports from China and, therefore, the respondent interested party group response with respect to the antidumping duty order on PET film from China was inadequate. The Commission, however, determined on January 23, 2014 to conduct a full review of the antidumping duty order on PET film from China to promote administrative efficiency in light of the Commission's determination to conduct full reviews of the antidumping duty orders on PET film from Brazil and the UAE.<sup>7</sup>

The Commission received prehearing and posthearing submissions filed jointly by domestic producers DuPont Teijin Films ("DTF"), Mitsubishi Polyester Film Inc. ("Mitsubishi"), and SKC, Inc. (collectively "Domestic Producers"). The Commission also received prehearing and posthearing submissions filed jointly by Terphane, Inc., a domestic producer, and Terphane Ltda., a producer and exporter of PET film from Brazil (collectively "Terphane"), and it received a posthearing submission from JBF RAK LLC ("JBF"), a producer of PET film from the UAE. Representatives of DTF, Mitsubishi, and Terphane appeared at the Commission's hearing accompanied by counsel.

U.S. industry data are based on the questionnaire responses of 11 U.S. producers of PET film that are believed to have accounted for \*\*\* percent of domestic production of PET film in 2013. U.S. import data and related information are based on the questionnaire responses of 19 U.S. importers of PET film that are believed to have accounted for \*\*\* percent of the total subject U.S. imports during 2013.<sup>8</sup> Foreign industry data and related information are based on the questionnaire responses of one firm, which was the sole producer and exporter of PET film in Brazil during the period of review; \*\*\* producer of PET film in China, which \*\*\*; and two producers and exporters of PET film from the UAE accounting for \*\*\* percent of total production of PET film in the UAE from 2008 to 2013.<sup>9</sup>

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<sup>6</sup> Explanation of Commission Determinations on Adequacy (EDIS Document No. 526611).

<sup>7</sup> Explanation of Commission Determinations on Adequacy (EDIS Document No. 526611).

<sup>8</sup> Confidential Report ("CR") at I-14; IV-1 to IV-2; PR at I-12; IV-1 to IV-2. The questionnaire responses of these 19 U.S. importers are believed to have accounted for \*\*\* percent of U.S. imports from Brazil during 2008-2013, \*\*\* percent of U.S. imports from China during 2008-2013, and \*\*\* percent of U.S. imports from the UAE during 2008-2013 (*i.e.*, the import data from these importers' questionnaire responses are equivalent to \*\*\* percent of the import data from the UAE for the period 2008-2013 as reported in official Commerce import statistics). CR at I-32; PR at I-25.

<sup>9</sup> CR at IV-13, IV-18, IV-21 to IV-22; PR at IV-9 to IV-13.

## 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.”<sup>10</sup> The Tariff Act defines “domestic like product” as “a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation under this subtitle.”<sup>11</sup> 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.<sup>12</sup>

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

The products covered by these orders are all gauges of raw, pretreated, or primed PET film, whether extruded or co-extruded. 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 more than 0.00001 inches thick. Also excluded is roller transport cleaning film which has at least one of its surfaces modified by application of 0.5 micrometers of SBR latex. Tracing and drafting film is also excluded. Imports of PET film were classifiable in the Harmonized Tariff Schedule of the United States (HTSUS) under item number 3920.62.00.90. Although the HTSUS subheadings are provided for convenience and customs purposes, the written description of the scope of these orders is dispositive.<sup>13</sup>

PET film 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 typically used only when its unique properties are required. Special properties imparted to PET film during the manufacturing process are integral

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<sup>10</sup> 19 U.S.C. § 1677(4)(A).

<sup>11</sup> 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, 96<sup>th</sup> Cong., 1<sup>st</sup> Sess. 90-91 (1979).

<sup>12</sup> 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).

<sup>13</sup> *Polyethylene Terephthalate Film, Sheet, and Strip from Brazil, the People’s Republic of China, and the United Arab Emirates: Final Results of the Expedited Sunset Reviews of the Antidumping Duty Orders*, 79 Fed. Reg. 10095 (Feb. 24, 2014).

to its preferred use in a myriad of downstream commodity and specialty applications encompassing food and other packaging, industrial, electrical, imaging, and magnetics sectors.<sup>14</sup>

In the preliminary phase of the original investigations, the Commission defined a single domestic like product that was coextensive with the scope of the investigations (which was identical in substance to the scope of the current reviews quoted above), finding that the various types of PET film comprised a single domestic like product. The Commission stated that the limited evidence in the record indicated that the various types of PET film had a general similarity in physical characteristics, a general similarity in production processes and facilities, a perception by U.S. customers and producers that they were a single product, similar channels of distribution, and a general similarity of prices.<sup>15</sup> In the final phase of the original investigations, the Commission stated that no new information had been developed since the preliminary phase to suggest that a different like product definition was warranted, and accordingly defined a single domestic like product that was coextensive with the scope of the investigations.<sup>16</sup>

There is no new information obtained during these reviews that would suggest any reason to revisit the Commission's domestic like product definition from the original investigations.<sup>17</sup> Accordingly, we define a single domestic like product that is coextensive with the scope.

## **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."<sup>18</sup> 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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<sup>14</sup> CR at I-22; PR at I-19.

<sup>15</sup> *Polyethylene Terephthalate Film, Sheet, and Strip from Brazil, China, Thailand, and the United Arab Emirates*, Inv. Nos. 731-TA-1131-1134 (Preliminary), USITC Pub. 3962 (Nov. 2007), at 7-8. The Commission declined to include "equivalent PET film," which was excluded from the scope of the investigations, in the definition of the domestic like product, noting that the parties had presented little information about equivalent PET film, and no party had argued that it should be included in the like product. Equivalent PET film differs from PET film in that the former has had at least one surface coated with a performance-enhancing resinous or inorganic layer of more than 0.00001 inch in thickness. *Id.*

<sup>16</sup> *Original Determinations*, USITC Pub. 4040, at 4-6.

<sup>17</sup> Domestic Producers have stated that the domestic like product should continue to be defined as being coextensive with the scope, and no party has requested that the Commission define the like product differently. Domestic Producers' Prehearing Brief at 22; see CR at I-30; PR at I-24.

<sup>18</sup> 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.<sup>19</sup> Exclusion of such a producer is within the Commission's discretion based upon the facts presented in each investigation.<sup>20</sup>

In the original investigations, the Commission found that appropriate circumstances existed to exclude one related party, Terphane, Inc., from the domestic industry under 19 U.S.C. § 1677(4)(B)<sup>21</sup> but determined that appropriate circumstances did not exist to exclude three other related parties, \*\*\* from the domestic industry.<sup>22</sup> The Commission consequently found a single domestic industry consisting of all U.S. producers of the domestic like product, except Terphane, Inc.<sup>23</sup>

In these reviews, \*\*\* domestic producers are related parties because they directly imported subject merchandise, and in \*\*\* of these cases because the producers are also related to exporters of subject merchandise.<sup>24</sup> \*\*\* imported subject merchandise \*\*\*. \*\*\* imported subject merchandise from China and \*\*\*. \*\*\* imported subject merchandise from the UAE and is related to a producer of subject merchandise in the UAE that exported PET film to the United States during the period of review. \*\*\* imported subject merchandise from Brazil and shares a common corporate parent with a producer of subject merchandise in Brazil that exported PET film to the United States during the period of review.<sup>25</sup>

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<sup>19</sup> 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).

<sup>20</sup> 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, *i.e.*, 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; and
- (3) the position of the related producer vis-à-vis the rest of the industry, *i.e.*, whether inclusion or exclusion of the related party will skew the data for the rest of the industry. See, *e.g.*, *Torrington Co. v. United States*, 790 F. Supp. at 1168.

<sup>21</sup> The Commission stated that Terphane, Inc. had imported a very large amount of subject merchandise relative to its production and found that its interests were more closely aligned to those of an importer than a domestic producer. *Original Determinations*, USITC Pub. 4040, at 9.

<sup>22</sup> *Original Determinations*, USITC Pub. 4040, at 8-10.

<sup>23</sup> *Original Determinations*, USITC Pub. 4040, at 11.

<sup>24</sup> Domestic producer \*\*\*. \*\*\*. However, the Chinese producer \*\*\*. CR at IV-18; PR at IV-12. Accordingly, \*\*\*, which did not import subject merchandise during the period of review, is not a related party.

<sup>25</sup> CR/PR at Table III-7; CR at I-31; PR at I-25. We find that the domestic producer that purchased subject imports is not a related party. The Commission has previously concluded that a purchaser may (Continued...)

We next examine whether appropriate circumstances exist to exclude any of these four related parties from the domestic industry. The parties have not asserted any arguments on related parties issues.

\*\*\*. \*\*\* imported \*\*\* pounds of subject merchandise from China in 2010, \*\*\* pounds in 2011, and \*\*\* pounds in 2012.<sup>26</sup> It stated that its reason for importing was that the \*\*\*.<sup>27</sup> \*\*\* U.S. production was \*\*\* pounds in 2010 and \*\*\* pounds in 2011. The ratio of its imports of subject merchandise to its U.S. production was \*\*\* percent in 2010 and \*\*\* percent in 2011.<sup>28</sup> \*\*\* continuation of the orders.<sup>29</sup> Curwood reported that it \*\*\*.<sup>30</sup> It accounted for \*\*\* percent of U.S. production in the 2008-2013 period.<sup>31</sup> \*\*\* ratio of operating income to net sales was \*\*\* percent in 2010 and \*\*\* percent in 2011, which was \*\*\*.<sup>32</sup>

While \*\*\* had a \*\*\* ratio of imports of subject merchandise to domestic production, its record of \*\*\* shows that it \*\*\* from importing subject merchandise. Accordingly, we find that appropriate circumstances do not exist to exclude \*\*\* from the domestic industry.<sup>33</sup>

\*\*\*. \*\*\* imported \*\*\* pounds of subject merchandise from China in 2008, \*\*\* pounds in 2009, \*\*\* pounds in 2010, \*\*\* pounds in 2011, \*\*\* pounds in 2012, \*\*\* pounds in 2013, \*\*\* pounds in interim 2013, and \*\*\* pounds in interim 2014.<sup>34</sup> It stated that \*\*\*.<sup>35</sup> \*\*\* U.S.

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(...Continued)

be treated as a related party if it controls large volumes of subject imports. The Commission has found such control to exist when the domestic producer was responsible for a predominant proportion of an importer's purchases and these purchases were substantial. *See Foundry Coke from China*, Inv. No. 731-TA-891 (Final), USITC Pub. 3449 at 8-9 (Sept. 2001).

In these reviews, U.S. producer \*\*\* purchased subject merchandise imported from China throughout the period of review. It purchased \*\*\* pounds in 2008, \*\*\* pounds in 2009; \*\*\* pounds in 2010; \*\*\* pounds in 2011; \*\*\* pounds in 2012, \*\*\* pounds in 2013, \*\*\* pounds in interim 2013, and \*\*\* pounds in interim 2014. (The interim periods in these reviews were January-June of 2013 and 2014.) CR/PR at Table III-8. Total subject imports from China ranged between \*\*\* pounds and \*\*\* pounds during the full years of the period of review, and were between \*\*\* and \*\*\* pounds in each of the interim periods. CR/PR at Table IV-1. Given the small volumes of purchases of subject merchandise by \*\*\*, the record indicates that it does not control large volumes of subject imports, and we accordingly conclude that it is not a related party.

<sup>26</sup> CR/PR at Table III-7.

<sup>27</sup> U.S. Importers' Questionnaire of \*\*\* at 8-9 \*\*\*.

<sup>28</sup> CR/PR at Table III-7.

<sup>29</sup> CR/PR at Table I-8.

<sup>30</sup> CR/PR at Table III-2.

<sup>31</sup> CR/PR at Table I-8.

<sup>32</sup> CR/PR at Table III-11. As he has done in other reviews, Vice Chairman Pinkert has not relied upon related parties' financial performance on their U.S. manufacturing operations as a factor in determining whether there are appropriate circumstances to exclude them from the domestic industry.

<sup>33</sup> Vice Chairman Pinkert concurs in finding that appropriate circumstances do not exist to exclude \*\*\* from the domestic industry. He notes that, \*\*\*, when its subject imports were \*\*\*, \*\*\* imports of subject merchandise exceeded its U.S. production in \*\*\*.

<sup>34</sup> CR/PR at Table III-7.

<sup>35</sup> U.S. Importers' Questionnaire of \*\*\* at 10-11 \*\*\*.



production was \*\*\* pounds in 2008, \*\*\* pounds in 2009, \*\*\* pounds in 2010, \*\*\* pounds in 2011, \*\*\* pounds in 2012, \*\*\* pounds in 2013, \*\*\* pounds in interim 2013, and \*\*\* pounds in interim 2014.<sup>36</sup> The ratio of its imports of subject merchandise to its U.S. production was \*\*\* percent in 2008, \*\*\* percent in 2009, \*\*\* percent in 2010, \*\*\* percent in 2011, \*\*\* percent in 2012, \*\*\* percent in 2013, \*\*\* percent in interim 2013, and \*\*\* percent in interim 2014.<sup>37</sup> \*\*\* continuation of the orders. It was the \*\*\* U.S. producer during the 2008-2013 period, accounting for \*\*\* percent of U.S. production.<sup>38</sup> \*\*\* ratio of operating income to net sales was \*\*\* percent in 2008; \*\*\* percent in 2009; \*\*\* percent in 2010; \*\*\* percent in 2011; \*\*\* percent in 2012; \*\*\* percent in 2013; \*\*\* percent in interim 2013; and \*\*\* percent in interim 2014, which was \*\*\*.<sup>39</sup>

\*\*\* had a \*\*\* ratio of imports of subject merchandise to domestic production, indicating that its primary interest is in domestic production. Moreover, its record of \*\*\* during the period of review shows that it \*\*\* from importing subject merchandise. Accordingly, we find that appropriate circumstances do not exist to exclude \*\*\* from the domestic industry.

\*\*\*. \*\*\* imported \*\*\* pounds of subject merchandise from the UAE in 2008, \*\*\* pounds in 2009, \*\*\* pounds in 2010, \*\*\* pounds in 2011, \*\*\* pounds in 2012, \*\*\* pounds in 2013, \*\*\* pounds in interim 2013, and \*\*\* pounds in interim 2014.<sup>40</sup> \*\*\* stated that its reason for importing was \*\*\*.<sup>41</sup> \*\*\* U.S. production was \*\*\* in the years \*\*\* through \*\*\*, \*\*\* pounds in \*\*\*, \*\*\* pounds in interim 2013, and \*\*\* pounds in interim 2014.<sup>42</sup> The ratio of its imports of subject merchandise to its U.S. production was \*\*\* percent in 2013, \*\*\* percent in interim 2013, and \*\*\* percent in interim 2014.<sup>43</sup> \*\*\* continuation of the orders. Its share of U.S. production in the 2008-2013 period was \*\*\* percent.<sup>44</sup> \*\*\* ratio of operating income to net sales was \*\*\* percent in 2013, \*\*\* percent in interim 2013, and \*\*\* percent in interim 2014, which was \*\*\* in those periods.<sup>45</sup>

U.S. producer \*\*\* is \*\*\* percent owned by \*\*\*. UAE subject producer Flex Middle East FZE exported \*\*\* pounds of subject merchandise to the United States in 2008, \*\*\* pounds in 2009, \*\*\* pounds in 2010, \*\*\* pounds in 2011, \*\*\* pounds in 2012, \*\*\* pounds in 2013, \*\*\*

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<sup>36</sup> CR/PR at Table III-7.

<sup>37</sup> CR/PR at Table III-7.

<sup>38</sup> CR/PR at Table I-8.

<sup>39</sup> CR/PR at Table III-11. In addition, \*\*\* at 4 \*\*\*. However, because neither of these Chinese producers submitted questionnaire responses, there are no data in the record regarding the extent of their exports of subject merchandise to the United States or their share of production of subject merchandise in China.

<sup>40</sup> CR/PR at Table III-7.

<sup>41</sup> U.S. Importers' Questionnaire of \*\*\* at 10 \*\*\*.

<sup>41</sup> CR/PR at Table III-7.

<sup>42</sup> CR/PR at Table III-7.

<sup>43</sup> CR/PR at Table III-7.

<sup>44</sup> CR/PR at Table I-8.

<sup>45</sup> CR/PR at Table III-11.

pounds in interim 2013, and \*\*\* pounds in interim 2014.<sup>46</sup> Flex Middle East FZE's share of subject UAE exports to the United States for the period 2008 through 2013 was \*\*\* percent.<sup>47</sup>

\*\*\* ratio of imports of subject merchandise to domestic production indicates that its primary interest lay in domestic production rather than in importation. Moreover, its \*\*\* suggest that it has \*\*\* from importing subject merchandise. Accordingly, we find that appropriate circumstances do not exist to exclude \*\*\* from the domestic industry.

\*\*\*. \*\*\* imported \*\*\* million pounds of subject merchandise from Brazil in 2008 and \*\*\* pounds in 2009.<sup>48</sup> \*\*\* U.S. production was \*\*\* pounds in 2008 and \*\*\* pounds in 2009. Its ratio of imports of subject merchandise to domestic production was \*\*\* percent in 2008 and \*\*\* percent in 2009.<sup>49</sup> \*\*\* continuation of the order on \*\*\*, but \*\*\* continuation of the orders on \*\*\*. Its share of U.S. production in the 2008-2013 period was \*\*\* percent.<sup>50</sup> \*\*\* ratio of operating income to net sales was \*\*\* percent in 2008 and \*\*\* percent in 2009, which \*\*\*.<sup>51</sup>

U.S. producer and importer Terphane, Inc. and Brazilian subject producer and exporter Terphane Ltda. are both 100 percent owned by the same corporate parent, Tredegar Corporation ("Tredegar").<sup>52</sup> Brazilian producer Terphane Ltda. exported \*\*\* pounds of subject merchandise to the United States in 2008 and exported \*\*\* pounds in 2009, but \*\*\* to the United States after 2009.<sup>53</sup> Terphane Ltda. accounted for 100.0 percent of PET film production in Brazil during the period of review.<sup>54</sup>

\*\*\* has not imported subject merchandise \*\*\*, and its primary interest during the period of review has been in domestic production rather than importation of subject merchandise. Accordingly, we find that appropriate circumstances do not exist to exclude \*\*\* from the domestic industry.

Consequently, we define the domestic industry to include all domestic producers of the domestic like product.

### 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

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<sup>46</sup> Foreign Producers Questionnaire of \*\*\* at 9-10 \*\*\*.

<sup>47</sup> CR at IV-22; PR at IV-13.

<sup>48</sup> CR/PR at Table III-7.

<sup>49</sup> CR/PR at Table III-7.

<sup>50</sup> CR/PR at Table I-8.

<sup>51</sup> CR/PR at Table III-11.

<sup>52</sup> U.S. Importers' Questionnaire of \*\*\* at 2-3 \*\*\*.

<sup>53</sup> Foreign Producers Questionnaire of \*\*\* at 11-12 \*\*\*.

<sup>54</sup> CR at II-7; PR at II-4.

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.<sup>55</sup>

Cumulation therefore is discretionary in five-year reviews, unlike original investigations, which are governed by section 771(7)(G)(i) of the Tariff Act.<sup>56</sup> 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 cumulated subject imports from Brazil, China, Thailand, and the UAE for purposes of its analysis of material injury by reason of subject imports. The Commission found that there was at least a moderate level of fungibility between domestic PET film and the subject imports, as well as among the imports from the various subject countries. Most U.S. producers, importers, and purchasers reported that PET film from each of the subject countries and the United States could always or frequently be used interchangeably. The Commission found that PET film produced in the United States was shipped nationwide and that, while subject imports from the four countries entered specific customs districts, the product was generally sold in multiple regions or nationwide. The Commission found that there was a reasonable overlap in channels of distribution between the subject imports and the domestic like product. The domestic producers sold through all three channels (processors, distributors, and end users) during the period of investigation. While there were no shipments of subject PET film from Brazil to distributors during the period, there were shipments from all subject countries to end users and processors. The Commission also found this overlap in channels of distribution to be sufficient. The Commission found that imports from each of the subject countries were present in the U.S. market throughout the period examined.<sup>57</sup>

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<sup>55</sup> 19 U.S.C. § 1675a(a)(7).

<sup>56</sup> 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).

<sup>57</sup> *Original Determinations*, USITC Pub. 4040, at 14-15.

In its analysis of threat of material injury in the original investigations, the Commission exercised its discretion to cumulate subject imports from Brazil, China, and the UAE, but declined to exercise its discretion to cumulate subject imports from Thailand with the other subject imports, in light of divergent trends in subject import and export volumes and differing trends in capacity. The Commission found that subject import volumes from Thailand decreased substantially between 2005 and 2007, while subject imports from the other three countries increased substantially. In addition, the capacity of Thailand's PET film industry was steady during the period of investigation, while capacity in the other countries rose substantially.<sup>58</sup>

Domestic Producers argue that the Commission should cumulate subject imports from Brazil, China, and the UAE in the current reviews.<sup>59</sup> Terphane argues that the Commission should not cumulate subject imports from Brazil with subject imports from China or the UAE, asserting that subject imports from Brazil are likely to have no discernible adverse impact on the domestic industry in the event of revocation of the order on PET film from Brazil, and further asserting that subject imports from Brazil are likely to compete under different conditions of competition than subject imports from China and the UAE.<sup>60</sup> JBF argues that the Commission should not cumulate subject imports from the UAE with subject imports from Brazil and China, asserting that subject imports from the UAE are likely to have no discernible adverse impact on the domestic industry in the event of revocation of the order on PET film from the UAE, and further asserting that subject imports from the UAE are likely to compete under different conditions of competition than subject imports from Brazil and China.<sup>61</sup>

The statutory threshold for cumulation is satisfied in these reviews, because all reviews were initiated on the same day: October 1, 2013.<sup>62</sup>

## **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.<sup>63</sup> 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.<sup>64</sup> 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

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<sup>58</sup> *Original Determinations*, USITC Pub. 4040, at 31-33.

<sup>59</sup> Domestic Producers' Prehearing Brief at 22-47.

<sup>60</sup> Terphane's Prehearing Brief at 12-13. Terphane makes no arguments as to whether there will be a likely reasonable overlap of competition.

<sup>61</sup> JBF's Posthearing Brief at 1-5.

<sup>62</sup> CR at I-1 n.3; PR at I-1 n.3.

<sup>63</sup> 19 U.S.C. § 1675a(a)(7).

<sup>64</sup> SAA, H.R. Rep. No. 103-316, vol. I at 887 (1994).

countries takes into account, among other things, the nature of the product and the behavior of subject imports in the original investigations.

Based on the record in these reviews, we do not find that imports from any of the subject countries would likely have no discernible adverse impact on the domestic industry in the event of revocation.

*Brazil.* During the original period of investigation, the quantity of subject imports from Brazil increased from \*\*\* pounds in 2005 to \*\*\* pounds in 2007.<sup>65</sup> In these reviews, the quantity of subject imports from Brazil declined from \*\*\* pounds in 2008 to \*\*\* pounds in 2009, and there have been no subject imports from Brazil since 2009.<sup>66</sup>

Terphane Ltda. reported in its questionnaire response that its share of production of PET film in Brazil was \*\*\* percent in 2013.<sup>67</sup> Reported annual production capacity for subject PET film in Brazil declined from \*\*\* pounds in 2008 to \*\*\* pounds in 2013.<sup>68</sup> Capacity utilization declined from \*\*\* percent in 2008 to \*\*\* percent in 2013, and was \*\*\* percent in interim 2013 and \*\*\* percent in interim 2014.<sup>69</sup> Total exports of subject PET film from Brazil declined from \*\*\* pounds in 2008 to \*\*\* pounds in 2013, and were \*\*\* pounds in interim 2013 and \*\*\* pounds in interim 2014.<sup>70</sup> Total exports as a percentage of Terphane Ltda.'s total shipments declined from \*\*\* percent in 2008 to \*\*\* percent in 2013.<sup>71</sup> Brazilian exports of subject merchandise to the United States as a percentage of total shipments were \*\*\* percent in 2008, but \*\*\*.<sup>72</sup> During the period of review, Terphane Ltda. has continued to export to the United States copolymer resinous surface films, which Commerce has determined are excluded from the scope of the order.<sup>73</sup> Terphane Ltda. has recently added a new production line in Brazil that is expected to add approximately \*\*\* metric tons (which is the equivalent of \*\*\* pounds) of capacity to the Brazilian industry by the end of 2015.<sup>74</sup>

Given the additional capacity coming online in Brazil in the reasonably foreseeable future, the Brazilian industry's behavior prior to the imposition of the orders and its continued interest in the U.S. market for out-of-scope merchandise, and in light of the relatively low standard for a discernible adverse impact,<sup>75</sup> we do not find that subject imports from Brazil

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<sup>65</sup> Memorandum INV-FF-125 (Oct. 6, 2008) at Table IV-2 (EDIS Document No. 523718).

<sup>66</sup> CR/PR at Table IV-1.

<sup>67</sup> CR at IV-13; PR at IV-9.

<sup>68</sup> CR/PR at Table IV-8.

<sup>69</sup> CR/PR at Table IV-8.

<sup>70</sup> CR/PR at Table IV-8.

<sup>71</sup> CR/PR at Table IV-8.

<sup>72</sup> CR/PR at Table IV-8.

<sup>73</sup> See Terphane's Prehearing Brief at 6-8 and Exh. 3.

<sup>74</sup> Terphane's Posthearing Brief at Exh. 1, Declaration of Danis J. Roy ("Roy Declaration") at paragraphs 13-15. As Terphane Ltda. is in the process of adding capacity at this new production line, it has already shut down another production line with capacity of 3,300 metric tons, and is considering shutting down additional inefficient capacity. *Id.*

<sup>75</sup> *Nippon Steel Corp. v. United States*, 494 F.3d 1371, 1379 n.6 (Fed. Cir. 2007).

would likely have no discernible adverse impact on the domestic industry if the order were revoked.

*China.* During the original period of investigation, the quantity of subject imports from China increased from \*\*\* pounds in 2005 to \*\*\* pounds in 2006, and then declined slightly to \*\*\* pounds in 2007.<sup>76</sup> In these reviews, the quantity of subject imports from China ranged from a high of \*\*\* pounds in 2011 to a low of \*\*\* pounds in 2012, and was \*\*\* pounds in 2013.<sup>77</sup>

In these reviews, one Chinese producer of PET film, Mitsubishi Polyester Film Suzhou Co., Ltd., submitted a questionnaire response. This firm \*\*\*.<sup>78</sup> Thus, there were no reported data on capacity, production, shipments or inventories of subject PET film from China for \*\*\*, in these reviews. Accordingly, we have relied in our analysis upon other information available on the subject industry in China, including public information, information supplied by the parties, and information from prior proceedings.

In the original investigations, the share of Chinese PET film producers' shipments going to the home market declined from 82.6 percent in 2005 to 72.8 percent in 2007, while the share exported to the United States increased from 8.9 percent to 10.9 percent over the same period and the share exported to all other markets increased from 7.4 percent to 15.6 percent.<sup>79</sup>

Data from the \*\*\* (which may include out-of-scope PET film) indicate that in 2011 the Chinese industry had production capacity of 2.6 billion pounds, production of 2.0 billion pounds, and 628.3 million pounds of unused capacity.<sup>80</sup> According to Global Trade Atlas data, the largest export destinations for PET film from China (including out-of-scope PET film) in 2013 were, in order, Indonesia, Japan, Taiwan, Malaysia, the United States, and Vietnam.<sup>81</sup>

Based on the record, we do not find that subject imports from China would likely have no discernible adverse impact on the domestic industry if the order were revoked.

*UAE.* During the original period of investigation, the quantity of subject imports from the UAE ranged from \*\*\* pounds in 2005 to \*\*\* pounds in 2007.<sup>82</sup> In these reviews, the quantity of subject imports from the UAE ranged from a low of \*\*\* pounds in 2009 to a high of \*\*\* pounds in 2012, and was \*\*\* pounds in 2013. It was \*\*\* pounds in interim 2013 and \*\*\* pounds in interim 2014.<sup>83</sup> Thus, subject imports from the UAE were present in the United States in increasing quantities throughout much of the period of review, although subject

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<sup>76</sup> Memorandum INV-FF-125 (Oct. 6, 2008) at Table IV-2 (EDIS Document No. 523718).

<sup>77</sup> CR/PR at Table IV-1.

<sup>78</sup> CR at IV-18; PR at IV-11 to IV-12.

<sup>79</sup> *Polyethylene Terephthalate Film, Sheet, and Strip from Brazil, China, Thailand, and the United Arab Emirates*, Inv. Nos. 731-TA-1131-1134 (Final), USITC Pub. 4040 (October 2008), at VII-1. Eight Chinese firms provided usable questionnaire responses in the original investigations, and those firms' exports to the United States were equivalent to 75.5 percent of U.S. imports of PET film from China in 2007 as reported in official import statistics. *Id.*

<sup>80</sup> CR/PR at Table IV-10.

<sup>81</sup> CR/PR at Table IV-12.

<sup>82</sup> Memorandum INV-FF-125 (Oct. 6, 2008) at Table IV-2 (EDIS Document No. 523718).

<sup>83</sup> CR/PR at Table IV-1.

import volumes declined between 2012 and 2013, and were lower in interim 2014 than in interim 2013.

In these reviews, questionnaire responses were received from two UAE producers of PET film, accounting for all production of PET film in the UAE during the period of review.<sup>84</sup> Reported annual production capacity for subject PET film increased during the period of review from \*\*\* pounds in 2008 to a high of \*\*\* pounds in 2011, and was \*\*\* pounds in 2013.<sup>85</sup> Capacity utilization ranged from a high of \*\*\* percent in 2010 to a low of \*\*\* percent in 2013.<sup>86</sup> Total exports of subject PET film from the UAE ranged from a low of \*\*\* pounds in 2008 to a high of \*\*\* pounds in 2010, and were \*\*\* pounds in 2013.<sup>87</sup> Total exports as a percentage of UAE producers' total shipments ranged from a high of \*\*\* percent in 2012 to a low of \*\*\* percent in 2013.<sup>88</sup> Exports of subject merchandise from the UAE to the United States as a percentage of total shipments ranged from a low of \*\*\* percent in 2009 to an annual high of \*\*\* percent in 2012, and were \*\*\* percent in 2013.<sup>89</sup>

The record does not support JBF's argument that subject imports from the UAE will be at a very low level if the order is revoked.<sup>90</sup> To the contrary, JBF and Flex Middle East \*\*\*.<sup>91</sup> Moreover, the record contains no information other than JBF's unsupported assertions on Flex Middle East's relationships with its U.S. or Mexican affiliates, or on JBF's production facility in Bahrain, that would corroborate JBF's arguments that these relationships would deter PET film exports from the UAE to the U.S. market, or that shipments of PET film in the U.S. market by Flex or JBF would be from sources other than their UAE facilities. While subject import volumes from the UAE declined between 2012 and 2013, and were \*\*\*, these declines are insufficient to

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<sup>84</sup> CR at IV-21 to IV-22; PR at IV-12 to IV-13.

<sup>85</sup> CR/PR at Table IV-13.

<sup>86</sup> CR/PR at Table IV-13.

<sup>87</sup> CR/PR at Table IV-13.

<sup>88</sup> CR/PR at Table IV-13.

<sup>89</sup> CR/PR at Table IV-13.

<sup>90</sup> JBF argues that subject imports from the UAE would have no discernible adverse impact on the domestic industry in the event of revocation, asserting that subject imports from the UAE will necessarily be at a very low level upon revocation, because both UAE subject producers face economic disincentives that would deter exports of PET film to the United States. It states that one UAE producer, Flex Middle East, has made a substantial investment to become a U.S. producer of PET film, which JBF asserts would ensure that Flex's UAE production would never inflict harm on Flex's U.S. production operations. It adds that Flex has also become a producer of PET film in Mexico and that PET film imported from Mexico is entitled to duty-free treatment under the North American Free Trade Agreement, providing Flex a further deterrent to exporting to the United States subject film that it manufactures in the UAE. JBF further asserts that JBF has no incentive to compete in the U.S. market from its facilities in the UAE, in light of its significant investment to build a new advanced production facility in Bahrain, given that U.S. imports of PET film from Bahrain would be subject to duty-free treatment under the U.S./Bahrain Free Trade Agreement. JBF's Posthearing Brief at 1-3.

<sup>91</sup> \*\*\* stated that \*\*\*, while \*\*\* stated that \*\*\*. CR at D-22 to D-23; PR at D-3. We also observe that \*\*\* continuation of the orders, which suggests that it is concerned about the impact of revoking the order on imports from the UAE. CR/PR at Table I-8.

establish that imports from the UAE would have no discernible adverse impact on the domestic industry if the order were revoked, particularly given the \*\*\* and the absence of corroboration for JBF's contentions.

Based on the record, we do not find that subject imports from the UAE would likely have no discernible adverse impact on the domestic industry if the orders were revoked.

### 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.<sup>92</sup> Only a "reasonable overlap" of competition is required.<sup>93</sup> In five-year reviews, the 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.<sup>94</sup>

*Fungibility.* In comparisons of the interchangeability among subject imports from Brazil, subject imports from China, subject imports from the UAE, and the domestic like product, majorities of reporting U.S. producers and importers found that PET film from all of these four sources is either always or frequently interchangeable.<sup>95</sup> While majorities of U.S. purchasers reported that the domestic like product was always or frequently interchangeable with subject

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<sup>92</sup> 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).

<sup>93</sup> *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).

<sup>94</sup> *See generally, Cheflin Corp. v. United States*, 219 F. Supp. 2d 1313, 1314 (Ct. Int'l Trade 2002).

<sup>95</sup> CR/PR at Table II-11. U.S. producers were nearly evenly divided between those that found that PET film from each of these four sources was always interchangeable and those that found that PET film from each of these four sources was frequently interchangeable. A majority of U.S. importers found that PET film from each of these four sources was frequently interchangeable. *Id.*



imports from each of the three subject countries, U.S. purchasers' responses were mixed with respect to comparisons between imports from the three subject countries.<sup>96</sup>

Purchasers reported that the domestic like product was comparable to subject imports from Brazil with respect to 7 of 15 factors and rated the domestic like product as superior with respect to eight factors. In purchasers' comparisons of the domestic like product with subject imports from China, purchasers rated them as comparable with respect to 8 of 15 factors and rated the domestic like product as superior with respect to four factors, but purchasers were evenly divided as to three factors. In comparisons of the domestic like product with subject imports from the UAE, purchasers rated them as comparable with respect to 12 of 15 factors and rated the domestic like product as superior with respect to three factors.<sup>97</sup> A majority or plurality of purchasers rated the U.S. product as superior to product from Brazil, China, and the UAE on availability, delivery time, and minimum quantity requirements.<sup>98</sup>

*Channels of Distribution.* U.S. producers sold almost evenly to end users and to converters, which in turn sell to end users.<sup>99</sup> U.S. importers of subject merchandise sold primarily to end users.<sup>100</sup>

*Geographic Overlap.* U.S. producers reported selling PET film to all regions in the contiguous United States. Importers also reported selling to all regions in the contiguous United States with the exception of \*\*\*.<sup>101</sup>

*Simultaneous Presence in Market.* The domestic like product was present in the U.S. market in every quarterly period between January 2008 and June 2014.<sup>102</sup> Subject imports from China and the UAE entered the United States in all 72 months from 2008 through 2013, while subject imports from Brazil have not entered the United States since 2009.<sup>103</sup>

*Conclusion.* The information in the record indicates that imports from each subject country are sufficiently fungible with the domestic like product and with each other. A majority of market participants found that the domestic like product and subject imports from all three countries were always or frequently interchangeable. The information in the record also indicates that there was overlap in channels of distribution among subject imports from Brazil,

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<sup>96</sup> CR/PR at Table II-11. A majority of reporting purchasers found that subject imports from China were always or frequently interchangeable with subject imports from the UAE. However, a majority of reporting purchasers found that subject imports from Brazil were only sometimes interchangeable with subject imports from China. Reporting purchasers were evenly divided between those who found that subject imports from Brazil were always or frequently interchangeable with subject imports from the UAE with those who found them only sometimes interchangeable. *Id.*

<sup>97</sup> CR/PR at Table II-10.

<sup>98</sup> CR/PR at Table II-10.

<sup>99</sup> CR/PR at Table II-1. Conversion activities include coating, metallizing, and laminating. CR at II-2 to II-3; PR at II-2.

<sup>100</sup> CR/PR at Table II-1. U.S. importers' U.S. shipments of imports from the UAE were divided almost evenly between end users and distributors. *Id.*

<sup>101</sup> CR/PR at Table II-2; CR at II-3, IV-9; PR at II-2, IV-7.

<sup>102</sup> CR/PR at Tables V-3 through V-8.

<sup>103</sup> CR at IV-9; PR at IV-6.

subject imports from China, subject imports from the UAE, and the domestic like product in shipments in the U.S. market to end users. There was geographic overlap among subject imports and the domestic like product, in that domestic production was shipped nationwide and subject imports from Brazil, China, and the UAE were shipped to most regions of the country. The domestic like product and subject imports from China and the UAE were present in the U.S market throughout the period of review, although subject imports from Brazil were not in the U.S. market after 2009.

In light of the foregoing, and the lack of any contrary argument on this issue, we find that there would likely be a reasonable overlap of competition between the domestic like product and imports from each subject country and between imports from each subject country upon revocation.

#### **D. Likely Conditions of Competition<sup>104</sup>**

In determining whether to exercise our discretion to cumulate the subject imports, we assess whether subject imports from Brazil, China and the UAE would compete under similar or different conditions of competition.<sup>105</sup>

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<sup>104</sup> Vice Chairman Pinkert does not join this section. He notes that Terphane’s arguments regarding the Commission’s exercise of its discretion to cumulate subject imports from Brazil with subject imports from China and the UAE, together with the evidence on which those arguments rest, are little more than recapitulations of its arguments and evidence regarding whether those imports are likely to cause a discernible adverse impact in the event of revocation. See Terphane’s Post-Hearing Brief at 1, 54-55, 58. In Vice Chairman Pinkert’s view, as explained below, discernible adverse impact should not be considered by the Commission twice – once for purposes of whether the Commission has discretion to cumulate and once for purposes of exercising that discretion – and he finds that cumulation of subject imports from Brazil, China, and the UAE is warranted for purposes of the analysis of likelihood of continuation or recurrence of material injury in these reviews.

Assuming a reasonable overlap of competition in the U.S. market, if the Commission finds that imports of the subject merchandise from a particular country are likely to have a discernible adverse impact on the domestic industry in the event of revocation, a relatively small expected impact from those imports cannot be a valid basis for not cumulating them – the cumulation provisions exist to enable the Commission to achieve a sensible overall result where multiple discernible adverse impacts, however small, are likely to affect the domestic industry in the same manner and thus to achieve a concerted impact. As the Statement of Administration Action to the Uruguay Round Agreements Act states, at 847, “This \*\*\* analysis recognizes that a domestic industry can be injured by a particular volume of imports and their effects regardless of whether those imports come from one source or many sources.” In the present case, as discussed in the Commission’s analysis of likely adverse impact with respect to imports from Brazil, China, and the UAE, it is plain that imports from all three countries would likely have a discernible adverse impact on the domestic industry, although not necessarily to the same degree, in the event of revocation. Further, there is no argument or indication here that the nature of those adverse impacts would vary based on the identity of the exporting country such that cumulation would be inappropriate.

We find that subject imports from Brazil would likely compete under different conditions of competition than subject imports from China or the UAE. There is only one Brazilian producer of subject PET film, Terphane Ltda.,<sup>106</sup> which has a corporate relationship with its U.S. affiliate, Terphane, Inc.; Terphane, Inc. has control over all PET film sales in the U.S. market by Terphane Ltda., and ensures that no sales of any Terphane products are made to U.S. customers without its approval.<sup>107</sup> As such, the general manager of Terphane, Inc. has effective veto power over imports to the U.S. market by Terphane Ltda., and is responsible for ensuring that any U.S. imports from Brazil are consistent with Terphane's overall coordinated corporate strategy.<sup>108</sup> Terphane's strategy is detailed in its 2015 business planning documents currently under review by Tredegar<sup>109</sup> and its 2011 presentation to Tredegar<sup>110</sup> (prior to Tredegar's acquisition of Terphane), and is consistent in large part with its 2006-2007 strategic planning before the antidumping petitions were filed.<sup>111</sup> This strategy calls for (1) a focus on the Brazilian home market and regional export markets in Latin America;<sup>112</sup> (2) the maximization of production and sale of value-added and specialty films;<sup>113</sup> (3) investment in research so as to develop new value-added products;<sup>114</sup> (4) seeking relief from dumped imports under the

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(...Continued)

<sup>105</sup> *Nucor Corp. v. United States*, 601 F.3d 1291, 1296 (Fed. Cir. 2010) (Commission may reasonably consider likely differing conditions of competition in deciding whether to cumulate subject imports in five-year reviews); *see also Allegheny Ludlum Corp.*, 475 F. Supp. 2d at 1378 (recognizing the wide latitude the Commission has in selecting the type of factors it considers relevant in deciding whether to exercise discretion to cumulate subject imports in five-year reviews); *Nucor v. United States*, 569 F. Supp. 2d at 1337-38.

<sup>106</sup> CR at II-7; PR at II-4; Terphane's Prehearing Brief at 3.

<sup>107</sup> Transcript of November 18, 2014 Hearing ("Hearing Tr.") at 89-90, 115-116, 130, 142 (Roy); Roy Declaration at paragraphs 3, 5.

<sup>108</sup> Hearing Tr. at 89-90, 115-116, 130, 142 (Roy); Roy Declaration at paragraphs 3, 5. Terphane Ltda. and Terphane, Inc. share a corporate parent, Tredegar, which acquired Terphane in 2011. The general manager of Terphane, Inc., Danis J. Roy, is responsible for managing Terphane's production and sales of PET film in all markets worldwide, and is responsible for preparing Terphane's business plans and budgets, which are required by Tredegar annually for its corporate planning and budgeting. Roy Declaration at paragraphs 1-3. Terphane has provided copies of its business planning documents to the Commission, including plans predating its acquisition by Tredegar. Roy Declaration, attachments A, B, C, and E. Mr. Roy states that, since Tredegar is a publicly traded corporation, these plans may become the basis for the information it discloses to the public about the present and future condition of the PET film industry, and accordingly must be as accurate as possible. Roy Declaration at paragraph 4.

<sup>109</sup> Roy Declaration at paragraph 12 and attachments C and E.

<sup>110</sup> Roy Declaration at paragraph 2 and attachment A.

<sup>111</sup> Roy Declaration at paragraphs 7, 9, 10 and attachment B.

<sup>112</sup> Roy Declaration, paragraphs 7, 9, 10 and attachment A at pages 6, 25-29; attachment E at pages 3, 30-37; Hearing Tr. at 91-92, 94-96, 116-117 (Roy).

<sup>113</sup> Roy Declaration, paragraphs 7, 10, 12 and attachment B at pages 15, 18, 23-24; attachment A at pages 6, 31; attachment E at page 3; Hearing Tr. at 146-147 (Roy).

<sup>114</sup> Roy Declaration at paragraphs 9, 11-12 and attachment B at pages 21, 29; attachment E at pages 3, 20; Hearing Tr. at 147 (Roy).

Brazilian antidumping laws;<sup>115</sup> and (5) being a “niche player” in the North American market by exporting out-of-scope higher value specialty films.<sup>116</sup>

We acknowledge that Terphane, Inc. is a \*\*\* U.S. producer of PET film,<sup>117</sup> but the information in the record indicates that the purpose of its power to effectively veto imports from Terphane Ltda. is less to protect the U.S. affiliate’s market share than to prevent imports that would be contrary to Terphane’s overall coordinated strategy, such as imports of low-priced commodity films that might drive down prices in the U.S. market for higher-value PET films.<sup>118</sup> There is no information in the record that subject producers from China or the UAE have comparable relationships with U.S. affiliates having control over their exports to the U.S. market.<sup>119</sup>

In addition, the PET film industry in Brazil is much less export oriented than the industries in China and the UAE. While data from the Global Trade Atlas rank the Chinese industry as the world’s largest exporter of PET film from 2008-2013, and the UAE industry as the eighth largest, the Brazilian industry is ranked as only the 25<sup>th</sup> largest.<sup>120</sup> Global Trade Atlas data also indicate that total PET film exports from the UAE more than doubled between 2008 and 2013, and total exports from the China almost doubled, while total exports from Brazil declined by over 50 percent during the same period.<sup>121</sup> The Brazilian PET film industry is heavily oriented towards its home market. Terphane Ltda.’s total home market shipments (commercial home market shipments plus internal consumption/transfers) as a percentage of total shipments ranged from a low of \*\*\* percent in 2008 to an annual high of \*\*\* percent in 2013, and was \*\*\* percent in interim 2014.<sup>122</sup> Its total exports as a percentage of total shipments declined sharply from \*\*\* percent in 2008 to \*\*\* percent in 2013, and were \*\*\* percent in

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<sup>115</sup> Roy Declaration at paragraph 9 and attachment B at page 29; attachment E at page 16; Hearing Tr. at 152-153 (Roy).

<sup>116</sup> Roy Declaration at paragraph 9 and attachment B at page 25; attachment A at page 6; attachment E at page 38; Hearing Tr. at 91-92, 95 (Roy).

<sup>117</sup> The share of U.S. production by Terphane, Inc. during the 2008-2013 period was \*\*\* percent. CR/PR at Table I-8.

<sup>118</sup> Hearing Tr. at 117-118, 176 (Roy). As explained below in section IV.C.4, the parties do not dispute that changes in the prices of commodity films will affect prices for non-commodity films.

<sup>119</sup> As previously discussed, notwithstanding JBF’s arguments, the record contains no detailed information from either Flex or JBF regarding Flex Middle East’s relationships with its U.S. or Mexican affiliates, or on JBF’s production facility in Bahrain. JBF’s Posthearing Brief at 1-5.

<sup>120</sup> CR/PR at Table IV-16. These rankings include exports of out-of-scope PET film.

<sup>121</sup> CR/PR at Table IV-16. These exports include exports of out-of-scope PET film.

<sup>122</sup> CR/PR at Table IV-8. The percentage of total shipments of Terphane Ltda. going to commercial shipments in the home market increased from \*\*\* percent in 2008 to \*\*\* percent in 2013. The percentage of total shipments going to internal consumption/transfers in the home market ranged from a low of \*\*\* percent in 2011 to an annual high of \*\*\* percent in 2008, with this ratio reaching \*\*\* percent in interim 2014.

interim 2014.<sup>123</sup> By contrast, total exports as a percentage of total shipments for the UAE industry remained above \*\*\* percent in each year of the period of review, and its home market shipments as a percentage of total shipments were below \*\*\* percent in each year of the same period.<sup>124</sup>

In addition, the Brazilian PET film industry has much smaller production capacity than the Chinese and UAE industries. Questionnaire data indicate that in 2013, the UAE industry had approximately \*\*\* the capacity of the Brazilian industry.<sup>125</sup> Industry data indicate that installed PET film capacity in China in 2012 was also \*\*\* than that for the industry in Brazil.<sup>126</sup> Moreover, the Brazilian industry's \*\*\* capacity utilization rates during most of the period of review, combined with its much smaller production capacity, indicate that it has historically had much less unused capacity than the Chinese and UAE industries.<sup>127</sup>

The corporate relationship whereby the U.S. affiliate exerts control over any imports into the U.S. market of the only Brazilian PET film producer, the lower export orientation of the Brazilian industry and its lower export capability in light of its smaller capacity and smaller excess capacity indicate that subject imports from Brazil are likely to compete under different conditions of competition upon revocation than subject imports from China and the UAE. By contrast, the greater and increasing export orientation, greater production capacity, and greater amount of excess capacity of both the Chinese and UAE industries indicate that subject imports from China and the UAE are likely to compete under similar conditions of competition upon revocation.

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<sup>123</sup> Exports as a share of the Brazilian producer's total shipments were \*\*\* percent in 2008, \*\*\* percent in 2009, \*\*\* percent in 2010, \*\*\* percent in 2011, \*\*\* percent in 2012, and \*\*\* percent in 2013. They were \*\*\* percent in interim 2013, and \*\*\* percent in interim 2014. CR/PR at Table IV- 8.

<sup>124</sup> Exports as a share of UAE producers' total shipments were \*\*\* percent in 2008, \*\*\* percent in 2009, \*\*\* percent in 2010, \*\*\* percent in 2011, \*\*\* percent in 2012, and \*\*\* percent in 2013. They were \*\*\* percent in interim 2013, and \*\*\* percent in interim 2014. CR/PR at Table IV-13. There are no comparable questionnaire data for the PET film industry in China.

<sup>125</sup> Capacity of the subject producer in Brazil totaled \*\*\* pounds in 2013. CR/PR at Table IV-8. The capacity of the UAE subject producers totaled \*\*\* pounds in 2013. CR/PR at Table IV-13. While comparable questionnaire data for the PET film industry in China are unavailable, the information supplied by the one responding Chinese producer \*\*\* was that its capacity totaled \*\*\* pounds in 2013, which was \*\*\* than Brazilian capacity in 2013. CR/PR at Table IV-11; CR at IV-18; PR at IV-9 to IV-10.

<sup>126</sup> CR/PR at Table IV-6. These data include capacity to produce out-of-scope PET film.

<sup>127</sup> Capacity utilization for the Brazilian PET film industry was \*\*\* percent in 2008, \*\*\* percent in 2009, \*\*\* percent in 2010, \*\*\* percent in 2011, \*\*\* percent in 2012, and \*\*\* percent in 2013. It was \*\*\* percent in interim 2013 and \*\*\* percent in interim 2014. CR/PR at Table IV-8. Capacity utilization for the UAE PET film industry was \*\*\* percent in 2008, \*\*\* percent in 2009, \*\*\* percent in 2010, \*\*\* percent in 2011, \*\*\* percent in 2012, and \*\*\* percent in 2013. It was \*\*\* percent in interim 2013 and \*\*\* percent in interim 2014. CR/PR at Table IV-13. Comparable data for the Chinese PET film industry are not available. Available industry data, which include out-of-scope PET film, indicate that in 2011 the capacity of the Chinese PET film industry \*\*\* Chinese PET film production by \*\*\* pounds. CR/PR at Table IV-10.

## E. Conclusion

In sum, we determine that subject imports from all three countries are not likely to have no discernible adverse impact on the domestic industry in the event of revocation and that there would likely be a reasonable overlap of competition between the subject imports from each country and the domestic like product. We also determine that subject imports from Brazil would not be likely to compete under similar conditions of competition with the subject imports from China and the UAE, but that subject imports from China and the UAE would be likely to compete under similar conditions of competition. Accordingly, for the reasons discussed above, we exercise our discretion to cumulate subject imports from China and the UAE and consider them separately from subject imports from Brazil.<sup>128</sup>

## IV. Whether Revocation of the Antidumping 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.”<sup>129</sup> 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.”<sup>130</sup> Thus, the likelihood standard is prospective in nature.<sup>131</sup> The U.S. Court of International Trade has found that

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<sup>128</sup> As discussed above, Vice Chairman Pinkert considers subject imports from Brazil, China, and the UAE on a cumulated basis.

<sup>129</sup> 19 U.S.C. § 1675a(a).

<sup>130</sup> 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.

<sup>131</sup> 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 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.

“likely,” as used in the five-year review provisions of the Act, means “probable,” and the Commission applies that standard in five-year reviews.<sup>132</sup>

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.”<sup>133</sup> 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.”<sup>134</sup>

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.”<sup>135</sup> 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).<sup>136</sup> The statute further provides 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.<sup>137</sup>

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

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<sup>132</sup> 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’”).

<sup>133</sup> 19 U.S.C. § 1675a(a)(5).

<sup>134</sup> 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.*

<sup>135</sup> 19 U.S.C. § 1675a(a)(1).

<sup>136</sup> 19 U.S.C. § 1675a(a)(1). Commerce has made no duty absorption findings with respect to any of the orders under review. CR at I-15 n. 26; PR at I-13 n.26.

<sup>137</sup> 19 U.S.C. § 1675a(a)(5). Although the Commission must consider all factors, no one factor is necessarily dispositive. SAA at 886.

or relative to production or consumption in the United States.<sup>138</sup> 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.<sup>139</sup>

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.<sup>140</sup>

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 more advanced version of the domestic like product.<sup>141</sup> 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.<sup>142</sup>

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<sup>138</sup> 19 U.S.C. § 1675a(a)(2).

<sup>139</sup> 19 U.S.C. § 1675a(a)(2)(A-D).

<sup>140</sup> 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.

<sup>141</sup> 19 U.S.C. § 1675a(a)(4).

<sup>142</sup> 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.



## B. Findings in the Original Investigations

### 1. Conditions of Competition

In the original investigations, the Commission found that the fact that a significant portion of domestic production was captively consumed was a significant condition of competition. It examined merchant market data, as well as data for the total U.S. market, in making its determinations.<sup>143</sup>

*Demand considerations.* In the original investigations, the Commission found that demand for PET film was driven by demand in the five main end-use market segments: industrial, packaging, magnetic media, electrical, and imaging.<sup>144</sup> PET film demand overall was estimated to be growing, with demand for commodity grades growing faster than demand for other grades. While industry participants gave mixed responses as to whether demand for PET film in the U.S. market had changed during the period of investigation, it was reported that global demand had increased. Demand was reported to be seasonal and cyclical. Apparent U.S. consumption by quantity declined in the total market and in the merchant market over the period of investigation.<sup>145</sup>

*Supply considerations.* There were eight domestic producers, the majority of which had foreign affiliations and/or foreign production facilities. The Commission stated that the domestic industry was unable to supply total U.S. demand throughout the period examined, with total apparent U.S. consumption being \*\*\* than U.S. producers' average capacity in each year between 2005 and 2007. Domestic producers' production decreased during the period, and their total U.S. shipments fell, while their merchant market shipments rose. The domestic producers' market share was substantially higher than the shares of subject and nonsubject imports, both in the total market and the merchant market. Domestic producers' market share remained static in the total market during the period of investigation, but increased slightly in the merchant market. The market share of cumulated subject imports rose between 2005 and 2007 in both the total market and the merchant market. The market share of nonsubject imports was substantially larger than that of subject imports, but declined in both the total market and the merchant market between 2005 and 2007. Most nonsubject imports were from Indonesia, Japan, Korea, the Netherlands, Mexico, Taiwan, and Turkey.<sup>146</sup>

*Substitutability.* The Commission found that there was at least a moderate degree of substitutability between imported PET film and the domestic PET film. Most U.S. producers, importers, and purchasers reported that PET film from each of the subject country pairs could always or frequently be used interchangeably. All responding purchasers indicated that they

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<sup>143</sup> *Original Determinations*, USITC Pub. 4040, at 4 n.7, 18. The Commission found that the statutory captive production provision was not met because the available information suggested that PET film was not the predominant material input of the downstream products in which it was used. *Id.* at 16-18.

<sup>144</sup> *Original Determinations*, USITC Pub. 4040, at 18.

<sup>145</sup> *Original Determinations*, USITC Pub. 4040, at 18.

<sup>146</sup> *Original Determinations*, USITC Pub. 4040, at 18 -19.

required their sources to be prequalified for all of their purchasers, a process that could take weeks or months, and a number of purchasers reported that at least one supplier had failed to qualify or be certified during the period of investigation. The Commission stated that price was reported as the most important factor in making purchasing decisions by the largest number of purchasers (and the second most important factor by a large number), while some purchasers reported the availability of pre-arranged contracts as the most important factor, and quality and product availability were also listed by purchasers as among the most important factors for their purchasing decisions.<sup>147</sup>

*Other.* The Commission stated that the main raw materials used in producing PET film were petroleum-based chemicals, which were subject to global oil price fluctuations, with prices for these chemicals rising when world oil and natural gas prices rise. It further stated that the PET film industry was capital intensive, giving producers a strong incentive to operate 24 hours a day with downtime only for repair and maintenance. The PET film market was divided between commodity-grade and specialty-grade film. The popular 48 gauge corona-treated film, a commodity-grade film, was used as the baseline for pricing, as pricing in the commodity grades affected pricing in the specialty grades. The Commission stated that competition between domestic production and subject imports was concentrated in commodity-grade films for use in packaging and industrial applications. PET film was sold on both a spot basis and a contract basis, with long-term contracts in effect for up to three years and short-term contracts that may last from three months up to one year.<sup>148</sup>

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<sup>147</sup> *Original Determinations*, USITC Pub. 4040, at 20.

<sup>148</sup> *Original Determinations*, USITC Pub. 4040, at 20-21.

## 2. Volume

In its analysis of present material injury, the Commission found that the volume of cumulated subject imports and the increase in that volume was significant in absolute terms when viewed in isolation, particularly in light of declining apparent U.S. consumption. However, the Commission also found that the effects of the volume of subject imports on prices and the impacts of the imports on the domestic industry were diminished because (1) the subject imports gained market share largely from the nonsubject imports and not from the domestic industry; and (2) the adverse effects experienced by the domestic industry were less pronounced in sales to the merchant market than in sales to the total market.<sup>149</sup>

In its analysis of threat of material injury, the Commission found that a significant increase in the volume of cumulated subject imports from Brazil, China, and the UAE was likely in the near future. The Commission stated that the import volume and market share of the subject producers from Brazil, China, and the UAE increased between 2005 and 2007, indicating that they all viewed the United States as an attractive market. In addition, the industries in all three countries were export oriented, and their export orientation increased over the period. The Commission found that home market shipments as a percentage of all shipments declined for all three subject industries. The Commission noted that the Brazilian industry had projected that it would have no subject PET film exports to the United States in 2009 and had stated that it \*\*\*. However, the Commission stated that it gave little weight to this projection, given past export trends and Brazil's capacity and production. Moreover, it stated that, while Terphane had claimed that its business plan provided for a shift to exports of nonsubject product, it failed to provide any such plan to the Commission.<sup>150</sup>

## 3. Price Effects

In its present material injury analysis, the Commission concluded that the price effects of cumulated subject imports were not significant during the period of investigation. The Commission found that the domestic and imported products, as well as the nonsubject imports, were substantially interchangeable and that price was an important factor in purchasing decisions. The Commission stated that underselling by subject imports was prevalent during the period examined, and it found the level of underselling to be significant. However, it found that nonsubject imports undersold both the domestic like product and the subject imports. The Commission stated that there was evidence that the domestic industry had experienced falling prices and a growing cost-price squeeze during the period of investigation, but found that the record did not establish that the subject imports had had significant price-depressing or price-suppressing effects. In finding that subject imports did not have significant price-depressing effects, the Commission observed that the price declines experienced by the domestic industry were not of a very large magnitude. As to price suppression, the Commission found that the

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<sup>149</sup> *Original Determinations*, USITC Pub. 4040, at 24-25.

<sup>150</sup> *Original Determinations*, USITC Pub. 4040, at 33-34.

domestic industry had experienced a smaller deterioration in its cost of goods sold (“COGS”) to net sales ratio for its sales to the merchant market, in which it competed head-to-head with subject (and nonsubject) imports, than for its overall sales, indicating that causes other than subject imports explained much of the cost-price squeeze.<sup>151</sup>

In its analysis of threat of material injury, the Commission found that the price effects of cumulated subject imports from Brazil, China, and the UAE would likely rise to a significant level in the immediate future. The Commission found that underselling by subject imports would likely increase as importers used lower prices to gain market share from the domestic industry, while also competing with nonsubject imports selling at even lower prices. The Commission stated that subject imports would have increasing depressing and/or suppressing effects on domestic prices as the volume of unfairly priced subject imports increased significantly, given that no substantial increase in demand was projected and that competition for sales would largely be price-based.<sup>152</sup>

#### **4. Impact**

In the original investigations, the Commission determined that the domestic industry was not materially injured by reason of cumulated subject imports from Brazil, China, Thailand, and the UAE. The Commission found that the domestic industry’s capacity, capacity utilization, and production all declined during the period of investigation. The industry’s employment and financial indicators also generally declined during the period, with operating income falling in both the general market and the merchant market.

Nevertheless, despite these negative trends, the Commission found that subject imports did not have a significant adverse impact on the condition of the domestic industry.<sup>153</sup> The Commission found that the cumulated subject imports (which increased in market share over the period) largely replaced nonsubject imports in the market, not the domestic like product. In addition, while subject imports undersold the domestic like product, they replaced nonsubject imports that were generally priced even lower. The Commission observed that the adverse effects of subject imports would normally be most visible in the domestic industry’s operations supplying the merchant market, where there was head-to-head competition, but found instead that the industry’s performance was better in the merchant market than in the total market.<sup>154</sup>

The Commission also identified several other developments adversely affecting the domestic industry: a steady decline in U.S. consumption during the period; the age and inefficiency of production lines of \*\*\* domestic producer; the importation by DTF of \*\*\*, and shortages of PET film in the U.S. market due to the lack of domestic capacity, resulting in customers being refused product. The Commission stated that the record did not demonstrate

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<sup>151</sup> *Original Determinations*, USITC Pub. 4040, at 25-26.

<sup>152</sup> *Original Determinations*, USITC Pub. 4040, at 34.

<sup>153</sup> *Original Determinations*, USITC Pub. 4040, at 27-28.

<sup>154</sup> *Original Determinations*, USITC Pub. 4040, at 28-29.

the requisite causal nexus between the subject imports and the condition of the domestic industry.<sup>155</sup>

In its analysis of threat of material injury caused by cumulated subject imports from Brazil, China, and the UAE, the Commission stated that the domestic industry was in a weakened state, as the Commission's discussion of impact in the context of present material injury had shown, and found that the industry was vulnerable to material injury. The Commission found that the PET film producers in the cumulated subject countries had a large amount of excess capacity and had rapidly increased capacity during the period of investigation. The likely significant increased cumulated subject import volumes would likely erode the market share not only of nonsubject imports, but of the domestic industry as well. The Commission found that the likely significant price depressing and suppressing effects of cumulated subject imports would likely lead to further deterioration in the domestic industry's already weakened condition. In contrast to the likely increase in subject imports, the Commission found that the volume of nonsubject imports was likely to remain steady or decline, given that imports from five nonsubject countries were subject to antidumping and countervailing duty orders and that imports from other nonsubject sources, such as Japan, tended to be higher-priced films. The Commission consequently concluded that the domestic industry was threatened with material injury by reason of cumulated subject imports.<sup>156</sup>

### **C. 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."<sup>157</sup> The following conditions of competition inform our determinations.

#### **1. Demand Conditions**

As in the original investigations, the overall demand for PET film is derived from the demand for downstream products. There are five main end-use segments 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 reportedly declining.<sup>158</sup> Within the larger segments, there are numerous sub-segments. Each sub-segment consists of a particular type of PET film (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.<sup>159</sup>

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<sup>155</sup> *Original Determinations*, USITC Pub. 4040, at 29-30.

<sup>156</sup> *Original Determinations*, USITC Pub. 4040, at 34-35.

<sup>157</sup> 19 U.S.C. § 1675a(a)(4).

<sup>158</sup> CR at I-28, II-1, II-13; PR at I-23, II-1, II-7.

<sup>159</sup> CR at II-1; PR at II-1.

Apparent U.S. consumption fluctuated over the period of review, declining overall by 5.6 percent from \*\*\* pounds in 2008 to \*\*\* pounds in 2013.<sup>160</sup> Apparent consumption in the merchant market likewise fluctuated, but increased overall by \*\*\* percent from \*\*\* million pounds in 2008 to \*\*\* pounds in 2013.<sup>161</sup>

Most market participants, including the majority of U.S. producers, importers, purchasers, and foreign producers reported that U.S. demand has increased since 2008. The majority of importers, purchasers, and foreign producers anticipated an increase in U.S. demand in the future, although only half of U.S. producers expected demand to increase. However, most responding purchasers did not expect an increase in U.S. demand for their final products in the future.<sup>162</sup>

## 2. Supply Conditions

During the period of review, the U.S. market was supplied by the domestic industry, subject imports, and nonsubject imports. Of the three sources, the domestic industry held the largest share of apparent U.S. consumption, as measured by quantity, but its share declined irregularly over the period, although it was \*\*\* percentage points higher in interim 2014 than in interim 2013.<sup>163</sup>

Since the antidumping duty orders were imposed in 2008, subject imports from China and the UAE have remained in the U.S. market, while subject imports from Brazil left the U.S. market after 2008, with the exception of one small shipment in 2009.<sup>164</sup> The market share of cumulated subject imports from China and the UAE increased irregularly over the period of review from \*\*\* percent in 2008 to \*\*\* percent in 2013, although it was lower in interim 2014 than in interim 2013.<sup>165</sup> The market share of nonsubject imports was higher than that of cumulated subject imports from China and the UAE and increased over the period of review, although it declined between 2012 and 2013, and was lower in interim 2014 than in interim

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<sup>160</sup> Apparent U.S. consumption was \*\*\* pounds in 2008, \*\*\* pounds in 2009, \*\*\* pounds in 2010, \*\*\* pounds in 2011, \*\*\* pounds in 2012, and \*\*\* pounds in 2013. It was \*\*\* pounds in interim 2013 and \*\*\* pounds in interim 2014. CR/PR at Table I-1.

<sup>161</sup> Apparent U.S. consumption in the merchant market was \*\*\* pounds in 2008, \*\*\* pounds in 2009, \*\*\* pounds in 2010, \*\*\* pounds in 2011, \*\*\* pounds in 2012, and \*\*\* pounds in 2013. It was \*\*\* pounds in interim 2013 and \*\*\* pounds in interim 2014. CR/PR at Table C-2.

<sup>162</sup> CR/PR at Table II-5.

<sup>163</sup> The domestic industry's market share was \*\*\* percent in 2008, \*\*\* percent in 2009, \*\*\* percent in 2010, \*\*\* percent in 2011, \*\*\* percent in 2012, and \*\*\* percent in 2013. It was \*\*\* percent in interim 2013 and \*\*\* percent in interim 2014. CR/PR at Table I-11.

<sup>164</sup> CR at IV-2; PR at IV-1; Hearing Tr. at 100, 122-123 (Roy).

<sup>165</sup> The market share of cumulated subject imports from China and the UAE was \*\*\* percent in 2008, \*\*\* percent in 2009, \*\*\* percent in 2010, \*\*\* percent in 2011, \*\*\* percent in 2012, and \*\*\* percent in 2013. It was \*\*\* percent in interim 2013 and \*\*\* percent in interim 2014. CR/PR at Table I-11. Subject imports from Brazil had a market share of \*\*\* percent in 2008, and a market share of \*\*\* percent for the remainder of the period of review. *Id.*

2013.<sup>166</sup> The largest sources of nonsubject imports during 2008-2013 were Korea, Mexico, and Taiwan.<sup>167</sup> Imports from India are subject to antidumping and countervailing duty orders, while imports from Taiwan are subject to an antidumping duty order.<sup>168</sup>

### 3. Substitutability

The record indicates a high degree of substitutability between domestically produced PET film and PET film imported from Brazil, China, and the UAE.<sup>169</sup> As discussed above, the majority of U.S. producers, importers, and purchasers reported that the domestic like product and imports from all three subject countries are always or frequently interchangeable, with the exception that U.S. purchasers' responses were mixed with respect to comparisons of subject imports from Brazil with subject imports from China and the UAE.<sup>170</sup> Price was rated as a very important factor in purchasing decisions by 18 of 19 responding purchasers.<sup>171</sup>

### 4. Other Conditions

PET film is produced and sold for a myriad of end uses in two major categories: general purpose commodity-grade films and non-commodity films that generally command a price premium relative to commodity grades. However, the dividing line between the two categories is not entirely clear, and different market participants apply these terms differently.<sup>172</sup> Domestic Producers and Terphane agree, however, that the pricing of commodity films affects

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<sup>166</sup> The market share of nonsubject imports was \*\*\* percent in 2008, \*\*\* percent in 2009, \*\*\* percent in 2010, \*\*\* percent in 2011, \*\*\* percent in 2012, and \*\*\* percent in 2013. It was \*\*\* percent in interim 2013 and \*\*\* percent in interim 2014. CR/PR at Table I-11.

<sup>167</sup> CR/PR at Table IV-2.

<sup>168</sup> CR at I-5; PR at I-3 to I-4. *See generally Polyethylene Terephthalate Film, Sheet, and Strip from India and Taiwan*, Inv. Nos. 701-TA-415 and 731-TA-933 and 934 (Second Review), USITC Pub. 4479 (July 2014).

<sup>169</sup> CR at II-17; PR at II-10.

<sup>170</sup> CR/PR at Table II-11. A majority of reporting purchasers found that subject imports from Brazil were only sometimes interchangeable with subject imports from China. Reporting purchasers were evenly divided between those who found that subject imports from Brazil were always or frequently interchangeable with subject imports from the UAE and those who found them only sometimes interchangeable. *Id.*

<sup>171</sup> CR/PR at Table II-8. Product consistency, quality meets industry standards, and reliability of supply were identified as very important factors by all 19 responding purchasers. *Id.*

<sup>172</sup> CR at I-28; PR at I-23; Hearing Tr. at 85 (Winn), 91-92, 124-126 (Roy); Domestic Producers' Posthearing Brief at 54-55 (response to Commissioner Schmidlein); Terphane's Posthearing Brief, Answers to Commissioners' Questions at 72-73 (responses to Commissioners Schmidlein and Williamson).

the pricing of non-commodity films, and a decline in the “base price” for commodity grades can lead to declines in prices for non-commodity specialty grades through a “domino effect.”<sup>173</sup>

As in the original investigations, the production of PET film is capital-intensive. Both Domestic Producers and Terphane agree that plants need to run at relatively high capacity utilization rates in order to remain profitable.<sup>174</sup>

Raw material costs are an important consideration in the price of PET film, accounting for between 48.3 percent and 60.1 percent of U.S. producers’ COGS during the period of review. 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. Thus, raw material costs are greatly affected by crude oil and natural gas prices.<sup>175</sup>

**D. Revocation of the Antidumping Duty Orders on Subject Imports from China and the UAE is Likely to Lead to the Continuation or Recurrence of Material Injury to the Domestic Industry within a Reasonably Foreseeable Time**

**1. Likely Volume of Subject Imports<sup>176</sup>**

The record indicates that subject producers in China and the UAE have both the incentive and capacity to significantly increase shipments of subject merchandise to the U.S. market within a reasonably foreseeable time if the antidumping duty orders are revoked. The cumulated subject industries in China and the UAE have substantial capacity, have added capacity since the orders were imposed in 2008, and have substantial excess capacity. Questionnaire data indicate that the annual production capacity for subject PET film producers in the UAE increased during the period of review from \*\*\* pounds in 2008 to \*\*\* pounds in 2013.<sup>177</sup> The subject UAE industry had its \*\*\* level of capacity utilization during the period of review in 2013, declining from \*\*\* percent in 2008 to \*\*\* percent in 2013, and had approximately \*\*\* pounds of unused capacity in 2013.<sup>178</sup>

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<sup>173</sup> Hearing Tr. at 20 (Kasoff); 117-118, 176 (Roy); Domestic Producers’ Posthearing Brief at 52 (response to Commissioner Schmidlein); Terphane’s Posthearing Brief, Answers to Commissioners’ Questions at 73-74 (response to Commissioner Schmidlein).

<sup>174</sup> CR at I-26; PR at I-21; Domestic Producers’ Prehearing Brief at 48; Hearing Tr. at 21 (Kasoff), 181 (Roy).

<sup>175</sup> CR at I-25 to I-26, V-1; PR at I-21, V-1.

<sup>176</sup> Vice Chairman Pinkert has cumulated all subject imports. He joins this section with respect to China and the UAE and finds that the conclusions herein are strengthened by his inclusion of the subject imports from Brazil in the analysis. He explains his cumulated volume conclusions at the end of this section and his price and impact conclusions in later footnotes.

<sup>177</sup> CR/PR at Table IV-13.

<sup>178</sup> In 2013, the capacity of the subject industry in the UAE was \*\*\* pounds, which was \*\*\* pounds greater than its production of \*\*\* pounds. CR/PR at Table IV-13.



The information available with respect to the subject Chinese PET film industry indicates that it has also added substantial capacity during the period of review, and has substantial excess capacity. At the end of 2011, the Chinese industry's BOPET capacity (biaxially oriented PET film) was estimated at almost double its capacity in 2008.<sup>179</sup> Data from the \*\*\* indicate that in 2011 the Chinese industry had production capacity of \*\*\* pounds of PET film, production of \*\*\* pounds of PET film, and \*\*\* pounds of unused PET film capacity (which may include out-of-scope PET film).<sup>180</sup> Moreover, the subject industries in both China and the UAE are export oriented, and total PET film exports from both subject countries increased overall during the period.<sup>181</sup> Public information from the Global Trade Atlas indicates that the Chinese industry was the largest exporter of PET film in the world in 2013, and the UAE industry was the world's eighth-largest exporter of PET film.<sup>182</sup> According to questionnaire data, total exports as a percentage of UAE producers' total shipments ranged from a high of \*\*\* percent in 2012 to a low of \*\*\* percent in 2013.<sup>183</sup> The information available indicates that in 2011, the ratio of total exports by the Chinese PET film industry to the industry's total production was approximately \*\*\* percent.<sup>184</sup>

We find that producers in China and the UAE would likely direct significant volumes of PET film to the U.S. market should the respective antidumping duty orders be revoked. Even under the discipline of the orders, the volume and market share of cumulated subject imports from China and the UAE were higher in 2013 than in 2008, prior to imposition of the orders,<sup>185</sup>

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<sup>179</sup> The Chinese industry's BOPET capacity (which may include out-of-scope merchandise) was estimated at \*\*\* in 2008, and \*\*\* in 2011. CR/PR at Table IV-10; CR at IV-18; PR at IV-11.

<sup>180</sup> CR/PR at Table IV-10.

<sup>181</sup> The information available indicates that total exports of PET film (including out-of-scope PET film) from China nearly doubled between 2008 and 2013, from 203.8 million pounds in 2008 to 403.8 million pounds in 2013. CR/PR at Table IV-12. Questionnaire data indicate that total PET film exports from the UAE increased irregularly over the period of review. They were \*\*\* pounds in 2008, \*\*\* pounds in 2009, \*\*\* pounds in 2010, \*\*\* pounds in 2011, \*\*\* pounds in 2012, and \*\*\* pounds in 2013. They were \*\*\* pounds in interim 2013 and \*\*\* pounds in interim 2014. CR/PR at Table IV-13.

<sup>182</sup> CR/PR at Table IV-16. The export data include data for exports of out-of-scope PET film.

<sup>183</sup> Total exports by UAE PET film producers as a percentage of total shipments totaled \*\*\* percent in 2008, \*\*\* percent in 2009, \*\*\* percent in 2010, \*\*\* percent in 2011, \*\*\* percent in 2012, and \*\*\* percent in 2013; they were \*\*\* percent in interim 2013 and \*\*\* percent in interim 2014. CR/PR at Table IV-13. Exports to the United States by UAE PET film producers as a percentage of total shipments totaled \*\*\* percent in 2008, \*\*\* percent in 2009, \*\*\* percent in 2010, \*\*\* percent in 2011, \*\*\* percent in 2012, and \*\*\* percent in 2013; they were \*\*\* percent in interim 2013 and \*\*\* percent in interim 2014. CR/PR at Table IV-13.

<sup>184</sup> CR/PR at Table IV-10. The Chinese production and export data include out-of-scope PET film.

<sup>185</sup> The volume of cumulated subject imports from China and the UAE was \*\*\* pounds in 2008, \*\*\* pounds in 2009, \*\*\* pounds in 2010, \*\*\* pounds in 2011, \*\*\* pounds in 2012, and \*\*\* pounds in 2013. It was \*\*\* pounds in interim 2013 and \*\*\* pounds in interim 2014. CR/PR at Table IV-1. The market share of cumulated U.S. shipments of subject imports from China and the UAE was \*\*\* percent in 2008, \*\*\* percent in 2009, \*\*\* percent in 2010, \*\*\* percent in 2011, \*\*\* percent in 2012, and \*\*\* (Continued...)

indicating that subject producers continue to find the U.S. market attractive and have ready access to U.S. distribution networks. In addition, questionnaire responses from \*\*\* indicate that \*\*\* are likely if the orders are revoked.<sup>186</sup>

The United States was the second largest importing market for PET film in the world in 2013, making its market attractive to exporters in China and the UAE.<sup>187</sup> In addition, Brazil maintains an antidumping duty order on PET film from the UAE, which provides an incentive for subject UAE producers to ship subject product to the U.S. market rather than Brazil, and we note that the Brazilian government is also conducting an ongoing antidumping investigation, and has given notice of application of provisional antidumping duties, on imports of PET film from China.<sup>188</sup> The United States also maintains antidumping and countervailing duty orders on imports of PET film from India and an antidumping duty order on imports of PET film from Taiwan,<sup>189</sup> which limit competition in the U.S. market and further increases its attractiveness compared to other markets.

Given the cumulated subject producers' capacity increases, unused capacity, and overall export orientation, the size and relative attractiveness of the U.S. market, and the continued presence of subject imports from China and the UAE in the U.S. market during the period of review, we conclude that cumulated subject import volumes will likely be significant, both in absolute terms and relative to U.S. consumption, upon revocation of the orders.<sup>190 191</sup>

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(...Continued)

percent in 2013. It was \*\*\* percent in interim 2013 and \*\*\* percent in interim 2014. CR/PR at Table I-1.

<sup>186</sup> \*\*\* stated that \*\*\*, while \*\*\* stated that \*\*\*. CR at D-22 to D-23; PR at D-3.

<sup>187</sup> CR/PR at Table IV-17.

<sup>188</sup> CR at IV-33; PR at IV-18.

<sup>189</sup> CR at I-5; PR at I-4.

<sup>190</sup> We have also examined inventories in our analysis of the likely volumes of subject imports, although we do not have questionnaire or other data available on inventories of subject merchandise in China. Reported end-of-period inventories of subject merchandise in the UAE increased irregularly over the period of review. They were \*\*\* pounds in 2008, \*\*\* pounds in 2009, \*\*\* pounds in 2010, \*\*\* pounds in 2011, \*\*\* pounds in 2012, and \*\*\* pounds in 2013. They were \*\*\* pounds in interim 2013, and \*\*\* pounds in interim 2014. CR/PR at Table IV-13. U.S. importers' cumulated end-of-period inventories from China and the UAE declined over the period of review. They were \*\*\* pounds in 2008, \*\*\* pounds in 2009, \*\*\* pounds in 2010, \*\*\* pounds in 2011, \*\*\* pounds in 2012, and \*\*\* pounds in 2013. They were \*\*\* pounds in interim 2013, and \*\*\* pounds in interim 2014. CR/PR at Table IV-4. \*\*\*. CR at II-12; PR at II-6. Given the lack of questionnaire data from subject Chinese PET film producers, there is little information in the record on the ability of Chinese producers to switch between producing other products and subject PET film on the same equipment.

<sup>191</sup> Vice Chairman Pinkert finds that this analysis is strengthened when imports of the subject merchandise from Brazil are cumulated with those from China and the UAE. Combined production capacity in Brazil, China, and the UAE in 2013 was nearly \*\*\* million pounds and combined production was only \*\*\* million pounds, for a combined capacity utilization of only \*\*\* percent. CR/PR at Table IV-15.

## 2. Likely Price Effects

As discussed above, domestically produced PET film and imported PET film from China and the UAE are highly substitutable, and price is an important factor in purchasing decisions.<sup>192</sup>

The Commission requested pricing data for eight PET film products in these reviews.<sup>193</sup> The pricing data show that, even with orders in place, there was predominant underselling by cumulated subject imports from China and the UAE during the period of review. Cumulated subject imports undersold the domestic like product in 185 out of 275 quarterly comparisons, with an average margin of underselling of 21.5 percent.<sup>194</sup> The volume of cumulated subject imports from China and the UAE that undersold the domestic like product constituted 177.8 million pounds out of 239.3 million total pounds accounted for by the pricing data, or 74.3 percent by volume.<sup>195</sup>

Given the underselling by cumulated subject imports in these reviews, as well as the extensive underselling in the original investigations,<sup>196</sup> and our findings that the cumulated subject import volumes would likely be significant upon revocation, we find that significant underselling would likely continue if the antidumping duty orders on PET film from China and the UAE were revoked. Because of the importance of price in purchasing decisions, this underselling would likely cause the domestic industry to either reduce its prices or forgo price increases to maintain market share and consequently would likely have price depressing or suppressing effects.<sup>197</sup>

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<sup>192</sup> CR/PR at Table II-8.

<sup>193</sup> Eight U.S. producers, four importers of subject merchandise from the UAE, and three importers of subject merchandise from China provided usable pricing data, although not all firms reported pricing for all products for all quarters. Pricing data reported by these firms accounted for 36.5 percent of U.S. producers' U.S. commercial shipments of PET film during the period of review, all U.S. commercial shipments of subject imports from China, and 99.2 percent of U.S. shipments of imports from the UAE. CR at V-6 to V-7; PR at V-4 to V-5.

<sup>194</sup> See CR/PR at Table V-12.

<sup>195</sup> CR/PR at Tables V-3 to V-10.

<sup>196</sup> In the original investigations, cumulated subject imports from China and the UAE undersold the domestic like product in 106 out of 121 comparisons. *Polyethylene Terephthalate Film, Sheet, and Strip from Brazil, China, Thailand, and the United Arab Emirates*, Inv. Nos. 731-TA-1131-1134 (Final), USITC Pub. 4040 (October 2008), at Table V-8.

<sup>197</sup> Vice Chairman Pinkert finds that this analysis is strengthened when imports of the subject merchandise from Brazil are cumulated with those from China and the UAE. During the period covered by these reviews, subject imports from Brazil undersold U.S. produced PET film in 13 of 14 instances. CR at V-32; PR at V-6. In the original investigations, subject imports from Brazil were priced lower than domestic product in 25 out of 36 comparisons. CR at V-32; PR at V-6. Vice Chairman Pinkert concludes that the significant cumulated volume of imports of the subject merchandise from Brazil, China, and the UAE, which would likely enter the United States at prices that would undersell the domestic product, would likely have significant depressing and/or suppressing effects on the prices available to U.S. producers.

### 3. Likely Impact<sup>198</sup>

Over the period of review, most indicators of the domestic industry's condition declined. Capacity declined overall, although it increased between 2012 and 2013.<sup>199</sup> Production fluctuated, but declined overall.<sup>200</sup> Capacity utilization fluctuated, but declined by about \*\*\* percentage points between 2008 and 2013.<sup>201</sup> U.S. shipments declined over the period.<sup>202</sup> The ratio of inventories to total shipments remained relatively steady over the period, declining slightly overall.<sup>203</sup> The domestic industry's market share declined over the period.<sup>204</sup>

Employment indicators declined over the period of review. The number of production and related workers declined,<sup>205</sup> as did the hours they worked<sup>206</sup> and the wages they were paid.<sup>207</sup> Their productivity also declined.<sup>208</sup>

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<sup>198</sup> The statute additionally instructs that “the Commission may consider the magnitude of the margin of dumping” in making its determination in a five-year review. 19 U.S.C. § 1675a(a)(6). In its expedited sunset review with respect to PET film from China, Commerce determined likely dumping margins of 3.49 percent for eight Chinese exporters/producers and 76.72 percent for the PRC-wide entity. In its expedited sunset review with respect to PET film from the UAE, Commerce determined a likely dumping margin of 4.05 percent for Flex Middle East FZE (Flex Middle East) and 4.05 percent for all others. *Polyethylene Terephthalate Film, Sheet, and Strip from Brazil, the People's Republic of China, and the United Arab Emirates: Final Results of the Expedited Sunset Reviews of the Antidumping Duty Orders*, 79 Fed. Reg. 10095 (Feb. 24, 2014).

<sup>199</sup> Capacity totaled \*\*\* pounds in 2008, \*\*\* pounds in 2009, \*\*\* pounds in 2010, \*\*\* pounds in 2011, \*\*\* pounds in 2012, and \*\*\* pounds in 2013. It was \*\*\* pounds in interim 2013 and \*\*\* pounds in interim 2014. CR/PR at Table III-4.

<sup>200</sup> Production totaled \*\*\* pounds in 2008, \*\*\* pounds in 2009, \*\*\* pounds in 2010, \*\*\* pounds in 2011, \*\*\* pounds in 2012, and \*\*\* pounds in 2013. It was \*\*\* pounds in interim 2013 and \*\*\* pounds in interim 2014. CR/PR at Table III-4.

<sup>201</sup> Capacity utilization was \*\*\* percent in 2008, \*\*\* percent in 2009, \*\*\* percent in 2010, \*\*\* percent in 2011, \*\*\* percent in 2012, and \*\*\* percent in 2013. It was \*\*\* percent in interim 2013 and \*\*\* percent in interim 2014. CR/PR at Table III-4.

<sup>202</sup> Total U.S. shipments were \*\*\* pounds in 2008, \*\*\* pounds in 2009, \*\*\* pounds in 2010, \*\*\* pounds in 2011, \*\*\* pounds in 2012, and \*\*\* pounds in 2013. They were \*\*\* pounds in interim 2013 and \*\*\* pounds in interim 2014. CR/PR at Table III-5.

<sup>203</sup> The ratio of inventories to total shipments was \*\*\* percent in 2008, \*\*\* percent in 2009, \*\*\* percent in 2010, \*\*\* percent in 2011, \*\*\* percent in 2012, and \*\*\* percent in 2013. It was \*\*\* percent in interim 2013 and \*\*\* percent in interim 2014. CR/PR at Table III-6.

<sup>204</sup> U.S. producers' share of the quantity of apparent U.S. consumption was \*\*\* percent in 2008, \*\*\* percent in 2009, \*\*\* percent in 2010, \*\*\* percent in 2011, \*\*\* percent in 2012, and \*\*\* percent in 2013. It was \*\*\* percent in interim 2013 and \*\*\* percent in interim 2014. CR/PR at Table I-1.

<sup>205</sup> The average number of production and related workers (PRWs) was \*\*\* in 2008, \*\*\* in 2009, \*\*\* in 2010, \*\*\* in 2011, \*\*\* in 2012, and \*\*\* in 2013. The average number of PRWs was \*\*\* in interim 2013 and \*\*\* in interim 2014. CR/PR at Table III-9.

The domestic industry's net sales declined over the period of review.<sup>209</sup> U.S. producers' total COGS fluctuated, but declined overall.<sup>210</sup> The domestic industry sustained an operating loss in 2008, improved operating performance in 2009 and 2010, and declining operating income thereafter.<sup>211</sup> The operating income margin followed the same trend.<sup>212</sup> Capital expenditures fluctuated, but increased slightly overall.<sup>213</sup> Research and development expenses increased over the period.<sup>214</sup> In view of the foregoing, we find that the domestic industry is in a vulnerable condition.

We have found that the likely additional volumes of subject imports would likely be priced in a manner that would undersell the domestic like product. Consequently, the domestic industry would need to respond either by forgoing sales and ceding market share or by lowering or restraining its prices. Under either circumstance, the domestic industry's revenues

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<sup>206</sup> Total hours worked was \*\*\* hours in 2008, \*\*\* hours in 2009, \*\*\* hours in 2010, \*\*\* hours in 2011, \*\*\* hours in 2012, and \*\*\* hours in 2013. Total hours worked were \*\*\* hours in interim 2013 and \*\*\* pounds in interim 2014. CR/PR at Table III-9.

<sup>207</sup> Wages paid totaled \$\*\*\* in 2008, \$\*\*\* in 2009, \$\*\*\* in 2010, \$\*\*\* in 2011, \$\*\*\* in 2012, and \$\*\*\* in 2013. Wages paid totaled \$\*\*\* in interim 2013 and \$\*\*\* in interim 2014. CR/PR at Table III-9.

<sup>208</sup> Productivity, as measured by pounds by hour, totaled \*\*\* in 2008, \*\*\* in 2009, \*\*\* in 2010, \*\*\* in 2011, \*\*\* in 2012 and \*\*\* in 2013. It was \*\*\* in interim 2013 and \*\*\* in interim 2014. CR/PR at Table III-9.

<sup>209</sup> Total net sales were 614.7 million pounds in 2008, 545.3 million pounds in 2009, 592.1 million pounds in 2010, 517.4 million pounds in 2011, 489.4 million pounds in 2012, and 508.8 million pounds in 2013. They were 264.5 million pounds in interim 2013 and 293.9 million pounds in interim 2014. CR/PR at Table III-10.

<sup>210</sup> Total COGS was \$1.1 billion in 2008, \$878.5 million in 2009, \$951.4 million in 2010, \$1.0 billion in 2011, \$945.2 million in 2012, and \$940.6 million in 2013. Total COGS was \$481.3 million in interim 2013 and \$500.4 million in interim 2014. CR/PR at Table III-10.

<sup>211</sup> Operating losses totaled \$5.5 million in 2008, and operating income totaled \$18.2 million in 2010, \$116.1 million in 2010, \$98.4 million in 2011, \$40.1 million in 2012, and \$10.7 million in 2013. Operating income was \$17.5 million in interim 2013 and \$10.0 million in interim 2014. CR/PR at Table III-10.

<sup>212</sup> The operating margin was negative 0.5 percent in 2008, 1.8 percent in 2009, 9.9 percent in 2010, 8.2 percent in 2011, 3.7 percent in 2012, and 1.0 percent in 2013. It was 3.2 percent in interim 2013 and 1.8 percent in interim 2014. CR/PR at Table III-10.

<sup>213</sup> Capital expenditures totaled \$\*\*\* in 2008, \$\*\*\* in 2009, \$\*\*\* in 2010, \$\*\*\* in 2011, \$\*\*\* in 2012, and \$\*\*\* in 2013. Capital expenditures totaled \$\*\*\* in interim 2013 and \$\*\*\* in interim 2014. CR/PR at Table III-13.

<sup>214</sup> Research and development expenses totaled \$\*\*\* in 2008, \$\*\*\* in 2009, \$\*\*\* in 2010, \$\*\*\* in 2011, \$\*\*\* in 2012, and \$\*\*\* in 2013. They totaled \$\*\*\* in interim 2013 and \$\*\*\* in interim 2014. CR/PR at Table III-13.

and financial performance would likely decline, resulting from declines in the domestic industry's production, shipments, market share, and employment, or from lower prices.<sup>215</sup>

We have also considered the role of nonsubject imports in the U.S. market, as well as that of subject imports from Brazil. As previously discussed, the market share of nonsubject imports increased over the period of review, although it declined between 2012 and 2013, and it was lower in interim 2014 than in interim 2013.<sup>216</sup> Among suppliers of nonsubject imports, India is subject to U.S. antidumping and countervailing duty orders, while Taiwan is subject to a U.S. antidumping duty order.<sup>217</sup> Several sources of nonsubject imports, including Mexico, Turkey, Taiwan, Thailand, and Indonesia, experienced declines in import volume between 2012 and 2013.<sup>218</sup> As discussed in section IV.E herein, we find that revocation of the antidumping duty order on subject imports from Brazil would not likely lead to a significant adverse impact on the domestic industry. We note that average unit values (AUVs) for nonsubject imports were consistently higher throughout the period of review than AUVs for cumulated subject imports from China and the UAE.<sup>219</sup>

We have found that the volume of cumulated subject imports from China and the UAE would likely be significant upon revocation of the orders and that the subject producers are export oriented. Under these circumstances, we find that the domestic industry would more likely lose market share to the high volume of aggressively priced cumulated subject imports than to nonsubject imports. Further, the domestic industry's profitability would likely decline as it is forced to lower its prices to compete with the increased volume of lower-priced subject imports.

Accordingly, in light of the likely significant volumes and likely adverse price effects, we find that revocation of the antidumping duty orders on PET film from China and the UAE would likely have a significant adverse impact on the domestic industry.<sup>220</sup>

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<sup>215</sup> JBF asserts that any weakness in the domestic industry's condition is attributable to various business problems of individual U.S. producers, and is unrelated to import competition from subject producers. JBF's Posthearing Brief at 7-8. Assuming *arguendo* that this is the case, the problems of individual U.S. producers, and of the domestic industry as a whole, would only be exacerbated by additional significant volumes of imports in the U.S. market at prices that undersell the domestic industry. The likely declines in domestic industry performance that we have found would likely be caused by the subject imports are distinguishable from the domestic industry's current difficulties.

<sup>216</sup> The market share of nonsubject imports was \*\*\* percent in 2008, \*\*\* percent in 2009, \*\*\* percent in 2010, \*\*\* percent in 2011, \*\*\* percent in 2012, and \*\*\* percent in 2013. It was \*\*\* percent in interim 2013, and \*\*\* percent in interim 2014. CR/PR at Table I-11.

<sup>217</sup> CR at I-5; PR at I-4.

<sup>218</sup> CR/PR at Table IV-2.

<sup>219</sup> CR/PR at Table C-1. Although we typically place limited weight on AUV data as a measure of relative prices since differences in AUVs may reflect differences in product mix, AUVs are the best approximation of actual prices for subject and nonsubject imports on the record in these reviews.

<sup>220</sup> Based on the foregoing and on his earlier findings with respect to volume and price, Vice Chairman Pinkert finds that imports of subject merchandise from Brazil, China, and the UAE are likely to have a significant adverse impact on the domestic industry if the orders were revoked. Thus, he (Continued...)

**E. Revocation of the Antidumping Duty Order on Subject Imports from Brazil is Not Likely to Lead to the Continuation or Recurrence of Material Injury to the Domestic Industry within a Reasonably Foreseeable Time<sup>221</sup>**

**1. Likely Volume of Subject Imports**

We find that the volume of subject imports from Brazil is not likely to be significant after revocation of the order.

The industry in Brazil has not been a large supplier to the U.S. market, even before imposition of the antidumping duty order in 2008. During the original investigations, subject imports from Brazil increased from \*\*\* pounds in 2005 to \*\*\* pounds in 2007, but subject imports from Brazil during the 12-month period prior to the filing of the petition constituted \*\*\* percent of total imports, \*\*\*.<sup>222</sup> During the original period of investigation, the market share of subject imports from Brazil never exceeded \*\*\* percent for any year.<sup>223</sup> Subject imports from Brazil exited the U.S. market after 2008, with the exception of an accidental shipment in 2009, and there have been no subject imports from Brazil since 2009.<sup>224</sup>

We acknowledge that Terphane Ltda. is increasing production capacity by adding the “P4” line, with a nameplate capacity of 28,000 metric tons.<sup>225</sup> This added capacity is being phased in over time, with approximately \*\*\* metric tons of capacity expected to be added by the end of 2015. As this capacity is being added, Terphane Ltda. is planning to idle some older and more inefficient capacity, and has already idled an older production line with capacity of 3,300 metric tons.<sup>226</sup> Terphane states that the addition of capacity is designed to “rightsize” its capacity and regain market share it has lost in the Brazilian home market. Since its capacity

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concludes that, if the orders were revoked, cumulated imports of subject merchandise from Brazil, China, and the UAE would likely lead to a continuation or recurrence of material injury to the domestic industry within a reasonably foreseeable time.

<sup>221</sup> Vice Chairman Pinkert does not join this section.

<sup>222</sup> *Original Determinations*, USITC Pub. 4040, at 12.

<sup>223</sup> CR/PR at Table I-1.

<sup>224</sup> CR at IV-2; PR at IV-1; Hearing Tr. at 100, 122-123 (Roy).

<sup>225</sup> Roy Declaration at paragraphs 13-15, Hearing Tr. at 93-94, 98, 131-132 (Roy); CR at IV-15, IV-32, IV-33 and n.40; PR at IV-10, IV-17, IV-18 and n.40. \*\*\*. In 2013, \*\*\* percent of its production was subject PET film and \*\*\* percent was out-of-scope PET film. CR at II-9; PR at II-5. By comparison, in 2007, \*\*\* percent of its production was subject PET film and \*\*\* percent was out-of-scope PET film. CR at II-9 n.12; PR at II-5 n.12. We consequently reject Domestic Producers’ contention that the Commission should have included Terphane Ltda.’s capacity used to produce out-of-scope products in its calculation of Terphane Ltda.’s capacity to produce subject film. Domestic Producers’ Posthearing Brief at 5-8. The manner in which Terphane Ltda. allocated its overall PET film capacity complies with the instructions in the Commission’s questionnaire. See Foreign Producers’ Questionnaire Response of \*\*\*.

<sup>226</sup> Roy Declaration at paragraphs 13-15, Hearing Tr. at 93-94, 98, 131-132 (Roy); CR at IV-15, IV-32, IV-33 and n.40; PR at IV-10, IV-17, IV-18 and n.40.

utilization has been essentially full during most of the period of review,<sup>227</sup> it was \*\*\* and unable to take advantage of market opportunities in its home market and Latin American export markets.<sup>228</sup> Terphane Ltda.'s likely capacity utilization is expected to continue to be \*\*\* in 2015 as the new capacity is phased in, with its internal estimate at \*\*\* percent.<sup>229</sup> Thus, we do not find it likely that the addition of capacity by Terphane Ltda. will lead to significant unused capacity in Brazil in the reasonably foreseeable future.

Moreover, we find that the subject Brazilian industry lacks the incentive to export significant volumes of subject merchandise to the U.S. market. As previously discussed, the Brazilian industry is oriented towards its home market, with its share of total shipments going to commercial shipments in the home market increasing from \*\*\* percent in 2008 to \*\*\* percent in 2013.<sup>230</sup> Demand for PET film in the Brazilian market is expected to grow in 2015.<sup>231</sup> Terphane Ltda. has also taken considerable effort to protect its home market through the use of Brazil's trade remedy laws. Exports to Brazil are restrained by antidumping duty orders on imports of PET film from Mexico, Turkey, and the UAE, and there are pending Brazilian antidumping duty investigations (and provisional duties imposed) involving imports of PET film from China, Egypt, and India.<sup>232</sup> In addition, Brazilian imports of PET film from non-MERCOSUR countries are subject to an import tariff of 16 percent.<sup>233</sup> Thus, we find it likely that the Brazilian PET film industry will continue to be focused primarily on its home market for the reasonably foreseeable future.

Moreover, for Terphane Ltda. to direct a significant volume of exports from Brazil into the U.S. market would be contrary to its corporate strategy and business plans. As previously discussed, Terphane's strategy focuses on supplying PET film to the Brazilian home market and the Latin American regional market, and not on exports of subject merchandise to the U.S. market.<sup>234</sup> Terphane's product mix strategy focuses on increasing production and sales of higher-priced value-added specialty products (much of which is out-of-scope merchandise), and limiting sales of lower-priced subject commodity products.<sup>235</sup> Thus, any likely significant volume

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<sup>227</sup> Capacity utilization for the Brazilian PET film industry was \*\*\* percent in 2008, \*\*\* percent in 2009, \*\*\* percent in 2010, \*\*\* percent in 2011, \*\*\* percent in 2012, and \*\*\* percent in 2013. It was \*\*\* percent in interim 2013, and \*\*\* percent in interim 2014. CR/PR at Table IV-8.

<sup>228</sup> Roy Declaration at paragraph 19; Hearing Tr. at 93, 169-170 (Roy).

<sup>229</sup> Roy Declaration at paragraph 14.

<sup>230</sup> CR/PR at Table IV-8. Thus, Terphane's total exports as a percentage of total shipments declined sharply from \*\*\* percent in 2008 to \*\*\* percent in 2013. *Id.*

<sup>231</sup> See Hearing Tr. at 133 (Roy); Terphane's Posthearing Brief, Exh. 1, Roy Declaration, at Attachment E, page 31

<sup>232</sup> CR at IV-33; PR at IV-18. There is also a pending Brazilian countervailing duty investigation on imports of PET film from India. *Id.*

<sup>233</sup> Terphane's Prehearing Brief at 20.

<sup>234</sup> Roy Declaration at paragraph 10 and attachments A, B and E; Hearing Tr. at 94-95, 116-118 (Roy).

<sup>235</sup> Roy Declaration at paragraphs 9, 10 and attachments A, B and E; Hearing Tr. at 100-101, 117, 146-147 (Roy). The record indicates that Terphane Ltda. has some ability to shift between producing (Continued...)



of exports to the United States from Brazil will be focused on high-value specialty film, rather than low-priced commodity products.<sup>236</sup> The North American facility of Terphane, Inc. \*\*\*.<sup>237</sup> If Terphane had wanted to compete in the commodity segment of the U.S. market, notwithstanding its objectives to the contrary in its business plan, it could have facilitated such competition considerably more economically by expanding capacity at its U.S. facility rather than installing the P4 line in Brazil for purposes of increasing exports of subject merchandise to the United States.<sup>238</sup>

Domestic Producers argue that Terphane Ltda. is facing significant oversupply in its home market as a result of competition from a new supplier, OPP Films (“OPP”), which is bringing online a new large PET film production facility in Peru.<sup>239</sup> The record indicates that OPP’s export volumes have been relatively small thus far as it has been undergoing a lengthy process of trying to ramp up production at this new “greenfield” facility.<sup>240</sup> Moreover, the record indicates that OPP is pursuing a different strategy from Terphane Ltda. by focusing on low-priced commodity films rather than higher-priced specialty films. OPP’s focus on commodity PET film has helped OPP \*\*\*; however, Terphane’s representative has stated that \*\*\*.<sup>241</sup> Moreover, OPP has an affiliate in Houston, Texas, and evidence on the record indicates that it is focusing on increasing PET film exports to the United States to take advantage of the U.S.-Peru Free Trade Agreement.<sup>242</sup> The contention that OPP is focusing on the U.S. market is supported by the fact that OPP’s exports to the United States have been growing at a faster rate in 2014 than its exports to Brazil.<sup>243</sup> Thus, the record does not suggest that competition

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(...Continued)

out-of-scope merchandise and subject merchandise on the same equipment, although there are significant practical and timing constraints on the ability to do so, particularly where more complex types of film would be involved in such a switch. CR at II-9; PR at II-5; Hearing Tr. at 128-129, 179-180 (Roy). Terphane’s new P4 line is being designed as a state of the art line to handle complex speciality film products, and not as a “turnkey” line designed to produce large volumes of subject commodity film. Roy Declaration at paragraphs 21-22; Hearing Tr. at 129, 163 (Roy). Moreover, Terphane’s business plan indicates a corporate strategy for product-shifting in the opposite direction by limiting production of subject commodity film, and using the available equipment to produce more value-added out-of-scope speciality film. See Roy Declaration at paragraph 10; Hearing Tr. at 146-147 (Roy). As previously discussed, the percentage of Terphane Ltda.’s overall PET film capacity that has been used to produce subject PET film declined from \*\*\* percent in 2007 to \*\*\* percent in 2013. CR at II-9 and n.12; PR at II-5 and n.12.

<sup>236</sup> Hearing Tr. at 95-96 (Roy); Roy Declaration at paragraph 2, 10, 20. Moreover, Terphane’s business planning documents addressing exports to the North American market contemplate that Terphane will be a niche player focused on exporting value-added specialty products. Roy Declaration at attachment B at page 25; attachment A at page 6; attachment E at page 38.

<sup>237</sup> Roy Declaration at paragraph 17.

<sup>238</sup> Roy Declaration at paragraph 18; Hearing Tr. at 100 (Roy).

<sup>239</sup> Domestic Producers’ Posthearing Brief at 20-22 (response to Chairman Broadbent).

<sup>240</sup> CR at IV-34; PR at IV-18.

<sup>241</sup> Roy Declaration at paragraphs 23-24; Hearing Tr. at 134-135 (Roy).

<sup>242</sup> Roy Declaration at paragraphs 25; Terphane’s Posthearing Brief, Exhibits 2, 3, 7.

<sup>243</sup> Terphane’s Posthearing Brief at Exhibit 4.

from OPP in Brazil would be likely to cause Terphane Ltda. to choose to direct significant volumes of subject merchandise to the U.S. market in contravention of its stated corporate strategy.<sup>244</sup>

For all these reasons, we conclude that revocation of the orders on subject imports from Brazil would not result in a likely significant volume of subject imports from Brazil within a reasonably foreseeable time.<sup>245</sup>

## 2. Likely Price Effects

In considering the likely price effects of subject imports from Brazil if the order were revoked, we acknowledge, as discussed above, that subject imports from Brazil and the domestic like product are generally interchangeable, and the general importance of price in purchasing decisions.

As previously discussed, the Commission requested pricing data for eight PET film products in these reviews.<sup>246</sup> Subject imports from Brazil undersold the domestic like product in 13 out of 14 quarterly comparisons, with an average margin of underselling of 11.8 percent.<sup>247</sup>

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<sup>244</sup> Similarly, we do not find that uncertainty about the level of future demand in Terphane's Latin American markets, or competition by OPP in those markets, would be sufficient to cause Terphane Ltda. to direct significant volumes of subject PET film to the U.S. market, given the disadvantages for Terphane's priority specialty films business by doing so. Hearing Tr. at 117-118, 174-177 (Roy); Roy Declaration at paragraph 20.

<sup>245</sup> We have also examined inventories in our analysis of the likely volumes of subject imports. Reported end-of-period inventories in Brazil declined irregularly over the period of review. They were \*\*\* pounds in 2008, \*\*\* pounds in 2009, \*\*\* pounds in 2010, \*\*\* pounds in 2011, \*\*\* pounds in 2012, and \*\*\* pounds in 2013. They were \*\*\* pounds in interim 2013, and \*\*\* pounds in interim 2014. CR/PR at Table IV-8. U.S. importers' cumulated end-of-period inventories from Brazil declined \*\*\* after 2008. They were \*\*\* pounds in 2008, \*\*\* pounds in 2009, \*\*\* pounds in 2010, \*\*\* pounds in 2011, \*\*\* pounds in 2012, and \*\*\* pounds in 2013. They were \*\*\* pounds in interim 2013, and \*\*\* pounds in interim 2014. CR/PR at Table IV-4.

<sup>246</sup> Eight U.S. producers and one importer of subject merchandise from Brazil provided usable pricing data, although not all firms reported pricing for all products for all quarters. Pricing data reported by these firms accounted for 36.5 percent of U.S. producers' U.S. commercial shipments of PET film during the period of review, and 98.4 percent of U.S. shipments of imports from Brazil. CR at V-7; PR at V-4.

<sup>247</sup> CR/PR at Table V-12. The volume of subject imports from Brazil that undersold the domestic like product during the period of review was \*\*\* pounds. CR/PR at Tables V-3 to V-10. While subject imports from Brazil exited the U.S. market after 2008 (apart from one shipment in 2009), the Commission's pricing data for \*\*\* reflect \*\*\*. CR/PR at Tables V-3 to V-5; CR at IV-2; PR at IV-1; Hearing Tr. at 100, 122-123 (Roy). In the original investigations, subject imports from Brazil undersold the domestic like product in 25 out of 36 comparisons, by an average margin of underselling of \*\*\* percent. Memorandum INV-FF-125 (Oct. 6, 2008) at Table V-8 (EDIS Document No. 523718).

We nevertheless do not find that significant underselling by subject imports from Brazil is likely upon revocation, for several reasons. As stated above, revocation of the order would not result in a likely significant volume of subject imports from Brazil. All U.S. imports from Brazilian producer Terphane Ltda. are controlled by its U.S. affiliate Terphane, Inc.,<sup>248</sup> which reinforces the fact that Terphane Ltda. is unlikely to price any PET film it exports to the United States in a manner that would result in reducing prices for specialty non-commodity films.<sup>249</sup> Indeed, such pricing would be contrary to both Terphane's business plan and its economic interest. As previously stated, Terphane's corporate strategy for the U.S. market indicates that any likely exports from Brazil to the United States will be focused on high-value specialty film, rather than low-priced commodity products.<sup>250</sup> For Terphane Ltda. to ship large volumes of low-priced commodity films to the U.S. market would also be detrimental to Terphane's economic interest in the U.S. market, since increased volumes of low-priced commodity films would exert downward pressure on prices for Terphane's higher-value specialty products through the "domino effect."<sup>251</sup> We therefore conclude that subject imports from Brazil would not be likely to significantly undersell the domestic like product or enter the United States at prices that otherwise would have significant depressing or suppressing effects on the price of the domestic like product.

### 3. Likely Impact<sup>252</sup>

In evaluating the likely impact of subject imports from Brazil on the domestic industry, we note our finding that the domestic industry is vulnerable to the continuation or recurrence of material injury, detailed in section IV.D.3 above. However, given that we do not find it likely that there would be a significant volume of subject imports from Brazil or that any such imports likely would have significant adverse price effects, we find that revocation of the antidumping duty order on subject imports from Brazil would not likely lead to a significant adverse impact on the domestic industry.

For all of the foregoing reasons, we conclude that if the antidumping duty order were revoked, subject imports from Brazil would not be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

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<sup>248</sup> Hearing Tr. at 89-90, 115-116, 130, 142 (Roy); Roy Declaration at paragraphs 3, 5.

<sup>249</sup> Hearing Tr. at 117-118, 174-177 (Roy).

<sup>250</sup> Hearing Tr. at 95-96 (Roy); Roy Declaration at paragraphs 10, 20.

<sup>251</sup> Hearing Tr. at 117-118, 174-177 (Roy); see section IV.C.4 above for a discussion of the interrelationship of prices between different PET film products.

<sup>252</sup> The statute additionally instructs that "the Commission may consider the magnitude of the margin of dumping" in making its determination in a five-year review. 19 U.S.C. § 1675a(a)(6). In its expedited sunset review with respect to PET film from Brazil, Commerce determined likely dumping margins of 44.36 percent for Terphane Inc. and 28.72 percent for all others. *Polyethylene Terephthalate Film, Sheet, and Strip from Brazil, the People's Republic of China, and the United Arab Emirates: Final Results of the Expedited Sunset Reviews of the Antidumping Duty Orders*, 79 Fed. Reg. 10095 (Feb. 24, 2014).

## V. Conclusion

For the above-stated reasons, we determine that revocation of the antidumping duty orders on PET film from China and the UAE would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time. We also determine that revocation of the antidumping duty order on PET film from Brazil would not be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.<sup>253</sup>

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<sup>253</sup> Vice Chairman Pinkert determines that revocation of the antidumping duty orders on PET film from Brazil, China and the UAE would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

## PART I: INTRODUCTION

### BACKGROUND

On October 1, 2013, 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”),<sup>1</sup> that it had instituted reviews to determine whether revocation of the antidumping duty orders on polyethylene terephthalate film, sheet, and strip (“PET film”) from Brazil, China, and the United Arab Emirates (“the UAE”) was likely lead to the continuation or recurrence of material injury to a domestic industry.<sup>2 3</sup> On January 23, 2014, the Commission determined that it would conduct full reviews pursuant to section 751(c)(5) of the Act.<sup>4</sup> The tabulation on the following page presents information relating to the background and schedule of this proceeding:<sup>5</sup>

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<sup>1</sup> 19 U.S.C. 1675(c).

<sup>2</sup> *Polyethylene Terephthalate Film, Sheet, and Strip from Brazil, China, and the United Arab Emirates; Institution of Five-Year Reviews*, 78 FR 60311, October 1, 2013. All interested parties were requested to respond to this notice by submitting the information requested by the Commission.

<sup>3</sup> 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 duty orders concurrently with the Commission’s notice of institution. *Initiation of Five-Year (“Sunset”) Review*, 78 FR 60253, October 1, 2013.

<sup>4</sup> *Polyethylene Terephthalate Film, Sheet, and Strip from Brazil, China and the United Arab Emirates; Notice of Commission Determinations to Conduct Full Five-Year Reviews*, 79 FR 9276, February 18, 2014. The Commission found both the domestic interested party group response and the respondent interested party group responses with respect to the orders on subject imports from Brazil and the United Arab Emirates were adequate. The Commission found that the respondent interested party group response with respect to the orders on subject imports from China was inadequate, but determined to conduct a full review of the China order to promote administrative efficiency.

<sup>5</sup> The Commission’s notice of institution, notice to conduct full reviews, scheduling notice, and statement on adequacy are referenced in appendix A and may be found at the Commission’s web site (internet address [www.usitc.gov](http://www.usitc.gov)). Commissioners’ votes on whether to conduct expedited or full reviews may also be found at the web site. Appendix B presents the list of witnesses appearing at the Commission’s hearing.

<b>Effective date</b>	<b>Action</b>
November 10, 2008	Commerce's antidumping duty orders on PET Film from Brazil, China, and the UAE (73 FR 66595)
October 1, 2013	Commission's institution of five-year reviews (78 FR 60311)
October 1, 2013	Commerce's initiation of five-year reviews (78 FR 60253)
February 18, 2014	Commission's determinations to conduct full five-year reviews (79 FR 9276)
February 24, 2014	Commerce's final results of expedited five-year reviews of the antidumping duty orders (79 FR 10095)
July 25, 2014	Commission's scheduling of the reviews (79 FR 43509)
November 18, 2014	Commission's hearing
December 19, 2014	Scheduled date for the Commission's vote
January 16, 2015	Scheduled date for the Commission's determinations and views

### **The original investigations**

The original investigations resulted from petitions filed by DuPont Teijin Films, Hopewell, VA; Mitsubishi Polyester Film of America, Greer, SC; SKC America, Inc., Covington, GA; and Toray Plastics (America), Inc., North Kingston, RI, on September 28, 2007, alleging that an industry in the United States was materially injured and threatened with material injury by reason of imports of PET film from Brazil, China, Thailand, and the UAE that were alleged to be sold in the United States at less-than-fair-value ("LTFV"). Following notification of a final determination by Commerce that imports of PET film from Brazil, China, Thailand, and the UAE were being sold at LTFV, the Commission determined on November 3, 2008 that a domestic industry was threatened with material injury by reason of LTFV imports of PET film from Brazil, China, and the UAE.<sup>6</sup> The Commission further determined no industry in the United States was materially injured or threatened with material injury, and the establishment of an industry in the United States was not materially retarded, by reason of imports from Thailand of PET film. Commerce published the antidumping duty orders on subject imports of PET film from Brazil, China, and the UAE on November 10, 2008.<sup>7</sup>

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<sup>6</sup> *Polyethylene Terephthalate Film, Sheet, and Strip from Brazil, China, Thailand, and the United Arab Emirates; Determinations*, Inv. Nos. 731-TA-1131-1134 (Final), 73 FR 66056, November 6, 2008.

<sup>7</sup> *Polyethylene Terephthalate Film, Sheet, and Strip from Brazil, the People's Republic of China and the United Arab Emirates: Antidumping Duty Orders and Amended Final Determination of Sales at Less Than Fair Value for the United Arab Emirates*, 73 FR 66595, November 10, 2008.

## RELATED INVESTIGATIONS

In 1990, the U.S. PET film industry filed for relief from alleged LTFV imports of PET film from Korea, Japan, and Taiwan.<sup>8</sup> The Commission made a negative determination with respect to Taiwan during the preliminary investigations.<sup>9</sup> The Commission published its affirmative final determinations on imports of PET film from Japan and Korea in May 1991.<sup>10</sup> Antidumping duty orders covering imports of PET film from Japan and Korea<sup>11</sup> were issued in 1991. Commerce revoked the order on PET film from Japan in 1995, after concluding that requirements for revocation based on changed circumstances (i.e., the order no longer was of interest to domestic interested parties) were met.<sup>12</sup>

On July 1, 1999, Commerce initiated a five-year “sunset” review of the antidumping duty order on PET film from Korea. Commerce subsequently determined that dumping would likely continue or recur if the order were revoked and the Commission determined that revocation of the order would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.<sup>13</sup> As a result, Commerce continued the order on PET film from Korea effective March 7, 2000.<sup>14</sup> In 2005, pursuant to expedited second reviews conducted by Commerce and the Commission, the order on PET film from Korea was again continued, effective October 20, 2005.<sup>15</sup> In 2011, as a result of the Commission’s determination that revocation of the antidumping duty order would not likely lead to the continuation or recurrence of material injury to an industry in the United States, Commerce revoked the antidumping duty order on PET film from Korea.<sup>16</sup>

On May 17, 2001, the U.S. PET film industry filed for relief from alleged LTFV imports of PET Film from India and Taiwan. The Commission determined that a domestic industry was materially injured by reason of subsidized imports of PET film from India and LTFV imports of

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<sup>8</sup> DuPont, Hoechst, and ICI were the petitioners.

<sup>9</sup> *Polyethylene Terephthalate Film, Sheet, and Strip from Japan, the Republic of Korea, and Taiwan*, Invs. Nos. 731-TA-458 through 460 (Preliminary), USITC Publication 2292, June 1990.

<sup>10</sup> *Polyethylene Terephthalate Film, Sheet, and Strip from Japan and the Republic of Korea*, Invs. Nos. 731-TA-458 and 459 (Final), USITC Publication 2383, May 1991.

<sup>11</sup> After conducting administrative reviews, Commerce revoked the antidumping duty order with respect to product produced/exported by Korean firms Saehan (formerly Cheil Synthetics, Inc.), Kolon Industries, and H.S. Industries (61 FR 35177, July 5, 1996, 61 FR 58374, November 14, 1996, and 66 FR 5717, November 15, 2001, respectively).

<sup>12</sup> 60 FR 52366, October 6, 1995.

<sup>13</sup> See *Polyethylene Terephthalate Film from Korea*, Inv. No. 31-TA-459 (Review), USITC Publication 3278, February 2000.

<sup>14</sup> 65 FR 11984, March 7, 2000.

<sup>15</sup> See *Polyethylene Terephthalate Film from Korea*, Inv. No. 31-TA-459 (Second Review), USITC Publication 3800, September 2005, and 70 FR 61118, October 20, 2005.

<sup>16</sup> 76 FR 54791. See also 76 FR 57715.

PET film from India and Taiwan.<sup>17</sup> Commerce published the countervailing duty order on subject imports of PET film from India on July 1, 2002<sup>18</sup> and published the antidumping duty orders on PET film from India and Taiwan on May 16, 2002<sup>19</sup> and May 20, 2002<sup>20</sup>, respectively. In 2008, following affirmative determinations in the first five-year reviews by Commerce<sup>21</sup> and the Commission,<sup>22</sup> Commerce issued a continuation of the countervailing duty order on imports of PET film from India,<sup>23</sup> and a continuation of the antidumping duty orders on PET film from India and Taiwan.<sup>24</sup> In the second five-year reviews, the Commission determined 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 be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.<sup>25</sup>

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<sup>17</sup> 66 FR 36296, July 11, 2001.

<sup>18</sup> 67 FR 44179, July 1, 2002.

<sup>19</sup> 67 FR 34899, amended 67 FR 44179.

<sup>20</sup> 67 FR 35474, amended 67 FR 44174.

<sup>21</sup> 72 FR 57300, October 9, 2007.

<sup>22</sup> *Polyethylene Terephthalate Film, Sheet, and Strip from India and Taiwan*, Inv. Nos. 701-TA-415 and 731-TA-933-934 (Review), USITC Publication 3994, April 2008.

<sup>23</sup> 73 FR 26080, May 8, 2008.

<sup>24</sup> 73 FR 26079, May 8, 2008.

<sup>25</sup> 79 FR 42534, July 22, 2014.



## SUMMARY DATA

Table I-1 presents a summary of data from the original investigations and the current full five-year reviews.

**Table I-1**  
**PET film: Comparative data from the original investigations and these reviews, 2005-13, January to June 2013 and January to June 2014**

Item	Original investigations		
	2005	2006	2007
	Quantity (1,000 pounds)		
U.S. consumption quantity	***	***	***
<b>Share of quantity (percent)</b>			
Share of U.S. consumption: U.S. producers' share	***	***	***
U.S. importers' share: Brazil	***	***	***
China	***	***	***
Thailand	***	***	***
UAE	***	***	***
Subtotal, subject sources	***	***	***
All other sources	***	***	***
Total imports	***	***	***
<b>Value (1,000 dollars)</b>			
U.S. consumption	***	***	***
<b>Share of value (percent)</b>			
Share of U.S. consumption: U.S. producers' share	***	***	***
U.S. importers' share: Brazil	***	***	***
China	***	***	***
Thailand	***	***	***
UAE	***	***	***
Subtotal, subject sources	***	***	***
All other sources	***	***	***
Total imports	***	***	***

Table continued on next page

**Table I-1--Continued**

**PET film: Comparative data from the original investigations and these reviews, 2005-13, January to June 2013 and January to June 2014**

Item	Original Investigations		
	2005	2006	2007
	Quantity (1,000 pounds); Value (1,000 dollars); and Unit Value (dollars per pound)		
Shipments of U.S. imports from Brazil:			
Quantity	***	***	***
Value	***	***	***
Unit value	***	***	***
China:			
Quantity	***	***	***
Value	***	***	***
Unit value	***	***	***
Thailand:			
Quantity	***	***	***
Value	***	***	***
Unit value	***	***	***
UAE:			
Quantity	***	***	***
Value	***	***	***
Unit value	***	***	***
Subject sources:			
Quantity	***	***	***
Value	***	***	***
Unit value	***	***	***
All other sources:			
Quantity	***	***	***
Value	***	***	***
Unit value	***	***	***
All sources:			
Quantity	***	***	***
Value	***	***	***
Unit value	***	***	***

Table continued on next page.

**Table I-1--Continued**

**PET film: Comparative data from the original investigations and these reviews, 2005-13, January to June 2013 and January to June 2014**

Item	First review						January to June	
	2008	2009	2010	2011	2012	2013	2013	2014
	Quantity (1,000 pounds)							
U.S. consumption quantity	711,479	622,585	727,389	678,463	671,313	671,764	338,661	334,591
<b>Share of quantity (percent)</b>								
Share of U.S. consumption: U.S. producers' share	81.8	83.0	75.2	70.5	67.7	74.9	72.0	82.1
U.S. importers' share: Brazil	***	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***	***
UAE	***	***	***	***	***	***	***	***
Subtotal, subject sources	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***
Total imports	18.2	17.0	24.8	29.5	32.3	25.1	28.0	17.9
<b>Value (1,000 dollars)</b>								
U.S. consumption	***	***	***	***	***	***	***	***
<b>Share of value (percent)</b>								
Share of U.S. consumption: U.S. producers' share	84.5	87.0	79.3	72.9	75.2	80.4	77.8	84.9
U.S. importers' share: Brazil	***	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***	***
UAE	***	***	***	***	***	***	***	***
Subtotal, subject sources	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***
Total imports	15.5	13.0	20.7	27.1	24.8	19.6	22.2	15.1

Table continued on next page.

**Table I-1--Continued**

**PET film: Comparative data from the original investigations and these reviews, 2005-13, January to June 2013 and January to June 2014**

Item	First Review						January to June	
	2008	2009	2010	2011	2012	2013	2013	2014
	Quantity (1,000 pounds); Value (1,000 dollars); and Unit Value (dollars per pound)							
Shipments of U.S. imports from Brazil:								
Quantity	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***
China:								
Quantity	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***
UAE:								
Quantity	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***
Subject sources:								
Quantity	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***
All other sources:								
Quantity	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***
All sources:								
Quantity	129,511	105,823	180,260	200,455	216,756	168,400	94,766	60,016
Value	202,923	142,908	279,024	396,453	317,560	239,072	139,739	90,509
Unit value	\$1.57	\$1.35	\$1.55	\$1.98	\$1.47	\$1.42	\$1.47	\$1.51

Table continued on next page.

**Table I-1--Continued**

**PET film: Comparative data from the original investigations and these reviews, 2005-13, January to June 2013 and January to June 2014**

Item	Original investigations		
	2005	2006	2007
	Quantity (1,000 pounds); Value (1,000 dollars); and Unit Value (dollars per pound)		
U.S. industry:			
Capacity (quantity)	***	***	***
Production (quantity)	***	***	***
Capacity utilization (percent)	***	***	***
U.S. shipments:			
Quantity	***	***	***
Value	***	***	***
Unit value	***	***	***
Export shipments:			
Quantity	***	***	***
Value	***	***	***
Unit value	***	***	***
Ending inventory	***	***	***
Inventories/total shipments	***	***	***
Production workers	***	***	***
Hours worked (1,000)	***	***	***
Wages paid (1,000 dollars)	***	***	***
Hourly wages	***	***	***
Productivity (pounds per hour)	***	***	***
Unit labor costs	***	***	***
Financial data:			
Net sales:			
Quantity	***	***	***
Value	***	***	***
Unit value	***	***	***
Total COGS	***	***	***
Gross profit or (loss)	***	***	***
SG&A expense	***	***	***
Operating income or (loss)	***	***	***
Capital expenditures	***	***	***
Unit COGS	***	***	***
Unit SG&A expenses	***	***	***
Unit operating income	***	***	***
COGS/ Sales (percent)	***	***	***
Operating income or (loss)/ Sales (percent)	***	***	***

Table continued on next page.

**Table I-1--Continued**

**PET film: Comparative data from the original investigations and these reviews, 2005-13, January to June 2013 and January to June 2014**

Item	First review						January to June	
	2008	2009	2010	2011	2012	2013	2013	2014
	Quantity (1,000 pounds); Value (1,000 dollars); and Unit Value (dollars per pound)							
U.S. industry:								
Capacity (quantity)	720,103	702,908	700,955	624,565	620,163	710,024	379,592	404,616
Production (quantity)	619,284	549,316	601,474	511,728	495,338	540,727	260,594	300,199
Capacity utilization (percent)	86.0	78.1	85.8	81.9	79.9	76.2	68.7	74.2
U.S. shipments:								
Quantity	581,968	516,762	547,129	478,008	454,557	503,364	243,895	274,575
Value	1,109,994	954,868	1,066,023	1,063,982	962,673	978,904	488,715	509,141
Unit value	\$1.91	\$1.85	\$1.95	\$2.23	\$2.12	\$1.94	\$2.00	\$1.85
Export shipments:								
Quantity	32,723	28,501	44,933	39,359	34,861	33,803	18,425	19,577
Value	64,187	58,444	111,416	139,557	115,682	104,660	60,126	47,464
Unit value	\$1.96	\$2.05	\$2.48	\$3.55	\$3.32	\$3.10	\$3.26	\$2.42
Ending inventory	60,547	56,657	61,019	50,201	52,158	49,838	44,266	50,429
Inventories/total shipments	9.8	10.4	10.3	9.7	10.7	9.3	8.4	8.6
Production workers	2,196	2,020	2,017	1,857	1,834	1,935	1,612	1,595
Hours worked (1,000)	4,366	3,978	3,981	3,735	3,749	3,933	2,376	2,361
Wages paid (1,000 dollars)	149,435	138,357	134,079	133,884	136,276	141,614	87,857	86,380
Hourly wages	\$34.23	\$34.78	\$33.68	\$35.85	\$36.35	\$36.01	\$36.98	\$36.59
Productivity (pounds per hour)	142	138	151	137	132	137	110	127
Unit labor costs	\$0.24	\$0.25	\$0.22	\$0.26	\$0.28	\$0.26	\$0.34	\$0.29
Financial data:								
Net sales:								
Quantity	614,691	545,263	592,062	517,366	489,417	508,795	264,472	293,906
Value	1,174,181	1,013,312	1,177,439	1,203,538	1,078,353	1,048,857	548,139	556,607
Unit value	\$1.91	\$1.86	\$1.99	\$2.33	\$2.20	\$2.06	\$2.07	\$1.89
Total COGS	1,052,922	878,505	951,407	1,000,633	945,174	940,628	481,280	500,355
Gross profit or (loss)	121,259	134,807	226,032	202,905	133,179	108,229	66,859	56,252
SG&A expense	126,771	116,634	109,919	104,537	93,036	97,551	49,318	46,205
Operating income or (loss)	(5,512)	18,713	116,113	98,368	40,143	10,678	17,541	10,047
Capital expenditures	123,403	40,342	35,933	53,020	128,410	129,782	103,234	23,906
Unit COGS	\$1.71	\$1.61	\$1.61	\$1.93	\$1.93	\$1.85	\$1.82	\$1.70
Unit SG&A expenses	\$0.21	\$0.21	\$0.19	\$0.20	\$0.19	\$0.19	\$0.19	\$0.16
Unit operating income	(\$0.01)	\$0.03	\$0.20	\$0.19	\$0.08	\$0.02	\$0.07	\$0.03
COGS/ Sales (percent)	89.7	86.7	80.8	83.1	87.6	89.7	87.8	89.9
Operating income or (loss)/ Sales (percent)	(0.5)	1.8	9.9	8.2	3.7	1.0	3.2	1.8

Note:--U.S. industry data for the original investigation are based on questionnaire responses. U.S. import data for the original investigation are based on adjusted official Commerce statistics (excluding Canada and Oman) and responses to Commission questionnaires for Brazil. All data for these current five-year reviews were compiled from data submitted in response to Commission questionnaires and are shipments of imports data.

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

## STATUTORY CRITERIA AND ORGANIZATION OF THE REPORT

### 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.”

### **Organization of report**

Information obtained during the course of the reviews that relates to the statutory criteria is presented throughout this report. A tabulation of relevant Federal Register notices is presented in appendix A. A summary of trade and financial data for PET film as collected in the reviews is presented in appendix C. U.S. industry data are based on the questionnaire responses of 11 U.S. producers of PET film that are believed to have accounted for \*\*\* percent of domestic production of PET film in 2013. U.S. import data and related information are based on the questionnaire responses of 19 U.S. importers of PET film that are believed to have accounted for \*\*\* percent of the total subject U.S. imports during 2013. Foreign industry data and related information are based on the questionnaire responses of four producers of PET film. \*\*\* in Brazil accounted for \*\*\* percent of total production and \*\*\* producers in the UAE accounted for \*\*\* percent of total production of PET film. \*\*\* in China submitted a questionnaire response, which estimated it accounted for \*\*\* percent of total production.



Responses by U.S. producers, importers, purchasers, and foreign producers of PET film to a series of questions concerning the significance of the existing antidumping duty orders and the likely effects of revocation of such orders are presented in appendix D.

## COMMERCE’S REVIEWS

### Administrative reviews<sup>26 27</sup>

Commerce has completed three administrative reviews of the outstanding antidumping duty order on PET film from Brazil, four administrative reviews of the outstanding antidumping duty order on PET film from China, and four administrative reviews with regard to the outstanding antidumping duty order on PET film from the UAE.<sup>28</sup> The results of the administrative reviews are shown tables in I-2, I-3, and I-4, respectively.

**Table I-2**  
**PET Film: Administrative reviews of the antidumping duty order for Brazil**

Date results published	Period of review	Producer or exporter	Margin (percent)
75 FR 75172 December 2, 2010	November 6, 2008 – October 31, 2009	Terphane, Inc.	44.36
76 FR 72676 November 25, 2011	November 1, 2009 – October 31, 2010	Terphane, Inc.	44.36
79 FR 1827 January 10, 2014	July 1, 2011 – June 30, 2012	Terphane, Inc.	No imports during POR

Source: Cited *Federal Register* notices.

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<sup>26</sup> Commerce has issued no duty absorption findings with respect to product from the subject countries.

<sup>27</sup> 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.

<sup>28</sup> In July 2014, Commerce initiated an anti-circumvention inquiry on antidumping duty order of polyethylene terephthalate film, sheet, and strip from the United Arab Emirates.

**Table I-3**

**PET Film: Administrative reviews of the antidumping duty order for the China**

<b>Date results published</b>	<b>Period of review</b>	<b>Producer or exporter</b>	<b>Margin (percent)</b>
76 FR 9753 <sup>1</sup> February 22, 2011	November 6, 2008 – October 31, 2009	Fuwei Films (Shandong) Co., Ltd.	0.27
		Shaoxing Xiangyu Green Packing Co., Ltd.	0.00
		Tianjin Wanhua Co., Ltd.	3.49
		PRC-wide Entity	76.72
77 FR 14493 March 12, 2012	November 1, 2009 – October 31, 2010	Tianjin Wanhua Co., Ltd.	8.42
		Sichuan Dongfang Insulating Material Co., Ltd.	10.87
		Fuwei Films (Shandong) Co., Ltd.	8.48
		Shaoxing Xiangyu Green Packing Co., Ltd.	8.48
		PRC-wide Entity	76.72
78 FR 35245 June 12, 2013	November 1, 2010 – October 31, 2011	DuPont Teijin Films China Limited	12.80
		Shaoxing Xiangyu Green Packing Co., Ltd.	0.00
		Fuwei Films (Shandong) Co., Ltd.	12.80
		Tianjin Wanhua Co., Ltd.	12.80
		Sichuan Dongfang Insulating Material Co., Ltd.	12.80
79 FR 37715 July 2, 2014	November 1, 2011 – October 31, 2012	Shaoxing Xiangyu Green Packing Co. Ltd.	34.00
		Tianjin Wanhua Co., Ltd.	22.07
		Fuwei Films (Shandong) Co., Ltd.	31.24

<sup>1</sup> Due to a court decision not in harmony with the final administrative review, the rate for Fuwei Films was adjusted from 30.91 percent, the rate for Shaoxing Xiangyu was adjusted from 42.94 percent, and the rate for Tianjin Wanhua was adjusted from 36.93 percent. See *Polyethylene Terephthalate Film, Sheet, and Strip from the People's Republic of China: Notice of Court Decision Not in Harmony with Final Results of Administrative Review and Notice of Amended Final Results of Administrative Review Pursuant to Court Decision*, 78 FR 9363, February 8, 2013. See also 78 FR 52500, August 23, 2013.

Source: Cited *Federal Register* notices.

**Table I-4**  
**PET Film: Administrative reviews of the antidumping duty order for the UAE**

<b>Date results published</b>	<b>Period of review</b>	<b>Producer or exporter</b>	<b>Margin (percent)</b>
76 FR 22867 April 25, 2011	November 6, 2008 – October 31, 2009	Flex Middle East FZE JBF RAK LLC	3.16 4.88
77 FR 20357 April 4, 2012	November 1, 2009 – October 31, 2010	JBF RAK LLC	3.14
78 FR 29700 May 21, 2013	November 1, 2010 – October 31, 2011	JBF RAK LLC Flex Middle East FZE	9.80 <i>ad valorem</i> 0.00 <i>ad valorem</i> (i.e., <i>de minimis</i> .)
79 FR 24401 April 30, 2014	November 1, 2011 – October 31, 2012	JBF RAK LLC Flex Middle East FZE	1.41 15.92

Source: Cited *Federal Register* notices.

### Scope inquiry reviews

Commerce has conducted one scope inquiry with respect to PET film from China and one with respect to PET film from Brazil. On January 7, 2010, Commerce determined that Coated Fabrics Company’s Amorphous PET (“APET”), Glycol-modified PET (“PETG”), and coextruded APET with PETG on its outer surfaces (“GAG Sheet”) are outside the scope of the China antidumping duty order.<sup>29</sup> On May 2, 2014, Commerce determined that Ecoblock C products in thicknesses of 14 or 16 millimeters produced by Evertis Packaging Solutions are not within the scope of the Brazil antidumping duty order because they are amorphous polyethylene terephthalate film, which lack biaxial orientation.<sup>30</sup>

### Five-year reviews

Commerce has issued the final results of its expedited sunset reviews of the antidumping duty orders with respect to all subject countries.<sup>31</sup> Tables I-5, I-6, and I-7 present the dumping margins calculated by Commerce in its original investigations and first reviews.

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<sup>29</sup> *Notice of Scope Rulings*, 75 FR 52311, August 25, 2010.

<sup>30</sup> *Notice of Scope Rulings*, 79 FR 47093, August 12, 2014.

<sup>31</sup> *Polyethylene Terephthalate Film, Sheet and Strip from Brazil, the People’s Republic of China, and the United Arab Emirates: Final Results of the Expedited Sunset Reviews of the Antidumping Duty Orders*, 79 FR 10095, February 24, 2014.

**Table I-5**  
**PET film: Commerce's original and first five-year review antidumping margins for producers/exporters in Brazil**

<b>Producer/exporter</b>	<b>Original margin (percent)</b>	<b>First five-year review margin (percent)</b>
Terphane Inc.	44.36	44.36
All others	28.72	28.72

*Source:* Antidumping duty orders, 73 FR 66595, November 10, 2008; Polyethylene Terephthalate Film, Sheet and Strip from Brazil, the People's Republic of China, and the United Arab Emirates: Final Results of the Expedited Sunset Reviews of the Antidumping Duty Orders, 79 FR 10095, February 24, 2014.

**Table I-6**  
**PET film: Commerce's original and first five-year review antidumping margins for producers/exporters in China**

<b>Producer</b>	<b>Exporter</b>	<b>Original margin (percent)</b>	<b>First five-year review margin (percent)</b>
DuPont Teijin Films China Ltd.	DuPont Hongji Films Foshan Co. Ltd.	3.49	3.49
DuPont Teijin Films China Ltd.	DuPont Teijin hongji Films Ningbo Co., Ltd.	3.49	3.49
Fuwei Films (Shandong) Co., Ltd.	Fuwei Films (Shandong) Co., Ltd.	3.49	3.49
Shaoxing Xiangyu Green Packing Co., Ltd.	Shaoxing Xiangyu Green Packing Co., Ltd.	3.49	3.49
Sichuan Dongfang Insulating Material Co., Ltd.	Sichuan Dongfang Insulating Material Co., Ltd.	3.49	3.49
Tianjin Wanhua Co., Ltd.	Tianjin Wanhua Co., Ltd.	3.49	3.49
Shanghai Uchem Co., Ltd.	Sichuan Dongfang Insulating Material Co., Ltd.	3.49	3.49
Shanghai Uchem Co., Ltd.	Shanghai Xishu Electric Material Co., Ltd.	3.49	3.49
PRC-wide Entity (including Jiangyin Jinzhongda New Material Co., Ltd.).		76.72	76.72

*Source:* Antidumping duty orders, 73 FR 66595, November 10, 2008; Polyethylene Terephthalate Film, Sheet and Strip from Brazil, the People's Republic of China, and the United Arab Emirates: Final Results of the Expedited Sunset Reviews of the Antidumping Duty Orders, 79 FR 10095, February 24, 2014.

**Table I-7**

**PET film: Commerce’s original and first five-year review antidumping margins for producers/exporters in the UAE**

<b>Producer/exporter</b>	<b>Original margin (percent)</b>	<b>First five-year review margin (percent)</b>
Flex Middle East FZE	4.05	4.05
All others	4.05	4.05

*Source:* Antidumping duty orders, 73 FR 66595, November 10, 2008; Polyethylene Terephthalate Film, Sheet and Strip from Brazil, the People’s Republic of China, and the United Arab Emirates: Final Results of the Expedited Sunset Reviews of the Antidumping Duty Orders, 79 FR 10095, February 24, 2014.

**THE SUBJECT MERCHANDISE**

**Commerce’s scope**

Commerce has defined the scope of this investigation as follows:

*The products covered by these 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. Also excluded is roller transport cleaning film which has at least one of its surfaces modified by application of 0.5 micrometers of SBR latex. Tracing and drafting film is also excluded. Imports of PET film were classifiable in the Harmonized Tariff Schedule of the United States (HTSUS) under item number 3920.62.00.90. Although the HTSUS subheadings are provided for convenience and customs purposes, the written description of the scope of these orders is dispositive.<sup>32</sup>*

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<sup>32</sup> *Polyethylene Terephthalate Film, Sheet and Strip from Brazil, the People’s Republic of China, and the United Arab Emirates: Final Results of the Expedited Sunset Reviews of the Antidumping Duty Orders*, 79 FR 10095, February 24, 2014.

## Tariff treatment

PET film is classifiable in the Harmonized Tariff Schedule of the United States (“HTS”) under subheading 3920.62.00 and reported for statistical purposes under statistical reporting number 3920.62.0090. Current tariff rates for PET film are presented below:

HTS provision	Article description	General <sup>1</sup>	Special <sup>2</sup>	Column 2 <sup>3</sup>
		Rates ( <i>ad valorem</i> )		
3920	Other plates, sheets, film, foil and strip, of plastics, noncellular and not reinforced, laminated, supported or similarly combined with other materials:			
3920.62.00	Of poly(ethylene terephthalate)	4.2 <sup>4</sup>	Free (A*, AU, BH, CA, CL, E, IL, JO, MA, MX, P, SG)	25
3920.62.0090	Other		2.9% (KR)	

<sup>1</sup> Normal trade relations, formerly known as the most-favored-nation duty rate, applicable to Brazil, China, and the UAE.

<sup>2</sup> Special rates apply to imports of PET film from certain trading partners of the United States as follows: A (GSP); AU (United States-Australia Free Trade Agreement); BH (United States Bahrain Free Trade Agreement Implementation Act); CA and MX (North American Free Trade Agreement); CL (United States-Chile Free Trade Agreement); E (Caribbean Basin Economic Recovery Act); IL (United States-Israel Free Trade Area); JO (United States-Jordan Free Trade Area Implementation Act); MA (United States-Morocco Free Trade Agreement Implementation Act); P (Dominican Republic-Central America-United States Free Trade Agreement Implementation Act); SG (United States-Singapore Free Trade Agreement). GSP authority expired July 31, 2013.

<sup>3</sup> Applies to imports from a small number of countries that do not enjoy normal trade relations duty status.

<sup>4</sup> HTS heading 9902.25.76 reduces the duty on biaxially oriented polyethylene terephthalate film certified by the importer as intended for use in capacitors and as produced from solvent-washed low ash content (≤300 ppm) polymer resin (CAS No. 25038-59-9) (provided for in subheading 3920.62.00) to 3.4 percent for goods entered on or before December 31, 2009.

## THE PRODUCT<sup>33</sup>

### Description and applications

PET film 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 film 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 the majority of subject PET film by truck directly to converters who apply thicker out-of-scope coatings and printing to produce salable merchandise. PET film is also sold through distributors. According to U.S. producers \*\*\*, subject PET film from both domestic and foreign sources is basically interchangeable, generally of the same quality and types across the board, although the relative product type distribution usually varies among producers.<sup>34</sup>

### Manufacturing processes

PET film 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-1. 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.<sup>35 36</sup>

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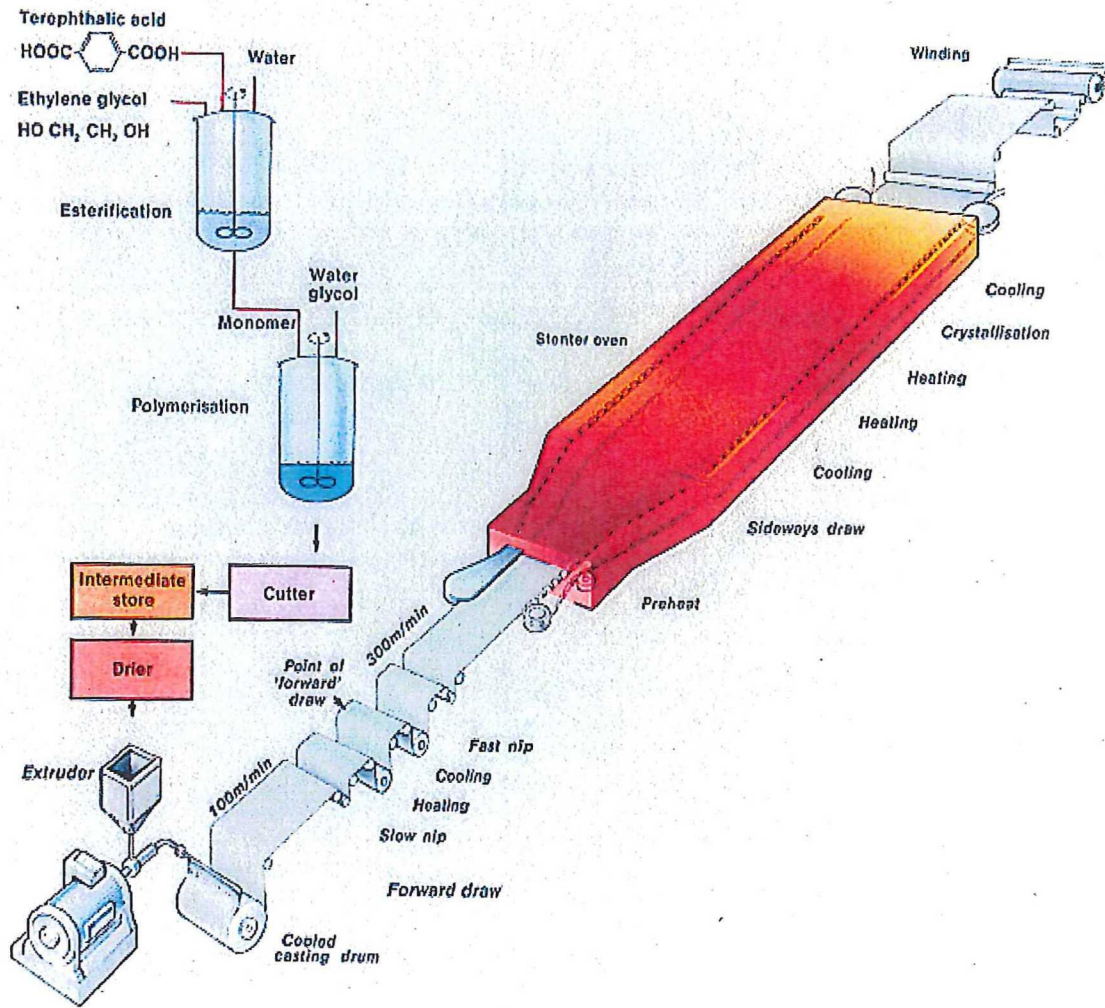
<sup>33</sup> Unless otherwise noted, basic information is derived from the most recently concluded PET film reviews, *Polyethylene Terephthalate Film, Sheet, and Strip from India and Taiwan, Inv. Nos. 701-TA-415 and 731-TA-933 and 934 (Second Review)*, USITC Publication 4479, July 2014, pp. I-16-20. Subject matter from producers’ questionnaire responses and related industry information, including briefs and hearing transcript testimony (Kasoff, Winn, and Roy), has been updated to reflect currently available information.

<sup>34</sup> E-mail correspondence from \*\*\*, April 16, 2014.

<sup>35</sup> Staff plant visit, DuPont Teijin, Hopewell, VA, August 26, 2008.

<sup>36</sup> Corona treatment is the act of exposing the surface of a material to a highly active electric field to modify its surface energy. The Global Association of Manufacturers of Polyester Film (AMPEF), <http://www.ampef.com/>, retrieved April 14, 2014.

Figure I-1: Process flow diagram for PET film production



Source: Obtained online at <http://www.ampef.com/technology2.html>

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.<sup>37 38</sup> 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 who apply 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.<sup>39 40</sup>

PET film 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.<sup>41 42</sup> The batch process allows the film producer to custom tailor PET polymer for specific end-use applications. PET film grade polymer can be manufactured from either purified terephthalic acid (“PTA”) or dimethyl terephthalate (“DMT”) in combination with ethylene glycol (“MEG”), feedstock products derived principally from petroleum and natural gas.<sup>43</sup> Producers tend to produce PET film grade polymer from either PTA or DMT dependent upon process design and end product property/quality perceptions. PTA reportedly has economic advantages compared to DMT.<sup>44 45</sup> DMT, however, is reported to currently account for the \*\*\* feedstock used in the production of certain types of PET film.<sup>46</sup>

PET film 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.<sup>47</sup> Production lines may cost \$50 million and up to install depending upon the type and quantity of product to be produced.<sup>48</sup> The PET film production process is conducted in a “clean

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<sup>37</sup> Staff plant visit, DuPont Teijin, Hopewell, VA, August 26, 2008.

<sup>38</sup> The Global Association of PET Film Manufacturers (AMPEF), <http://www.ampef.com/>, retrieved April 14, 2014.

<sup>39</sup> \*\*\* produces nonsubject equivalent PET film interchangeably with subject PET film on the same equipment; \*\*\* can make out-of-scope PET film on certain lines, but only changes if \*\*\*. U.S. producers’ questionnaire responses, sections II-5-7.

<sup>40</sup> 1 micron = 3.937 gauge (0.00004 inch); 100 gauge = 1 mil (0.001 inches).

<sup>41</sup> \*\*\* reported plans to purchase certain quantities of PET polymer owing to the \*\*\*. \*\*\* producers’ questionnaire response, section III-13; hearing transcript, p. 47 (Kasoff).

<sup>42</sup> \*\*\* currently source certain quantities of PET film feedstock resin from related firms. Producers’ questionnaire responses, section III-7. Mitsubishi purchases small volumes of specialty polymers from outside sources. Hearing transcript, p. 46 (Winn).

<sup>43</sup> Producers’ questionnaire responses, section IV-14.

<sup>44</sup> \*\*\* producers’ questionnaire response, section III-13.

<sup>45</sup> Staff plant visit, DuPont Teijin, Hopewell, VA, August 26, 2008.

<sup>46</sup> \*\*\* supplement response to producers’ questionnaire, section I-8.

<sup>47</sup> Producers’ questionnaire responses, section II-5.

<sup>48</sup> Flex Films started up a new grassroots state-of-the-art flexible packaging PET film plant at Elizabethtown, KY, in January 2013. The 8.7 meter wide film line is reported to be larger than any other line operating in the United States and has an annual production capability of 36,000 metric tons per year, having an estimated cost of about \$75 million; a second 8.7 meter line is planned,

(continued...)

room” environment to protect the finished film from microscopic airborne contamination. Sturdy equipment and vibratory control are essential to the production of PET films of uniform thickness and surface features. The major producers of PET film do not normally run other types of film on their PET film production lines unless necessary owing to the intricacies of the process, and, therefore, do not normally employ production workers for other purposes.<sup>49</sup> Also, most PET film 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.<sup>50 51</sup>

### Physical Characteristics and Uses

PET film has certain inherent desirable qualities such as brilliant optical clarity, high tensile strength, good flexibility, and 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.<sup>52</sup> It is available commercially in a range of widths, thicknesses, and properties depending upon the need of end users, and is generally more expensive than other plastic films owing to its diverse and superior properties. PET film 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. Producers variably sell to downstream customers on long-term, short-term, and spot bases.<sup>53</sup>

There are five subject PET film end-use categories generally recognized by the industry: Packaging, Industrial and Specialties, Electrical, Imaging, and Magnetics.<sup>54</sup> PET film is produced

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(...continued)

<http://www.flexfilm.com>; <http://www.uflexltd.com/pdf/Annual-Report-uflex2013.pdf> , retrieved October 15, 2014.

<sup>49</sup> Producers’ questionnaire responses, section II-5.

<sup>50</sup> Staff plant visit, DuPont Teijin, Hopewell, VA, August 26, 2008.

<sup>51</sup> Most lines installed during the past five to ten years are large turn-key technology lines of 20,000 to 40,000 metric ton annual production capability having certain product interchange process capabilities. Hearing transcript, p. 21 (Kasoff) and p. 38 (Winn).

<sup>52</sup> The Global Association of PET film Manufacturers (AMPEF), <http://www.ampef.com/>, retrieved October 15, 2014. PET film has the widest service temperature range of any competing material (-70°C to 150°C); the highest tensile and tear strength, and electrical insulation breakdown properties; together with superior dimensional stability, oxygen barrier properties, and dielectric constant (electrical resistivity).

<sup>53</sup> Producers’ questionnaire responses, section IV-6.

<sup>54</sup> The Global Association of Manufacturers of Polyester Film (AMPEF), <http://www.ampef.com/>, retrieved April 15, 2014.

and sold for a myriad of end-uses in two major categories: general purpose commodity-grade films, and specialty-grade films which generally command a price premium relative to the commodity grades.<sup>55</sup> 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.<sup>56</sup> Packaging and industrial and specialty applications are major volume and growth markets, while imaging is reportedly declining and traditional magnetics applications have mostly disappeared.<sup>57 58</sup> Packaging films account for about 43 percent of the U.S. market volume, and are growing at about 4 to 5 percent annually, while industrial films account for about 36 percent of the market and are growing at about 2 percent annually by volume. Electrical and specialty optical markets account for about 16 percent of U.S. volume and are growing at 3 to 4 percent annually. Imaging, which was once a reliable market for thick PET film, has declined to about 6 percent of U.S. volume, as computer storage technologies have replaced microfilm and projectors have replaced overhead transparencies; the magnetics market, once the largest end use of PET film, has essentially disappeared.<sup>59</sup>

Packaging film end-use examples include general purpose food packaging, film for flexible and stand-up pouches, pet food, peel-able seals, lids, snacks, barrier films, can laminations, vacuum insulation panels, and medical packaging. Industrial and specialties 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. 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. Imaging applications include microfilm, printing and pre-press films, display signs,<sup>60</sup> 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 PET film product types cited as manufactured by domestic producers include flexible packaging, window film and solar window film, silicon release and other liners, industrial carrier web, pressure sensitive label stock, printing plate and

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<sup>55</sup> Commodity films are estimated to account for 70 percent of the market. Hearing transcript, p. 83 (Kasoff).

<sup>56</sup> Pricing products definitions reflect \*\*\* for packaging/industrial markets; \*\*\* for industrial/electrical markets. Producers' questionnaire, section IV-1.

<sup>57</sup> Producers' questionnaire responses, section IV-11; hearing transcript, p. 17 (Kasoff).

<sup>58</sup> Demand for \*\*\* continues to decline. \*\*\* producer questionnaire response, section II-3.

<sup>59</sup> Hearing transcript, pp. 17-20 (Kasoff).

<sup>60</sup> Hearing transcript, p. 50 (Kasoff).

motors applications, optical films and optical display films (flat panel TV), LCD, renewable energy films, photovoltaic cell, touch screen applications, imaging and medical X-ray, \*\*\*.<sup>61</sup>

## **DOMESTIC LIKE PRODUCT ISSUES**

In its original determinations, the Commission defined a single like product coextensive with the scope as defined by Commerce.<sup>62</sup> 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.<sup>63</sup> No parties requested that the Commission collect data concerning other possible domestic like products in their comments on the Commission's draft questionnaires.

## **U.S. MARKET PARTICIPANTS**

### **U.S. producers**

During the original investigations, eight firms supplied the Commission with information on their U.S. operations with respect to PET film. These firms accounted for \*\*\* percent of U.S. production of PET film in 2007.<sup>64</sup> In these current proceedings, the Commission issued U.S. producers' questionnaires to 11 firms, all of which provided the Commission with information on their product operations. These firms are believed to account for \*\*\* percent of U.S. production of PET film in 2013. Presented in table I-8 is a list of current domestic producers of PET film and each company's position on continuation of the orders, production locations(s), and share of reported production of PET film for 2013.

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<sup>61</sup> Producers' questionnaire responses, sections II; IV-10; and IV-11.

<sup>62</sup> *Polyethylene Terephthalate Film, Sheet, and Strip from Brazil, China, Thailand, and the United Arab Emirates*, Inv. Nos. 731-TA-1131-1134 (Final), USITC Publication 4040 (October 2008).

<sup>63</sup> *Polyethylene Terephthalate Film, Sheet, and Strip from Brazil, China, and the United Arab Emirates; Institution of Five-Year Reviews*, 78 FR 60311, October 1, 2008.

<sup>64</sup> The eight U.S. producers that supplied the Commission with usable questionnaire information during the original investigations were: 3M; Curwood; DuPont Teijin; Kodak; Mitsubishi; SKC; Terphane; and Toray.

**Table I-8****PET film: U.S. producers, positions on orders, U.S. production locations, and shares of 2008-2013 reported U.S. production**

Firm	Position on orders	Production location(s)	Share of production (percent)
3M Company	***	St. Paul, MN	***
Carestream	***	Windsor, CO	***
Curwood, Inc.	***	Oshkosh, WI	***
DuPont Teijin Films	Support	Hopewell, VA	***
Flex Films (USA) Inc.	Support	Elizabethtown, KY	***
Kodak	***	Rochester, NY	***
Mitsubishi Polyester Film	Support	Greer, SC	***
Polyplex USA LLC	Support	Decatur, AL	***
SKC Inc.	Support	Covington, GA	***
Terphane Inc.	*** <sup>1</sup>	Bloomfield, NY	***
Toray Plastics (America), Inc.	Support	North Kingstown, RI	***
Total			100.0

\*\*\*

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

\*\*\*. In addition, as discussed in greater detail in Part III, \*\*\* U.S. producers directly import the subject merchandise and \*\*\* purchase the subject merchandise from U.S. importers.

### U.S. importers

In the original investigations, 28 U.S. importing firms supplied the Commission with usable information on their operations involving the importation of PET film, accounting for \*\*\* percent of U.S. imports from Brazil, \*\*\* percent from China, \*\*\* percent from the UAE, and \*\*\* percent from nonsubject sources in 2007. Of the responding U.S. importers, eight were domestic producers: \*\*\*.

In the current proceedings, the Commission issued U.S. importers' questionnaires to 30 firms believed to be importers of PET film, as well as to all U.S. producers of PET film. Usable questionnaire responses were received from 19 firms, representing \*\*\* percent of U.S. imports from Brazil from 2008-2013, \*\*\* percent of U.S. imports from China from 2008-2013, and \*\*\* percent of U.S. imports from the UAE from 2008-2013. Table I-9 lists all responding U.S. importers of PET film from Brazil, China, the UAE, and other sources, their locations, and their shares of U.S. imports from January 2008 through June 2014.

**Table I-9**  
**PET film: U.S. importers, U.S. headquarters, source(s) of imports, and shares of imports in 2008 through June 2014**

Firm	Headquarters	Share of imports by source (percent)					
		Brazil	China	UAE	Subject	All other	Total
Bemis Company, Inc.	Neenah, WI	***	***	***	***	***	***
Carestream Health Inc.	Rochester, NY	***	***	***	***	***	***
DuPont Teijin Films	Hopewell, VA	***	***	***	***	***	***
Eastman Kodak Company	Rochester, NY	***	***	***	***	***	***
Flex Films USA Inc.	Elizabethtown, KY	***	***	***	***	***	***
FORPLAX, LLC	Itasca, IL	***	***	***	***	***	***
Granwell Products, Inc.	West Caldwell, NJ	***	***	***	***	***	***
International Packaging Films, Inc.	Norwood, NJ	***	***	***	***	***	***
JBF RAK LLC	Ras Al Khaimah, UAE,	***	***	***	***	***	***
Kolon Usa Inc.	Ridgefield Park, NJ	***	***	***	***	***	***
Mitsubishi Polyester Film, Inc.	Greer, SC	***	***	***	***	***	***
NOW PLASTICS, INC.	East Longmeadow, MA	***	***	***	***	***	***
Pilcher Hamilton	Willowbrook, IL	***	***	***	***	***	***
Polyplex USA LLC	Decatur, AL	***	***	***	***	***	***
Rocheux International of NJ Inc	Piscataway, NJ	***	***	***	***	***	***
Sanyo Corporation of America	New York, NY	***	***	***	***	***	***
SKC INC	Covington, GA	***	***	***	***	***	***
Terphane Inc.	Bloomfield, NY	***	***	***	***	***	***
Toray Plastics (America), Inc	North Kingstown, RI	***	***	***	***	***	***
Total		***	***	***	***	***	***

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

### U.S. purchasers

The Commission received 19 questionnaire responses from firms that bought PET film during the review period.<sup>65</sup> These firms purchased 201 million pounds of PET film in 2013 (30 percent of U.S. apparent consumption). Twelve responding purchasers are processors, four are distributors, and five are end users.<sup>66</sup> Responding U.S. purchasers are located mainly in the South and Midwest. The largest responding purchasers of PET film in 2013 were \*\*\*.

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<sup>65</sup> Of the 19 responding purchasers, all purchased domestically produced PET film, 3 purchased imports from Brazil, 2 purchased imports from China, 8 purchased imports from UAE and 14 purchased imports from other countries.

<sup>66</sup> Two purchasers indicated more than one role.

## APPARENT U.S. CONSUMPTION

Data on apparent U.S. consumption of PET film are shown in table I-10.

**Table I-10**

**PET film: Apparent U.S. consumption, 2008-13, January to June 2013, and January to June 2014**

Item	Calendar year						January to June	
	2008	2009	2010	2011	2012	2013	2013	2014
	Quantity (1,000 pounds)							
U.S. producers' U.S. shipments	581,968	516,762	547,129	478,008	454,557	503,364	243,895	274,575
U.S. importers' U.S. shipments from.-- Brazil	***	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***	***
UAE	***	***	***	***	***	***	***	***
Subject total	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***
Total U.S. imports	129,511	105,823	180,260	200,455	216,756	168,400	94,766	60,016
Apparent U.S. consumption	711,479	622,585	727,389	678,463	671,313	671,764	338,661	334,591
	Value (1,000 dollars)							
U.S. producers' U.S. shipments	1,109,994	954,868	1,066,023	1,063,982	962,673	978,904	488,715	509,141
U.S. importers' U.S. shipments from.-- Brazil	***	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***	***
UAE	***	***	***	***	***	***	***	***
Subject total	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***
Total U.S. imports	202,923	142,908	279,024	396,453	317,560	239,072	139,739	90,509
Apparent U.S. consumption	1,312,917	1,097,776	1,345,047	1,460,435	1,280,233	1,217,976	628,454	599,650

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

## U.S. MARKET SHARES

U.S. market share data are presented in table I-11.

**Table I-11**  
**PET film: Market shares, 2008-13, January to June 2013, and January to June 2014**

Item	Calendar year						January to June	
	2008	2009	2010	2011	2012	2013	2013	2014
	Quantity (1,000 pounds)							
Apparent U.S. consumption	711,479	622,585	727,389	678,463	671,313	671,764	338,661	334,591
<b>Share of quantity (percent)</b>								
U.S. producers' U.S. shipments	81.8	83.0	75.2	70.5	67.7	74.9	72.0	82.1
U.S. importers' U.S. shipments from.--								
Brazil	***	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***	***
UAE	***	***	***	***	***	***	***	***
Subject total	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***
Total U.S. imports	18.2	17.0	24.8	29.5	32.3	25.1	28.0	17.9
<b>Value (1,000 dollars)</b>								
Apparent U.S. consumption	1,312,917	1,097,776	1,345,047	1,460,435	1,280,233	1,217,976	628,454	599,650
<b>Share of value (percent)</b>								
U.S. producers' U.S. shipments	84.5	87.0	79.3	72.9	75.2	80.4	77.8	84.9
U.S. importers' U.S. shipments from.--								
Brazil	***	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***	***
UAE	***	***	***	***	***	***	***	***
Subject total	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***
Total U.S. imports	15.5	13.0	20.7	27.1	24.8	19.6	22.2	15.1

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



## PART II: CONDITIONS OF COMPETITION IN THE U.S. MARKET

### U.S. MARKET CHARACTERISTICS

The United States was the second largest worldwide importer (after China) of PET film during the review period.<sup>1</sup> In the original investigations, the U.S. market was described as consisting of five main end-use segments: packaging, industrial, electrical, imaging, and magnetics. Since then, the magnetics end use has virtually disappeared. U.S. producer \*\*\* noted that PET film “has been reinventing itself for many decades and new end uses will be developed.”

Within the larger segments, there are numerous sub-segments. Each sub-segment consists of a particular type of PET film (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 film types can be classified as commodity films, semi-specialty films, and specialty films.<sup>2</sup>

U.S. PET film producers fall into two categories, firms that produce primarily or solely for the merchant market (DuPont Teijin, Flex USA, Mitsubishi, Polyplex USA, SKC, Terphane, and Toray) and those that produce primarily or solely for internal consumption (Carestream, Curwood, Kodak, and 3M).<sup>3</sup> The producers that internally consume the product tend to be concentrated in large end-use sub-segments, such as photography and X-rays, into which merchant-market producers rarely sell.

\*\*\* described the PET film business cycle as short peaks followed by long bottoms and stated that the peak years were 1995 and 2010. After a period of tight supply for PET film in U.S. and world markets in 2010, additional production capacity has come on line in the United States and in other countries.<sup>4</sup> Two new U.S. producers, Flex USA and Polyplex USA, began producing PET film in 2013.

Apparent U.S. consumption of PET film declined by 5.6 percent during 2008-13. It fluctuated during the first four years of the review period, with a decline from 2008 to 2009, recovery in 2010, another decline in 2011, and then remained relatively stable in 2012 and 2013.

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<sup>1</sup> Based on Global Trade Atlas data, which includes out of scope products. See part IV of this report.

<sup>2</sup> \*\*\*. Domestic interested parties' prehearing brief, p. 19.

<sup>3</sup> The portion of U.S. production that was internally consumed fell from \*\*\* percent in 2008 to \*\*\* percent in 2013.

<sup>4</sup> \*\*\*.

## CHANNELS OF DISTRIBUTION

U.S. producers sold mainly to end users and to converters, who in turn sell to end users (table II-1). Conversion activities include coating, metallizing, and laminating.<sup>5</sup> Importers of PET film from Brazil, China, and nonsubject countries sold mainly to end users. Sales of imports from the UAE \*\*\*.

## GEOGRAPHIC DISTRIBUTION

U.S. producers reported selling PET film to all regions in the contiguous United States (table II-2). Importers also reported selling to all regions in the contiguous United States with the exception of \*\*\*. For U.S. producers, the majority of sales were between 101 and 1,000 miles of their production facilities (table II-3).

**Table II-1**

**PET film: U.S. producers' and importers' share of reported U.S. shipments, by sources and channels of distribution, 2008-13, January-June 2013, and January-June 2014**

\* \* \* \* \*

**Table II-2**

**PET film: Geographic market areas in the United States served by U.S. producers and importers, by number of responding firms**

Region	U.S. producers	U.S. importers		
		Brazil	China	UAE
Northeast	8	***	3	4
Midwest	9	***	3	3
Southeast	9	***	2	3
Central Southwest	8	***	1	1
Mountains	7	***	1	1
Pacific Coast	8	***	2	2
Other <sup>1</sup>	1	***	0	0
All regions in the continental United States	7	***	1	1

<sup>1</sup> All other U.S. markets, including AK, HI, PR, and VI, among others.

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

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<sup>5</sup> \*\*\*.

**Table II-3**  
**PET film: Distances shipped within the United States, 2013**

Distance	U.S. producers	U.S. importers	
		China	UAE
		Share (percent)	
Zero to 100 miles	9.4	***	***
101 miles to 1,000 miles	61.8	***	***
Over 1,000 miles	28.8	***	***

*Note:* There were no imports from Brazil in 2013.

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

## SUPPLY AND DEMAND CONSIDERATIONS

### U.S. supply

#### Domestic production

Based on available information, U.S. producers of PET film have the ability to respond to changes in demand with moderate changes in the quantity of shipments of U.S.-produced PET film to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity and some inventories.

#### *Industry capacity*

Domestic capacity utilization decreased over the period of review from \*\*\* percent in 2008 to \*\*\* percent in 2013, reflecting a slight decline in overall capacity and a larger decline in production.<sup>6</sup> This level of capacity utilization suggests that U.S. producers may have some capacity to increase production of PET film in response to an increase in prices. Three new PET film lines were installed in the United States in 2013-14 (Flex USA, Polyplex USA, and SKC). In addition, \*\*\*.<sup>7</sup>

#### *Alternative markets*

U.S. producers' exports, as a percentage of total shipments, ranged from \*\*\* percent to \*\*\* percent during the review period. Most U.S. producers stated that it would be difficult to shift their shipments to other markets. Reasons cited include: relatively high U.S. production

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<sup>6</sup> \*\*\* reported that PET film production is highly capital intensive and requires producers to operate at very high utilization rates.

<sup>7</sup> \*\*\* reported that by the third quarter of 2010, U.S. producers stopped making commodity type 36g and 48g \*\*\*, in favor of producing higher margin products creating a shortage until Flex and Polyplex opened their U.S. production facilities.

costs (both materials and manufacturing costs); logistical issues (long qualification times, wait period for testing, high costs of entering new markets, and contract negotiations); and global oversupply of commodity grades. One firm stated it could sell specialty grades to Europe but not in the same volume as in the U.S. market and another firm reported that it typically exports high-end specialty products. In addition, U.S. producers that produce for internal consumption or that have production facilities abroad are unlikely to increase exports of PET film. Only one U.S. producer reported barriers to trade in other markets: \*\*\* cited tariffs in Europe (6 percent) and Brazil (16 percent).

### ***Inventory levels***

U.S. producers' inventories were about \*\*\* percent of total shipments during the review period. These inventory levels suggest that U.S. producers may have some ability to respond to changes in demand with changes in the quantity shipped from inventories.

### ***Production alternatives***

Only one of the 11 responding U.S. producers reported that it could switch production from PET film to other products in response to a price change. \*\*\*.

### ***Subject imports from Brazil***

Information in this section is based on the questionnaire response of one foreign producer, Terphane Ltda., which accounted for 100 percent of production in Brazil. The Brazilian producer likely has the capability to respond to changes in demand with small-to-moderate changes in the quantity shipped to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the current lack of unused capacity and the existence of limited alternate markets.

### ***Industry capacity***

Terphane Ltda.'s subject PET film capacity in Brazil \*\*\* during the review period, from \*\*\* million pounds in 2008 to \*\*\* million pounds in 2013. Terphane Ltda. also produces nonsubject PET film; its capacity for all products was steady at \*\*\* million pounds during the review period. Capacity utilization declined from \*\*\* in 2008 to \*\*\* in 2013. Terphane Ltda. is starting a new 30,000 metric ton (66 million pounds) PET film line, \*\*\*.<sup>8</sup> Terphane Ltda. projects that its total capacity in 2015 to produce subject PET film will be \*\*\* metric tons (\*\*\*)

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<sup>8</sup> Terphane projects production on the new line for subject and nonsubject PET film to be \*\*\* metric tons (\*\*\*) million pounds) in 2014 and \*\*\* metric tons (\*\*\*) million pounds) in 2015. Terphane recently idled \*\*\* metric tons (\*\*\*) million pounds) of capacity on its older F1line. Terphane's prehearing brief, pp. 11-12 and posthearing brief, pp. 44-48.

million pounds).<sup>9</sup> It estimates that its capacity utilization for all PET film products in 2015 will be \*\*\* percent.<sup>10</sup>

### ***Alternative markets***

\*\*\* of Terphane Ltda.'s production was consumed in Brazil during the review period. Exports accounted for only \*\*\* percent of total shipments of Brazilian PET film in 2013, down from \*\*\* percent in 2008. Terphane Ltda. reported exporting to \*\*\*. \*\*\*. Terphane Ltda. projects that the Brazilian PET film market will grow by \*\*\* percent in 2015 and that Terphane Ltda.'s share of the Brazilian market will increase from \*\*\* percent in 2014 to \*\*\* percent in 2015.<sup>11</sup>

### ***Inventory levels***

Terphane Ltda.'s ratio of inventories to total shipments ranged between \*\*\* percent and \*\*\* percent during the review period.

### ***Production alternatives***

Terphane Ltda. also produces nonsubject PET film, specifically coated, metallized, and other finished PET film. It reported that in 2013, \*\*\* percent of its production was subject PET film and \*\*\* percent was nonsubject PET film.<sup>12</sup> The time needed to switch production between different types of PET film depends on the types of products and may be 15 minutes for switching between different gauges or changing a coating, and up to 12 hours for more complicated engineered films.<sup>13</sup>

### ***Subject imports from China***

Information in this section is based primarily on information from \*\*\*.<sup>14</sup> \*\*\* lists more than \*\*\* producers in China. Only one Chinese producer, Mitsubishi Suzhou, responded to the Commission's questionnaire; it estimated that it accounted for \*\*\* of total production in China.<sup>15</sup> Producers in China likely have the capability to respond to changes in demand with

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<sup>9</sup> Terphane's posthearing brief, p. 4.

<sup>10</sup> Terphane's posthearing brief, p. 5.

<sup>11</sup> Terphane's posthearing brief, app. E, p. 31. There are currently antidumping duty orders in Brazil on PET film imports from Mexico, the UAE, and Turkey, and Brazilian antidumping investigations on imports of PET film from China, Egypt, and India that should be completed by March 2015. Hearing transcript, p. 99 (Roy).

<sup>12</sup> During the original investigation, in 2007, Terphane Ltda's production was \*\*\* percent subject PET film and \*\*\* percent nonsubject PET film. Terphane's posthearing brief, exh. 10.

<sup>13</sup> Hearing transcript, pp. 128-129 (Roy). In its questionnaire response, Terphane Ltda. reported \*\*\*.

<sup>14</sup> \*\*\*.

<sup>15</sup> \*\*\*.

large changes in the quantity shipped to the U.S. market. The main contributing factors to this degree of responsiveness of supply are available capacity and the existence of alternate markets.

\*\*\*.<sup>16</sup>

China's exports increased from 204 million pounds in 2008 to 404 million pounds in 2013 (see part IV of this report).<sup>17</sup> China's major export markets in 2013 were Indonesia (10 percent), Japan (10 percent), Taiwan (9 percent), Malaysia (9 percent), United States (6 percent), Vietnam (6 percent), Thailand (4 percent), Philippines (4 percent), Canada (4 percent), and Germany (3 percent).

### **Subject imports from UAE**

Information in this section is based on the questionnaire responses of two foreign producers, Flex Middle East and JBF, which accounted for 100 percent of UAE PET film production in 2013. UAE producers likely have the capability to respond to changes in demand with large changes in the quantity shipped to the U.S. market. The main contributing factors to this degree of responsiveness of supply are unused capacity and the existence of alternate markets.

### ***Industry capacity***

The UAE producers' reported capacity increased from \*\*\* pounds in 2008 to \*\*\* pounds in 2013. Capacity utilization declined from \*\*\* percent in 2008 to \*\*\* percent in 2013.

### ***Alternative markets***

Most of UAE producers' shipments \*\*\* went to export markets. In 2013, \*\*\*. The other \*\*\* percent went to the UAE home market.

### ***Inventory levels***

The ratio of inventories to total shipments ranged between \*\*\* percent and \*\*\* percent during the review period.

### ***Production alternatives***

\*\*\*.

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<sup>16</sup> \*\*\*. Domestic interested parties' prehearing brief, p. 9.

<sup>17</sup> Global Trade Atlas data presented in part IV of this report; data include some nonsubject products.

## **Nonsubject imports**

The largest sources of nonsubject imports during 2008-13 were Mexico, Korea, and Taiwan. Mexico accounted for 23.8 percent of nonsubject imports during 2013, Korea accounted for 14.4 percent and Taiwan accounted for 4.7 percent.

## **New suppliers**

Seven of 18 purchasers indicated that new suppliers entered the U.S. market since 2008, and 5 purchasers expect additional entrants. Purchasers cited new U.S. production by Flex USA and Polyplex USA, and new suppliers of product from India (Jindal, Garware, and Ester), China (WanHua and Green Packaging, Dong Fang), UAE (JBF), and Mexico (Flex). Expected new entrants include Middle Eastern and South American producers. Two purchasers noted that foreign producers are attracted to the large size of the U.S. market.

## **U.S. demand**

Based on available information, the overall demand for PET film 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 film's highly variable cost shares of final products.

## **End uses**

U.S. demand for PET film depends on the demand for U.S.-produced downstream products. As shown in table II-4, almost half of U.S. producers' shipments went to industrial end uses, followed by packaging and then imaging. The vast majority of imports from China and UAE were used in packaging.<sup>18</sup> Terphane's U.S. and Brazil facilities produce PET film for the packaging market.<sup>19</sup>

Although most firms reported no changes in end uses since 2008, 6 of 9 responding U.S. producers, 6 of 16 importers, and 6 of 18 purchasers reported changes. Firms reported the following changes: decreases in PET film demand for LCD screens, photovoltaic cell manufacturing, magnetics, and imaging (which has shifted from analog to digital); growth in optical displays and solar panels; increase in touchscreen, flexible displays, and other IT applications; 10 percent annual global growth in industrial and packaging; siliconized (in line chemically treated) PET film replacing siliconized paper; use of high clarity films in flatscreen TVs and other electrical devices; and mature end-use markets. Some firms reported increased

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<sup>18</sup> Firms were asked to report based on their 2013 U.S. shipments; therefore these data do not include firms that did not produce or import PET film in 2013. In addition, not all firms answered the question; some noted that they did not know the end uses.

<sup>19</sup> Hearing transcript, p. 118 (Roy).

PET film use in photovoltaic applications while at least one firm reported that PET film use in this application had declined.

**Table II-4**  
**PET film: Shipments by end use**

End use segment	U.S. producers	U.S. importers	
		China	UAE
Share of shipments (percent)			
Electrical	4.7	***	***
Industrial	47.7	***	***
Imaging	18.0	***	***
Magnetics	0.0	***	***
Packaging	19.6	***	***
Other	10.0	***	***
Total	100.0	***	***

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

Only 2 of 8 U.S. producers, 3 of 16 importers, 1 of 3 foreign producers, and 4 of 17 purchasers anticipated changes in end uses. Anticipated changes include PET film replacing other products such as oriented polypropylene and the growing use of PET film in flexible printed electronics.

### Business cycles

Most producers, but a smaller percentage of importers and purchasers, indicated that the PET film market was subject to business cycles.<sup>20</sup> A minority of firms indicated that the PET film market was subject to other conditions of competition distinctive to PET film.<sup>21</sup> \*\*\* reported that the PET film business cycle is typically 4 to 6 years. One firm reported that seasonality varies between end-use markets with higher demand in food packaging during the agricultural growing seasons and around holidays, while another firm reported that demand is lowest in the fourth quarter.

Most responding firms (7 of 8 U.S. producers, 7 of 9 importers, and 5 of 10 purchasers) reported changes since 2008 in business cycles or conditions of competition, often citing capacity changes and wider economic conditions. \*\*\* reported that it expects a prolonged trough in the business cycle because of worldwide oversupply due to continuing capacity expansions, particularly in China and India. \*\*\* reported a shortage of PET film in 2010 as Asian producers, responding to increased demand in Asia for optical film, reduced exports.

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<sup>20</sup> Of the responding firms, 7 of 10 U.S. producers, 7 of 16 importers, and 4 of 16 purchasers reported that the market was subject to business cycles.

<sup>21</sup> Of the responding firms, 3 of 6 U.S. producers, 3 of 12 importers, and 4 of 16 purchasers reported that the PET film market was subject to other conditions of competition distinctive to PET film.



\*\*\* also reported a shortage in 2010, in which packaging film prices doubled as U.S. producers reduced production of these films and increased production of thicker industrial films (for consumer electronics, solar applications, and release films). It added that global and U.S. capacity additions in 2012 and 2013 lowered the prices and increased the availability of packaging films. \*\*\* reported that global capacity utilization has dropped from almost “sold out” in 2010 to less than 70 percent currently as new producers have entered the world market. \*\*\* reported that during the recession, customers reduced inventories, and as the economy has recovered, customers have restocked but that pricing pressures have increased with continued imports and the installation of new U.S. PET film lines. \*\*\* reported that flat panel displays have become a large new segment as magnetics have disappeared. \*\*\* reported new domestic capacity and that the antidumping duties have normalized pricing. \*\*\* reported that the slow U.S. economic growth since the recession has made it difficult to expand markets, and that the plethora of competition has reduced order lead times.

### Demand trends

Most firms reported an increase in U.S. demand for PET film since 2008 (table II-5). Most firms also expect demand to increase in the future.

**Table II-5**  
**PET film: Firms’ responses regarding U.S. demand, by number of responding firms**

Item	Number of firms reporting			
	Increase	No change	Decrease	Fluctuate
Demand in the United States:				
U.S. producers	6	2	1	2
Importers	11	3	1	1
Purchasers	10	1	3	5
Foreign producers	2	0	1	0
Anticipated future demand in the United States:				
U.S. producers	5	2	1	2
Importers	9	4	1	2
Purchasers	10	4	2	1
Foreign producers	2	1	0	0
Demand for purchasers' final products:				
Purchasers	2	3	1	4

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

### Substitute products

Substitutes for PET film are somewhat limited, although some firms (5 of 9 producers, 8 of 17 importers, and 8 of 16 purchasers) reported some substitutes. Substitutes listed by

purchasers include polypropylene film and nylon film<sup>22</sup> for food and other flexible packaging uses; certain laminating papers<sup>23</sup> for electrical insulation uses; cyclic olefin copolymer for flexible conductive display; and polycoated paper and polyolefin films for lamination and conversion uses. Only one importer and one purchaser reported any changes in substitutes since 2008, and only one importer anticipated changes in substitutes, citing growth in flexible printed electronics.

### **Cost share**

Because PET film is used in a wide variety of end-use products (which are themselves often used in other downstream products), the percentage of the final cost that is accounted for by PET film varies widely across and within end uses. Reported cost shares for some end uses were as follows (in percent): packaging (15 to 85), medical (12 to 23); optical films (20); motors (3 to 10); release liners (40 to 60); labels (10 to 50); solar window films (25 to 50); metalized PET (73); packing tapes (40 to 50); laminated film (28); specialty films (15); and reflective sheeting (10).

### **SUBSTITUTABILITY ISSUES**

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

### **Lead times**

PET film is primarily produced-to-order. U.S. producers reported that in 2013, 79 percent of their commercial shipments were produced-to-order with lead times of 2 to 6 weeks.<sup>24</sup> The remaining 21 percent of their commercial shipments came from inventories, with lead times of 1 to 7 days. Importers reported that most PET film from UAE (\*\*\*) was also produced-to-order, while almost all PET film from China (98 percent) was sold from inventories.<sup>25</sup> Importers' reported lead times from U.S inventories were \*\*\* days for imports from China and \*\*\* days for imports from the UAE. Importers' lead times for produced-to-order product from China and the UAE were \*\*\* days.

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<sup>22</sup> Specifically mentioned were BOPP (bi-axially oriented polypropylene film) and BOPA (bi-axially oriented polyamide).

<sup>23</sup> The specific substitutes listed were 3M's Tufquin and Cequin.

<sup>24</sup> \*\*\* reported that during a peak business cycle in 2010, some lead times exceeded 4 to 6 weeks.

<sup>25</sup> Data based on 2013 estimates. Importers reported no sales of product from Brazil in 2013.

### Knowledge of country sources

Eighteen purchasers indicated they had marketing/pricing knowledge of domestic product, two of Brazilian product, three of Chinese product, three of UAE product, and seven of nonsubject countries.

As shown in table II-6, purchasers provided mixed responses regarding how often their purchasing decisions were based on country of origin or producer. Of the five purchasers that reported that they always make decisions based on the manufacturer, \*\*\*. It also considers service, quality, long-term commitment to the U.S. market, and the overall risk of doing business with a specific supplier. Other reasons cited for basing decision on producer included product specification, quality, qualification, and food safety requirements. Reasons provided for usually or sometimes basing purchase on country of origin include user or internal requirements and service.

**Table II-6**

**PET film: Purchasing decisions based on producer and country of origin, by number of reporting firms**

Decision	Always	Usually	Sometimes	Never
Purchaser makes decision based on producer	5	4	5	4
Purchaser's customers make decision based on producer	0	6	4	6
Purchaser makes decision based on country	3	3	4	8
Purchaser's customers make decision based on country	0	3	3	10

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

### Factors affecting purchasing decisions

As shown in table II-7, the most often cited top three factors firms consider in their purchasing decisions for PET film were quality (15 firms), price (13 firms), availability/lead time (9 firms). Quality was the most frequently cited first-most important factor (cited by 5 firms), followed by price (11 firms); price was the most frequently reported second-most important factor (7 firms); and quality and price were the most frequently reported third-most important factor (4 firms each). In addition, firms listed minimum order quantities, product range/specifications, capacity, reliability, service, quality systems/history, and ease of supply chain as important considerations in their purchase decisions for PET film.

The majority of purchasers (17 of 19) reported that they usually or sometimes purchase the lowest-priced product. Five of 18 purchasers reported that certain types of product were only available from a single source.

When asked if they purchased PET film from one source although a comparable product was available at a lower price from another source, 14 purchasers reported doing so, citing lead times, delivery, supply reliability, ease of supply chain, and order size. One purchaser stated that it may be willing to pay a higher price for U.S.-produced product due to shorter lead times

and lower minimum order size.<sup>26</sup> It also considers the cost to qualify versus the expected benefits of changing sources (price, terms, lead time, and service). One purchaser stated that it buys from \*\*\* because of \*\*\*. \*\*\* purchases from more than one source, but among qualified producers, it purchases from the lowest price supplier with sufficient capacity that consistently meets specifications. One firm noted that suppliers in Korea and Turkey require larger minimum order size and have a longer transit time. Another firm reported that when availability is crucial, the firm will pay what is required, adding that it typically does not change purchasing patterns simply because a supplier offers a lower price—quality and service are also important considerations.

**Table II-7**  
**PET film: Ranking of factors used in purchasing decisions as reported by U.S. purchasers, by number of reporting firms**

Factor	First	Second	Third	Total
Quality	11	0	4	15
Price	2	7	4	13
Availability/lead time	0	6	3	9
Delivery and payment terms	0	0	2	2
Other <sup>1</sup>	4	2	2	8

<sup>1</sup> Other factors include specification, product line and fit for use considerations as first factor; ease of supply chain and vendor strategic fit for second factor; service and function 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-8). Almost all responding purchasers rated the following factors as “very important”: availability, price, product consistency, quality meets industry standards, and reliability of supply. Delivery time rated was rated “very important” by more than two-thirds of responding purchasers.

### Supplier certification

Nearly all purchasers (18 of 19) require certification for their PET film purchases. Purchasers reported that the time to qualify a new supplier ranged from 60 to 365 days.<sup>27</sup> Nine of 17 purchasers reported that a supplier had failed in its attempt to qualify product, or had lost its approved status since 2008. Two firms listed Jindal (India) because of “specification,” absence of food-safe certified facilities, and failure in dielectric testing. One firm each listed Toyobo (China); SKC (Korea); Terphane (Brazil) for quality issues for a particular grade; Kolon (Korea) for delivery delays on some grades; Flex (Mexico) for not passing stability requirements;

<sup>26</sup> It reported that most offshore suppliers require a minimum order of a container (40,000 pounds).

<sup>27</sup> Three purchasers reported 300-365 days, five reported 180 days, and ten reported 60 to 180 days.

and a Russian supplier for delivery problems and failed specifications. One purchaser reported that Mitsubishi, DuPont, Riken Tecnos (Japan), and Tesa Tapes (Germany) could not meet specifications.

**Table II-8**  
**PET film: Importance of purchase factors, as reported by U.S. purchasers, by number of responding firms**

Factor	Number of firms reporting		
	Very important	Somewhat important	Not important
Availability	17	2	0
Delivery terms	8	11	0
Delivery time	13	6	0
Discounts offered	2	10	7
Extension of credit	5	8	6
Minimum quantity requirements	6	9	4
Packaging	7	11	1
Price	18	1	0
Product consistency	19	0	0
Product range	6	10	3
Quality exceeds industry standards	3	14	2
Quality meets industry standards	19	0	0
Reliability of supply	19	0	0
Technical support/service	6	14	0
U.S. transportation costs	6	10	3

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

### Changes in purchasing patterns

Purchasers were asked about changes in their purchases from different sources since 2008 (table II-9). Most firms reported that their domestic purchases either did not change or fluctuated, five firms reported increased purchases, and two firms reporting decreased purchases. Reasons reported for increased domestic purchases included: availability, increased U.S. capacity in 2014, market growth, increased supply availability, and competitive prices. Reasons for decreased domestic purchases were the addition of a new supplier and the current supplier changed its country of origin.

**Table II-9**  
**PET film: Changes in relative purchases from U.S., subject, and nonsubject countries**

Factor	Did not purchase	Decreased	Increased	Constant	Fluctuated
United States	0	2	5	6	5
Brazil	14	2	0	2	1
China	11	5	1	1	2
United Arab Emirates	9	2	5	1	3
All other sources	3	2	4	5	4

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

The majority of purchasers reported they did not purchase product from Brazil (14 firms) or China (11 firms). For Brazil, a reason provided for decreased purchases was that products were no longer available. For China, reasons for decreased purchases were suppliers exiting the U.S. market, and increased availability and competitiveness of domestic film. Nine purchasers did not purchase UAE product, but five purchasers reported increased purchases, three reported fluctuating purchases, two reported decreased purchases, and one reported no change in purchases. Reasons for increased purchases of UAE product were pricing, needing a new source, and sample film.

Four purchasers reported increased purchases of nonsubject imports, citing pricing, specialty material requirements, small amounts from India for trial purposes, and an added supplier. A reason for decreased purchases from nonsubject countries was increased availability and competitiveness of U.S.-produced PET film.

Fifteen of 18 responding purchasers reported that they had changed suppliers since 2008. Specifically, firms reported dropping or reducing purchases from the following suppliers (and reasons, if stated): Granwell; Shaoxing; Dynamic Polymers; Shenda China (exited U.S. market in 2008 due to antidumping duties); Terphane Brazil (exited U.S. market in 2008 due to antidumping duties); Mitsubishi (unwillingness to supply in 2010); DuPont Teijin (unwillingness to supply in 2011); Nan Ya (no longer competitive); all Chinese suppliers (high antidumping rates). Firms reported adding or increasing purchases from the following suppliers (and reasons, if stated): Flex USA (new capacity, quality, price, source of supply); Flex Mexico; JBF (U.S. supply constraints); Polyplex USA; \*\*\*; SKC (added to our product portfolio); Smyrna International/Triton (unable to obtain packaging films from domestic suppliers); Toray (quality, price, and source of supply); and Super Film Turkey. Firms also reported changes because of mill/vendor consolidation. One purchaser reported shifting purchases among a large number of suppliers based on price, quality, and product availability.

### **Importance of purchasing domestic product**

Purchasers reported that they did not require domestic product for most of their PET film purchases. About 17 percent of their 2013 purchases reportedly required domestic product; specifically, for 7.3 percent of their purchases their customers required domestic product, and for the remaining 9.3 percent, purchases of domestic product were required for reasons other than their customers or laws/regulations. These other reasons cited for preferring domestic product included: short supply chains, firm choice, and better film quality.

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

Purchasers were asked to compare PET film produced in the United States, subject countries, and nonsubject countries on the same 15 factors (table II-10) for which they were asked to rate the importance. A majority of purchasers reported that U.S. and all subject imported products were comparable on seven factors: discounts offered, packaging, price, product consistency, quality exceeds industry standards, quality meets industry standards, and U.S. transportation costs. For China, a majority reported “comparable” for one additional factor (extension of credit) and for UAE, a majority or plurality reported “comparable” for five

additional factors (delivery terms, extension of credit, product range, reliability of supply, and technical support/service).

**Table II-10**  
**PET film: Purchasers' comparisons between U.S.-produced and imported product**

Factor	Number of firms reporting								
	U.S. vs. Brazil			U.S. vs. China			U.S. vs. UAE		
	S	C	I	S	C	I	S	C	I
Availability	5	1	0	6	4	0	6	5	1
Delivery terms	4	2	0	5	5	0	5	7	0
Delivery time	6	0	0	7	3	0	9	1	2
Discounts offered	2	3	0	1	6	2	1	7	2
Extension of credit	3	2	0	3	6	0	2	8	1
Minimum quantity requirements	4	1	0	6	3	0	7	4	0
Packaging	0	5	0	2	7	0	0	11	0
Price <sup>1</sup>	1	3	0	1	5	2	0	7	3
Product consistency	1	4	0	3	5	1	2	8	1
Product range	3	2	0	4	4	1	2	9	0
Quality exceeds industry standards	1	5	0	3	6	1	1	11	0
Quality meets industry standards	1	5	0	3	7	0	1	11	0
Reliability of supply	4	2	0	5	5	0	5	6	1
Technical support/service	5	0	1	6	2	2	5	6	1
U.S. transportation costs <sup>1</sup>	1	5	0	2	8	0	2	10	0

<sup>1</sup> 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.

A majority or plurality of purchasers rated the U.S. product as superior to that from Brazil, China, and UAE on availability, delivery time, and minimum quantity requirements. A majority of purchasers rated the U.S. product as superior to that from Brazil on delivery terms, extension of credit, product range, reliability of supply, and technical support/service. In comparing U.S. product and that from China, equal numbers of purchasers reported "comparable" and "superior" for delivery terms, product range, and reliability of supply, and that the U.S. product was superior for technical support/service.

Only one purchaser compared PET film amongst subject countries, rating them comparable for all factors. Firms that compared nonsubject country PET film to that from each of the subject countries generally rated them as comparable for all factors. Purchasers were more likely to rate U.S. product as superior to nonsubject product, with a majority rating the U.S. product as superior on delivery time and a plurality rating it superior on technical support/service.

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

In order to determine whether U.S.-produced PET film can generally be used in the same applications as imports, firms were asked whether the products can “always,” “frequently,” “sometimes,” or “never” be used interchangeably. As shown in table II-11, the majority of responding firms reported that U.S.-produced PET film and imported PET film from Brazil, China, UAE, and other countries “always” or “frequently” can be used interchangeably.

As can be seen from table II-12, all responding purchasers reported that U.S.-produced product “always” or “usually” met minimum quality specifications. Six of seven responding purchasers reported that PET film from China “always” or “usually” met minimum quality specifications. Most responding purchasers of PET film reported that product “usually” met minimum qualifications from Brazil (3 of 4), UAE (6 of 11), and nonsubject countries (7 of 13).

**Table II-11**  
**PET film: Interchangeability between PET film produced in the United States and in other countries, by country pairs**

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. Brazil	5	3	0	0	4	7	0	0	1	4	2	0
United States vs. China	4	5	1	0	4	7	1	0	2	4	4	0
United States vs. UAE	4	4	1	0	4	7	2	0	2	9	3	0
Brazil vs. China	4	4	0	0	4	7	0	0	1	1	3	0
Brazil vs. UAE	4	4	0	0	4	7	1	0	1	2	3	0
China vs. UAE	4	4	0	0	4	7	2	0	2	2	3	0
United States vs. Other	4	5	2	0	4	8	3	0	2	9	5	0
Brazil vs. Other	4	4	0	0	4	7	0	0	2	2	2	0
China vs. Other	4	5	0	0	4	7	0	0	2	4	2	0
UAE vs. Other	4	4	1	0	4	8	0	0	2	5	2	0

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

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

**Table II-12**  
**PET film: Ability to meet minimum quality specifications, by source and number of reporting firms<sup>1</sup>**

Factor	Always	Usually	Sometimes	Rarely or never
United States	9	10	0	0
Brazil	1	3	0	0
China	3	3	1	0
United Arab Emirates	3	6	1	1
All other sources	4	7	1	1

<sup>1</sup>Purchasers were asked how often domestically produced or imported PET film meets minimum quality specifications for their own or their customers' uses.

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



In addition, producers, importers, and purchasers were asked to assess how often differences other than price were significant in sales of PET film from the United States, subject, or nonsubject countries. As seen in table II-13, most producers and importers reported that such differences were “sometimes” or “never” significant. On the other hand, purchasers were split in their responses, with about half of purchasers reporting that differences other than price between domestic PET film and subject imports were “always” or “frequently” significant factors in their purchases. When comparing domestic product to PET film in Brazil, four purchasers reported differences were “always” or “frequently” significant, and four reported “sometimes” or “never.” When comparing domestic product with Chinese product, five purchasers reported differences were “always” or “frequently” significant and five reported “sometimes” or “never.” When comparing domestic product with UAE PET film, seven purchasers reported differences were “always” or “frequently” significant and seven reported “sometimes” or “never.” Lastly, when comparing domestic product with nonsubject country product, 8 of 15 purchasers reported differences were “sometimes” significant, and 7 purchasers reported “always” or “frequently.”

**Table II-13**  
**PET film: Significance of differences other than price between PET film produced in the United States and in other countries, by country pairs**

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. Brazil	1	0	4	3	1	0	6	3	3	1	3	1
United States vs. China	1	1	5	3	1	1	6	4	2	3	4	1
United States vs. UAE	1	1	4	3	0	0	7	5	3	4	5	2
Brazil vs. China	1	0	4	3	1	0	6	3	1	1	3	0
Brazil vs. UAE	1	0	4	3	1	0	7	3	1	1	3	1
China vs. UAE	1	1	4	3	1	0	8	3	1	2	3	2
United States vs. Other	2	0	6	3	1	0	10	3	4	3	8	0
Brazil vs. Other	1	0	4	3	1	0	6	3	1	1	3	1
China vs. Other	1	1	4	3	1	0	7	3	1	2	3	2
UAE vs. Other	2	0	4	3	1	0	6	4	2	1	3	3

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

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

## ELASTICITY ESTIMATES

This section discusses elasticity estimates. Parties did not comment on these estimates.

### **U.S. supply elasticity**

The domestic supply elasticity<sup>28</sup> for PET film measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price of PET film. 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 film. Analysis of these factors earlier indicates that the U.S. industry is likely to be able to moderately increase or decrease shipments to the U.S. market; an estimate in the range of 2 to 5 is suggested.

### **U.S. demand elasticity**

The U.S. demand elasticity for PET film measures the sensitivity of the overall quantity demanded to a change in the U.S. market price of PET film. This estimate depends on factors discussed earlier such as the existence, availability, and commercial viability of substitute products, as well as the component share of PET film in the production of any downstream products. Based on the available information, the aggregate demand for PET film 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.<sup>29</sup> 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 film and imported PET film is likely to be in the range of 3 to 6.

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<sup>28</sup> A supply function is not defined in the case of a non-competitive market.

<sup>29</sup> 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. Eleven firms, which accounted for all of U.S. production of PET film during the period for which data were collected, supplied information on their operations in these reviews and other proceedings on PET film.<sup>1</sup>

Important industry events that occurred during the period of these current five-year reviews are presented in table III-1.

**Table III-1**  
**PET film: Important industry events, 2008-13**

Flex USA	***
Polyplex USA	***
Terphane	***

Source: \*\*\*.

### 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 film since 2008. \*\*\* of the 11 domestic producers indicated that they had experienced such changes; their responses are presented in table III-2.

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<sup>1</sup> The eleven responding U.S. producers are: 3M Co. ("3M"); Carestream ("Carestream"); Curwood, Inc. ("Curwood"); DuPont Teijin Films ("DuPont Teijin"); Eastman Kodak Co. ("Kodak"); Flex Films (USA) Inc. ("Flex USA"); Mitsubishi Polyester Film, Inc. ("Mitsubishi"); Polyplex USA LLC ("Polyplex USA"); SKC Inc. ("SKC"); Terphane Inc. ("Terphane"); and Toray Plastics (America), Inc. ("Toray").

**Table III-2**  
**PET film: Changes in the character of U.S. operations since January 1, 2008**

Firm	Production facility location	Capacity (1,000 pounds)	Operational changes
3M	St. Paul MN Decatur, AL Greenville, SC	***	*** *** *** ***
Carestream	Rochester, NY	***	***
Curwood	Oshkosh, WI	***	***
DuPont	Hopewell, VA Circleville, OH Florence, SC Fayetteville, NC	***	*** *** *** *** ***
Flex USA	Elizabethtown, KY	***	***
Kodak	Rochester, NY	***	***
Mitsubishi	Greer, SC	***	*** *** ***
Polyplex USA	Decatur, AL	***	*** ***
SKC	Covington, GA	***	***
Terphane	Bloomfield, NY	***	***
Toray	North Kingstown, RI	***	***

Source: Compiled from data submitted in response to Commission questionnaires (U.S. producer questionnaire responses, section II-2).

### Anticipated changes in operations

The Commission asked domestic producers to report anticipated changes in the character of their operations relating to the production of PET film. Their responses appear in table III-3.

**Table III-3**  
**PET film: Anticipated changes in the character of U.S. operations**

***	***
***	***
***	***
***	***

Source: Compiled from data submitted in response to Commission questionnaires (U.S. producer questionnaire responses, section II-3).

### U.S. PRODUCTION, CAPACITY, AND CAPACITY UTILIZATION

Several responding U.S. producers have foreign affiliations and/or production facilities. DuPont is \*\*\* owned by Teijin Holdings USA, Inc., New York, NY, and \*\*\* owned by E.I. DuPont de Nemours & Co., Wilmington, DE. DuPont also \*\*\*. Flex USA is \*\*\*. Mitsubishi is \*\*\*.

Polyplex USA reported that it is \*\*\*. SKC reported that it is \*\*\*. Terphane reported that it \*\*\*. Toray reported that it is related to \*\*\*.<sup>2</sup>

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<sup>2</sup> U.S. producers' questionnaire responses, section I-4, section I-6, and section I-7.

Table III-4 presents U.S. producers' production, capacity, and capacity utilization by firm.

**Table III-4**  
**PET film: U.S. producers' production, capacity, and capacity utilization, 2008-2013, January to June 2013, and January to June 2014**

Item	Calendar year						January to June	
	2008	2009	2010	2011	2012	2013	2013	2014
	Capacity (1,000 pounds)							
3M	***	***	***	***	***	***	***	***
Carestream	***	***	***	***	***	***	***	***
Curwood, Inc.	***	***	***	***	***	***	***	***
DuPont Teijin Films	***	***	***	***	***	***	***	***
Flex Films (USA) Inc.	***	***	***	***	***	***	***	***
Kodak	***	***	***	***	***	***	***	***
Mitsubishi Polyester Film	***	***	***	***	***	***	***	***
Polylex USA LLC	***	***	***	***	***	***	***	***
SKC INC	***	***	***	***	***	***	***	***
Terphane Inc.	***	***	***	***	***	***	***	***
Toray Plastics (America), Inc	***	***	***	***	***	***	***	***
Total	720,103	702,908	700,955	624,565	620,163	710,024	379,592	404,616
	Production (1,000 pounds)							
3M	***	***	***	***	***	***	***	***
Carestream	***	***	***	***	***	***	***	***
Curwood, Inc.	***	***	***	***	***	***	***	***
DuPont Teijin Films	***	***	***	***	***	***	***	***
Flex Films (USA) Inc.	***	***	***	***	***	***	***	***
Kodak	***	***	***	***	***	***	***	***
Mitsubishi Polyester Film	***	***	***	***	***	***	***	***
Polylex USA LLC	***	***	***	***	***	***	***	***
SKC INC	***	***	***	***	***	***	***	***
Terphane Inc.	***	***	***	***	***	***	***	***
Toray Plastics (America), Inc	***	***	***	***	***	***	***	***
Total	619,284	549,316	601,474	511,728	495,338	540,727	260,594	300,199
	Capacity utilization (percent)							
3M	***	***	***	***	***	***	***	***
Carestream	***	***	***	***	***	***	***	***
Curwood, Inc.	***	***	***	***	***	***	***	***
DuPont Teijin Films	***	***	***	***	***	***	***	***
Flex Films (USA) Inc.	***	***	***	***	***	***	***	***
Kodak	***	***	***	***	***	***	***	***
Mitsubishi Polyester Film	***	***	***	***	***	***	***	***
Polylex USA LLC	***	***	***	***	***	***	***	***
SKC INC	***	***	***	***	***	***	***	***
Terphane Inc.	***	***	***	***	***	***	***	***
Toray Plastics (America), Inc	***	***	***	***	***	***	***	***
Average	86.0	78.1	85.8	81.9	79.9	76.2	68.7	74.2

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

The Commission asked U.S. producers whether the production equipment and the production and related workers (“PRWs”) employed in the production of PET film were used to produce other products. \*\*\*. \*\*\*. \*\*\*.<sup>3</sup>

### Constraints on capacity

\*\*\* of the eleven responding U.S. producers reported constraints in the manufacturing process. Most frequently cited constraints were \*\*\*. Reported constraints are presented in the following tabulation:

\* \* \* \* \*

### U.S. PRODUCERS’ U.S. SHIPMENTS AND EXPORTS

Table III-5 presents U.S. producers’ U.S. shipments, export shipments, and total shipments. U.S. commercial shipments fluctuated during 2008-13, but were higher in interim period 2014 than in interim period 2013. \*\*\* U.S. producers, \*\*\*, accounted for \*\*\* percent of U.S. commercial shipment quantity from 2008 to 2013 and \*\*\* percent of U.S. commercial shipment quantity during the interim periods 2013 and 2014. Internal consumption \*\*\* over the period of review. Certain U.S. producers consume \*\*\* of their production; however, \*\*\* report any internal consumption of PET film. \*\*\* U.S. producers reported transfers to related firms during 2008-2013 or interim period 2014. \*\*\* firms reported export shipments during all or a portion of the period of the current five-year reviews. \*\*\* firms accounted for an aggregated \*\*\* percent of U.S. exports during 2008-2013: \*\*\*. These same firms accounted for an aggregated \*\*\* percent of U.S. exports during interim periods 2013 and 2014: \*\*\*. \*\*\* export shipments. Export markets reported for U.S. produced PET film were: \*\*\*.<sup>4</sup>

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<sup>3</sup> U.S. producer questionnaire responses (Section II-5).

<sup>4</sup> U.S. producers’ questionnaire responses (section II-6, fn. 3).

**Table III-5**

**PET film: U.S. producers' U.S. shipments, exports shipments, and total shipments, 2008-13, January to June 2013, and January to June 2014**

Item	Calendar year						January to June	
	2008	2009	2010	2011	2012	2013	2013	2014
	<b>Quantity (1,000 pounds)</b>							
Commercial U.S. shipments	400,977	346,349	398,097	346,602	349,209	399,676	194,011	222,819
Internal consumption	***	***	***	***	***	***	***	***
Transfers to related firms	***	***	***	***	***	***	***	***
Subtotal, U.S. shipments	581,968	516,762	547,129	478,008	454,557	503,364	243,895	274,575
Export shipments	32,723	28,501	44,933	39,359	34,861	33,803	18,425	19,577
Total shipments	614,691	545,263	592,062	517,367	489,418	537,167	262,320	294,152
	<b>Value (1,000 dollars)</b>							
Commercial U.S. shipments	727,053	583,938	744,606	769,075	714,647	746,969	373,977	396,343
Internal consumption	***	***	***	***	***	***	***	***
Transfers to related firms	***	***	***	***	***	***	***	***
Subtotal, U.S. shipments	1,109,994	954,868	1,066,023	1,063,982	962,673	978,904	488,715	509,141
Export shipments	64,187	58,444	111,416	139,557	115,682	104,660	60,126	47,464
Total shipments	1,174,181	1,013,312	1,177,439	1,203,539	1,078,355	1,083,564	548,841	556,605
	<b>Unit value (dollars per pound)</b>							
Commercial U.S. shipments	1.81	1.69	1.87	2.22	2.05	1.87	1.93	1.78
Internal consumption	***	***	***	***	***	***	***	***
Transfers to related firms	***	***	***	***	***	***	***	***
Subtotal, U.S. shipments	1.91	1.85	1.95	2.23	2.12	1.94	2.00	1.85
Export shipments	1.96	2.05	2.48	3.55	3.32	3.10	3.26	2.42
Total shipments	1.91	1.86	1.99	2.33	2.20	2.02	2.09	1.89
	<b>Share of quantity</b>							
Commercial U.S. shipments	65.2	63.5	67.2	67.0	71.4	74.4	74.0	75.7
Internal consumption	***	***	***	***	***	***	***	***
Transfers to related firms	***	***	***	***	***	***	***	***
Subtotal, U.S. shipments	94.7	94.8	92.4	92.4	92.9	93.7	93.0	93.3
Export shipments	5.3	5.2	7.6	7.6	7.1	6.3	7.0	6.7
Total shipments	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	<b>Share of value</b>							
Commercial U.S. shipments	61.9	57.6	63.2	63.9	66.3	68.9	68.1	71.2
Internal consumption	***	***	***	***	***	***	***	***
Transfers to related firms	***	***	***	***	***	***	***	***
Subtotal, U.S. shipments	94.5	94.2	90.5	88.4	89.3	90.3	89.0	91.5
Export shipments	5.5	5.8	9.5	11.6	10.7	9.7	11.0	8.5
Total shipments	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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 over the period examined.



**Table III-6**  
**PET film: U.S. producers' inventories, 2008-2013, January to June 2013, and January to June 2014.**

Item	Calendar year						January to June	
	2008	2009	2010	2011	2012	2013	2013	2014
	<b>Quantity (1,000 pounds)</b>							
U.S. producers' end-of-period inventories	60,547	56,657	61,019	50,201	52,158	49,838	44,266	50,429
	<b>Ratio (percent)</b>							
Ratio of inventories to--								
U.S. Production	9.8	10.3	10.1	9.8	10.5	9.2	8.5	8.4
U.S. shipments	10.4	11.0	11.2	10.5	11.5	9.9	9.1	9.2
Total shipments	9.8	10.4	10.3	9.7	10.7	9.3	8.4	8.6

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 film, and the ratio of imports to U.S. production over the period examined.

**Table III-7**  
**PET film: U.S. producers' U.S. production, imports, and import ratios to U.S. production, 2008-13, January to June 2013, and January to June 2014**

\*       \*       \*       \*       \*       \*       \*

\*\*\* U.S. producers \*\*\*.

Table III-8 presents data on individual U.S. producers' reported purchases of PET film imported from subject sources over the period for which data were gathered.

**Table III-8**  
**PET film: U.S. producers' purchases of imports, 2008-13, and January to June 2013, January to June 2014**

\*       \*       \*       \*       \*       \*       \*

### U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

Table III-9 shows U.S. producers' employment-related data during the period examined. Aggregate number of PRWs decreased irregularly by \*\*\* percent during the period for which data were gathered. However, several firms exhibited opposite employment trends. Specifically, \*\*\* producers, while \*\*\* during the period of these current five-year reviews. Additionally, industry \*\*\* affected the number of PRWs. Specifically, \*\*\*. Therefore, overall the PET film industry \*\*\* for a \*\*\* PRWs during 2008-13.

**Table III-9**

**PET film: Average number of production and related workers, hours worked, wages paid to such employees, hourly wages, productivity, and unit labor costs, 2008-2013, and January to June 2013, January to June 2014.**

Item	Calendar year						January to June	
	2008	2009	2010	2011	2012	2013	2013	2014
Production-Related Workers (PRWs) (number)	2,196	2,020	2,017	1,857	1,834	1,935	1,612	1,595
Total hours worked (1,000 hours)	4,366	3,978	3,981	3,735	3,749	3,933	2,376	2,361
Hours worked per PRW (hours)	1,988	1,969	1,974	2,011	2,044	2,033	1,474	1,480
Wages paid (\$1,000)	149,435	138,357	134,079	133,884	136,276	141,614	87,857	86,380
Hourly wages (dollars per hour)	34.23	34.78	33.68	35.85	36.35	36.01	36.98	36.59
Productivity (pounds per hour)	141.8	138.1	151.1	137.0	132.1	137.5	109.7	127.2
Unit labor costs (dollars per pound)	0.24	0.25	0.22	0.26	0.28	0.26	0.34	0.29

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

## FINANCIAL EXPERIENCE OF U.S. PRODUCERS

### Background

Eleven U.S. producers provided usable financial data on their operations producing PET film.<sup>5</sup> Internal consumption of PET film by \*\*\* accounted for a declining share of U.S. producers' total sales, from \*\*\* percent by quantity and \*\*\* percent by value in 2008 to \*\*\* percent by quantity and \*\*\* percent by value in 2013. Generally, all of the firms reported that their installed equipment is dedicated to the production of PET film.<sup>6</sup>

### Operations on PET Film

Table III-10 presents aggregated data on U.S. producers' operations in relation to PET film over the period examined, January 2008-June 2014, while table III-11 presents selected company-specific financial data. In brief, the quantity and value of total sales declined from 2008 through 2013 but were higher in January-June 2014 than in January-June 2013. Operating income increased from a loss in 2008 to a profit high point in 2010, fell steadily from 2010 to 2013, and was lower in January-June 2014 than in the comparable period one year earlier. Likewise, the number of firms reporting operating losses decreased from 2008 to 2010-2011 and increased in 2012 and 2013. Net income before taxes was negative in 2008, 2009, and 2013; this indicator fell steadily from a high level in 2010 through 2012, and was lower, although profitable, in January-June 2014 than in January-June 2013. Cash flow increased from 2008 to a high in 2010, falling thereafter through 2013 and was lower in January-June 2014 than in January-June 2013.

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<sup>5</sup> These firms were: 3M, Curwood, Carestream, DuPont Teijin, Kodak, Flex USA, Mitsubishi, Polyplex USA, SKC, Terphane, and Toray. Each firm, \*\*\*, reported on a calendar year basis. \*\*\*. Transfers to related firms were reported by \*\*\* classified them as exports in the trade section of the Commission's questionnaire. Differences between the trade and financial sections of the Commission's questionnaire are attributable to rounding, timing differences, and \*\*\*. \*\*\*.

<sup>6</sup> Two firms, \*\*\*, reported producing products other than subject PET film on the same equipment. \*\*\*. U.S. Producers' questionnaire responses of \*\*\*, section II-5a.

**Table III-10**  
**PET film: Results of operations of U.S. producers, fiscal years, 2008-13, January-June 2013, and**  
**January-June 2014**

Item	Fiscal year						January-June	
	2008	2009	2010	2011	2012	2013	2013	2014
	Quantity (1,000 pounds)							
Commercial sales	433,096	371,788	435,224	371,680	367,635	391,399	206,621	236,153
Internal consumption <sup>1</sup>	***	***	***	***	***	***	***	***
Transfers to related firms <sup>2</sup>	***	***	***	***	***	***	***	***
Total net sales	614,691	545,263	592,062	517,366	489,417	508,795	264,472	293,906
	Value (1,000 dollars)							
Commercial sales	789,234	630,913	824,589	835,720	761,576	761,969	398,421	424,221
Internal consumption <sup>1</sup>	***	***	***	***	***	***	***	***
Transfers to related firms <sup>2</sup>	***	***	***	***	***	***	***	***
Total net sales	1,174,181	1,013,312	1,177,439	1,203,538	1,078,353	1,048,857	548,139	556,607
Cost of goods sold.--								
Raw materials	579,597	424,267	503,604	600,990	550,374	534,471	271,289	285,177
Direct labor	161,242	150,657	144,069	148,531	148,735	147,791	74,795	72,813
Other factory costs	312,083	303,581	303,734	251,112	246,065	258,366	135,196	142,365
Total COGS	1,052,922	878,505	951,407	1,000,633	945,174	940,628	481,280	500,355
Gross profit	121,259	134,807	226,032	202,905	133,179	108,229	66,859	56,252
SG&A expense	126,771	116,634	109,919	104,537	93,036	97,551	49,318	46,205
Operating income or (loss)	(5,512)	18,173	116,113	98,368	40,143	10,678	17,541	10,047
Other expense/(income), net <sup>3</sup>	34,003	36,421	12,747	8,362	14,287	21,100	11,840	7,929
Net income or (loss)	(39,515)	(18,248)	103,366	90,006	25,856	(10,422)	5,701	2,118
Depreciation/amortization	102,524	108,074	110,877	76,950	77,773	71,843	29,411	28,173
Cash flow	63,009	89,826	214,243	166,956	103,629	61,421	35,112	30,291
	Ratio to net sales (percent)							
Cost of goods sold.--								
Raw materials	49.4	41.9	42.8	49.9	51.0	51.0	49.5	51.2
Direct labor	13.7	14.9	12.2	12.3	13.8	14.1	13.6	13.1
Other factory costs	26.6	30.0	25.8	20.9	22.8	24.6	24.7	25.6
Average COGS	89.7	86.7	80.8	83.1	87.6	89.7	87.8	89.9
Gross profit	10.3	13.3	19.2	16.9	12.4	10.3	12.2	10.1
SG&A expense	10.8	11.5	9.3	8.7	8.6	9.3	9.0	8.3
Operating income or (loss)	(0.5)	1.8	9.9	8.2	3.7	1.0	3.2	1.8
Net income or (loss)	(3.4)	(1.8)	8.8	7.5	2.4	(1.0)	1.0	0.4

Table continued on next page.

**Table III-10**

**PET film: Results of operations of U.S. producers, fiscal years, 2008-13, January-June 2013, and January-June 2014**

Item	Fiscal year						January-June	
	2008	2009	2010	2011	2012	2013	2013	2014
<b>Unit value (dollars per pound)</b>								
Commercial sales	1.82	1.70	1.89	2.25	2.07	1.95	1.93	1.80
Internal consumption	***	***	***	***	***	***	***	***
Transfers to related firms	***	***	***	***	***	***	***	***
Total net sales	1.91	1.86	1.99	2.33	2.20	2.06	2.07	1.89
Cost of goods sold.--								
Raw materials	0.94	0.78	0.85	1.16	1.12	1.05	1.03	0.97
Direct labor	0.26	0.28	0.24	0.29	0.30	0.29	0.28	0.25
Other factory costs	0.51	0.56	0.51	0.49	0.50	0.51	0.51	0.48
Average COGS	1.71	1.61	1.61	1.93	1.93	1.85	1.82	1.70
Gross profit	0.20	0.25	0.38	0.39	0.27	0.21	0.25	0.19
SG&A expense	0.21	0.21	0.19	0.20	0.19	0.19	0.19	0.16
Operating income or (loss)	(0.01)	0.03	0.20	0.19	0.08	0.02	0.07	0.03
Net income or (loss)	(0.06)	(0.03)	0.17	0.17	0.05	(0.02)	0.02	0.01
<b>Number of firms reporting</b>								
Operating losses <sup>4</sup>	5	5	***	***	4	6	4	3
Data	9	9	9	9	9	10	10	10

<sup>1</sup> Internal consumption was reported by \*\*\*.

<sup>2</sup> Transfers to related firms were reported by \*\*\*.

<sup>3</sup> Other income/(expense) consists mostly of interest expense. Other expenses, reported by \*\*\*.

<sup>4</sup> Firms reporting operating losses were: \*\*\*.

Note.—See table C-2 for a calculation of the industry's merchant market sales and costs.

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

**Table III-11**  
**PET film: Results of operations of U.S. producers, by firm, fiscal years, 2008-13, January-June 2013, and January-June 2014**

Item	Fiscal year						January-June	
	2008	2009	2010	2011	2012	2013	2013	2014
<b>Total net sales:</b>	<b>Quantity (1,000 pounds)</b>							
3M Company	***	***	***	***	***	***	***	***
Carestream	***	***	***	***	***	***	***	***
Curwood, Inc.	***	***	***	***	***	***	***	***
DuPont Teijin Films	***	***	***	***	***	***	***	***
Flex Films (USA)	***	***	***	***	***	***	***	***
Kodak	***	***	***	***	***	***	***	***
Mitsubishi Polyester	***	***	***	***	***	***	***	***
Polyplex USA	***	***	***	***	***	***	***	***
SKC	***	***	***	***	***	***	***	***
Terphane	***	***	***	***	***	***	***	***
Toray Plastics	***	***	***	***	***	***	***	***
Total	614,691	545,263	592,062	517,366	489,417	508,795	264,472	293,906
<b>Total net sales:</b>	<b>Value (\$1,000)</b>							
3M Company	***	***	***	***	***	***	***	***
Carestream	***	***	***	***	***	***	***	***
Curwood, Inc.	***	***	***	***	***	***	***	***
DuPont Teijin Films	***	***	***	***	***	***	***	***
Flex Films (USA)	***	***	***	***	***	***	***	***
Kodak	***	***	***	***	***	***	***	***
Mitsubishi Polyester	***	***	***	***	***	***	***	***
Polyplex USA	***	***	***	***	***	***	***	***
SKC	***	***	***	***	***	***	***	***
Terphane	***	***	***	***	***	***	***	***
Toray Plastics	***	***	***	***	***	***	***	***
Total	1,174,181	1,013,312	1,177,439	1,203,538	1,078,353	1,048,857	548,139	556,607
<b>COGS:</b>								
3M Company	***	***	***	***	***	***	***	***
Carestream	***	***	***	***	***	***	***	***
Curwood, Inc.	***	***	***	***	***	***	***	***
DuPont Teijin Films	***	***	***	***	***	***	***	***
Flex Films (USA)	***	***	***	***	***	***	***	***
Kodak	***	***	***	***	***	***	***	***
Mitsubishi Polyester	***	***	***	***	***	***	***	***
Polyplex USA	***	***	***	***	***	***	***	***
SKC	***	***	***	***	***	***	***	***
Terphane	***	***	***	***	***	***	***	***
Toray Plastics	***	***	***	***	***	***	***	***
Total	1,052,922	878,505	951,407	1,000,633	945,174	940,628	481,280	500,355

Table continued on next page.

Table III-11--Continued

PET film: Results of operations of U.S. producers, by firm, fiscal years, 2008-13, January-June 2013, and January-June 2014

Item	Fiscal year						January-June	
	2008	2009	2010	2011	2012	2013	2013	2014
<b>Gross Profit:</b>	Value (\$1,000)							
3M Company	***	***	***	***	***	***	***	***
Carestream	***	***	***	***	***	***	***	***
Curwood, Inc.	***	***	***	***	***	***	***	***
DuPont Teijin Films	***	***	***	***	***	***	***	***
Flex Films (USA)	***	***	***	***	***	***	***	***
Kodak	***	***	***	***	***	***	***	***
Mitsubishi Polyester	***	***	***	***	***	***	***	***
Polyplex USA	***	***	***	***	***	***	***	***
SKC	***	***	***	***	***	***	***	***
Terphane	***	***	***	***	***	***	***	***
Toray Plastics	***	***	***	***	***	***	***	***
Total	121,259	134,807	226,032	202,905	133,179	108,229	66,859	56,252
<b>SG&amp;A expenses:</b>								
3M Company	***	***	***	***	***	***	***	***
Carestream	***	***	***	***	***	***	***	***
Curwood, Inc.	***	***	***	***	***	***	***	***
DuPont Teijin Films	***	***	***	***	***	***	***	***
Flex Films (USA)	***	***	***	***	***	***	***	***
Kodak	***	***	***	***	***	***	***	***
Mitsubishi Polyester	***	***	***	***	***	***	***	***
Polyplex USA	***	***	***	***	***	***	***	***
SKC	***	***	***	***	***	***	***	***
Terphane	***	***	***	***	***	***	***	***
Toray Plastics	***	***	***	***	***	***	***	***
Total	126,771	116,634	109,919	104,537	93,036	97,551	49,318	46,205
<b>Operating Income or (loss):</b>								
3M Company	***	***	***	***	***	***	***	***
Carestream	***	***	***	***	***	***	***	***
Curwood, Inc.	***	***	***	***	***	***	***	***
DuPont Teijin Films	***	***	***	***	***	***	***	***
Flex Films (USA)	***	***	***	***	***	***	***	***
Kodak	***	***	***	***	***	***	***	***
Mitsubishi Polyester	***	***	***	***	***	***	***	***
Polyplex USA	***	***	***	***	***	***	***	***
SKC	***	***	***	***	***	***	***	***
Terphane	***	***	***	***	***	***	***	***
Toray Plastics	***	***	***	***	***	***	***	***
Total	(5,512)	18,173	116,113	98,368	40,143	10,678	17,541	10,047

Table continued on next page.

**Table III-11--Continued**

**PET film: Results of operations of U.S. producers, by firm, fiscal years, 2008-13, January-June 2013, and January-June 2014**

Item	Fiscal year						January to June	
	2008	2009	2010	2011	2012	2013	2013	2014
<b>COGS:</b>	<b>Ratio to net sales value (percent)</b>							
3M Company	***	***	***	***	***	***	***	***
Carestream	***	***	***	***	***	***	***	***
Curwood, Inc.	***	***	***	***	***	***	***	***
DuPont Teijin Films	***	***	***	***	***	***	***	***
Flex Films (USA)	***	***	***	***	***	***	***	***
Kodak	***	***	***	***	***	***	***	***
Mitsubishi Polyester	***	***	***	***	***	***	***	***
Polyplex USA	***	***	***	***	***	***	***	***
SKC	***	***	***	***	***	***	***	***
Terphane	***	***	***	***	***	***	***	***
Toray Plastics	***	***	***	***	***	***	***	***
Average	89.7	86.7	80.8	83.1	87.6	89.7	87.8	89.9
<b>Gross Profit:</b>								
3M Company	***	***	***	***	***	***	***	***
Carestream	***	***	***	***	***	***	***	***
Curwood, Inc.	***	***	***	***	***	***	***	***
DuPont Teijin Films	***	***	***	***	***	***	***	***
Flex Films (USA)	***	***	***	***	***	***	***	***
Kodak	***	***	***	***	***	***	***	***
Mitsubishi Polyester	***	***	***	***	***	***	***	***
Polyplex USA	***	***	***	***	***	***	***	***
SKC	***	***	***	***	***	***	***	***
Terphane	***	***	***	***	***	***	***	***
Toray Plastics	***	***	***	***	***	***	***	***
Average	10.3	13.3	19.2	16.9	12.4	10.3	12.2	10.1
<b>SG&amp;A expenses:</b>								
3M Company	***	***	***	***	***	***	***	***
Carestream	***	***	***	***	***	***	***	***
Curwood, Inc.	***	***	***	***	***	***	***	***
DuPont Teijin Films	***	***	***	***	***	***	***	***
Flex Films (USA)	***	***	***	***	***	***	***	***
Kodak	***	***	***	***	***	***	***	***
Mitsubishi Polyester	***	***	***	***	***	***	***	***
Polyplex USA	***	***	***	***	***	***	***	***
SKC	***	***	***	***	***	***	***	***
Terphane	***	***	***	***	***	***	***	***
Toray Plastics	***	***	***	***	***	***	***	***
Average	10.8	11.5	9.3	8.7	8.6	9.3	9.0	8.3

Table continued on next page.



Table III-11--Continued

PET film: Results of operations of U.S. producers, by firm, fiscal years, 2008-13, January-June 2013, and January-June 2014

Item	Fiscal year						January to June	
	2008	2009	2010	2011	2012	2013	2013	2014
<b>Operating income or (loss):</b>	<b>Ratio to net sales value (percent)</b>							
3M Company	***	***	***	***	***	***	***	***
Carestream	***	***	***	***	***	***	***	***
Curwood, Inc.	***	***	***	***	***	***	***	***
DuPont Teijin Films	***	***	***	***	***	***	***	***
Flex Films (USA)	***	***	***	***	***	***	***	***
Kodak	***	***	***	***	***	***	***	***
Mitsubishi Polyester	***	***	***	***	***	***	***	***
Polyplex USA	***	***	***	***	***	***	***	***
SKC	***	***	***	***	***	***	***	***
Terphane	***	***	***	***	***	***	***	***
Toray Plastics	***	***	***	***	***	***	***	***
Average	(0.5)	1.8	9.9	8.2	3.7	1.0	3.2	1.8
<b>Total net sales:</b>	<b>Unit value (dollars per pound)</b>							
3M Company	***	***	***	***	***	***	***	***
Carestream	***	***	***	***	***	***	***	***
Curwood, Inc.	***	***	***	***	***	***	***	***
DuPont Teijin Films	***	***	***	***	***	***	***	***
Flex Films (USA)	***	***	***	***	***	***	***	***
Kodak	***	***	***	***	***	***	***	***
Mitsubishi Polyester	***	***	***	***	***	***	***	***
Polyplex USA	***	***	***	***	***	***	***	***
SKC	***	***	***	***	***	***	***	***
Terphane	***	***	***	***	***	***	***	***
Toray Plastics	***	***	***	***	***	***	***	***
Average	1.91	1.86	1.99	2.33	2.20	2.06	2.07	1.89
<b>COGS:</b>								
3M Company	***	***	***	***	***	***	***	***
Carestream	***	***	***	***	***	***	***	***
Curwood, Inc.	***	***	***	***	***	***	***	***
DuPont Teijin Films	***	***	***	***	***	***	***	***
Flex Films (USA)	***	***	***	***	***	***	***	***
Kodak	***	***	***	***	***	***	***	***
Mitsubishi Polyester	***	***	***	***	***	***	***	***
Polyplex USA	***	***	***	***	***	***	***	***
SKC	***	***	***	***	***	***	***	***
Terphane	***	***	***	***	***	***	***	***
Toray Plastics	***	***	***	***	***	***	***	***
Average	1.71	1.61	1.61	1.93	1.93	1.85	1.82	1.70

Table continued on next page.

Table III-11--Continued

PET film: Results of operations of U.S. producers, by firm, fiscal years, 2008-13, January-June 2013, and January-June 2014

Item	Fiscal year						January to June	
	2008	2009	2010	2011	2012	2013	2013	2014
<b>Gross Profit or (loss):</b>	<b>Unit value (dollars per pound)</b>							
3M Company	***	***	***	***	***	***	***	***
Carestream	***	***	***	***	***	***	***	***
Curwood, Inc.	***	***	***	***	***	***	***	***
DuPont Teijin Films	***	***	***	***	***	***	***	***
Flex Films (USA)	***	***	***	***	***	***	***	***
Kodak	***	***	***	***	***	***	***	***
Mitsubishi Polyester	***	***	***	***	***	***	***	***
Polyplex USA	***	***	***	***	***	***	***	***
SKC	***	***	***	***	***	***	***	***
Terphane	***	***	***	***	***	***	***	***
Toray Plastics	***	***	***	***	***	***	***	***
Average	0.20	0.25	0.38	0.39	0.27	0.21	0.25	0.19
<b>SG&amp;A expenses:</b>								
3M Company	***	***	***	***	***	***	***	***
Carestream	***	***	***	***	***	***	***	***
Curwood, Inc.	***	***	***	***	***	***	***	***
DuPont Teijin Films	***	***	***	***	***	***	***	***
Flex Films (USA)	***	***	***	***	***	***	***	***
Kodak	***	***	***	***	***	***	***	***
Mitsubishi Polyester	***	***	***	***	***	***	***	***
Polyplex USA	***	***	***	***	***	***	***	***
SKC	***	***	***	***	***	***	***	***
Terphane	***	***	***	***	***	***	***	***
Toray Plastics	***	***	***	***	***	***	***	***
Average	0.21	0.21	0.19	0.20	0.19	0.19	0.19	0.16
<b>Operating income or (loss):</b>								
3M Company	***	***	***	***	***	***	***	***
Carestream	***	***	***	***	***	***	***	***
Curwood, Inc.	***	***	***	***	***	***	***	***
DuPont Teijin Films	***	***	***	***	***	***	***	***
Flex Films (USA)	***	***	***	***	***	***	***	***
Kodak	***	***	***	***	***	***	***	***
Mitsubishi Polyester	***	***	***	***	***	***	***	***
Polyplex USA	***	***	***	***	***	***	***	***
SKC	***	***	***	***	***	***	***	***
Terphane	***	***	***	***	***	***	***	***
Toray Plastics	***	***	***	***	***	***	***	***
Average	(0.01)	0.03	0.20	0.19	0.08	0.02	0.07	0.03

<sup>1</sup> Not applicable (\*\*\*).

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

## Total net sales

As shown in table III-10, total net sales include commercial sales, internal consumption, and transfers to related firms. Total sales irregularly declined from 2008 to 2013 in terms of quantity and value; the average unit value of total sales increased irregularly from 2008 to 2011 and then declined from 2011 to 2013. The quantity reported for internal consumption declined while the quantity reported for transfers irregularly increased from 2008 to 2013. The value of internal consumption fell from 2008 through 2013 while the value of transfers increased irregularly during the same period; the value and average unit value of transfers reached a high point in 2011, like commercial sales. Sales quantity and value were greater in the January-June 2014 period than in the period one year earlier, led by commercial sales.

Table III-11 shows that the sales experience was mixed: \*\*\* in 2013. In terms of quantity, five other firms experienced a decrease in sales from 2008 to 2013 while three other firms increased sales between the two years. In terms of value, three firms (\*\*\*) reported lower sales in 2013 compared with 2008 while four firms (\*\*\*) reported higher sales between the two years. With regard to commercial sales quantity and value, three firms (\*\*\*) reported lower sales in 2013 than in 2008 while four other firms (\*\*\*) reported higher sales. The average unit value of commercial sales of each of the companies increased between 2008 and 2013, \*\*\*.<sup>7</sup> The majority of firms reported higher commercial sales quantities and values in January-June 2014 compared to January-June 2013 although only five firms reported higher sales unit values.

## Costs and expenses

As shown in table III-10, raw material costs represent the single largest component of overall COGS, averaging approximately 55.4 percent of total COGS during 2008-13 (ranging from 48.3 percent in 2009 to 60.1 percent in 2011). Raw material costs as a percentage of total net sales value ranged from 41.9 percent in 2009 to 51.0 percent in 2012 and 2013 and irregularly increased from 2008 to 2013. As shown in table III-11, average raw material costs, direct labor, and other factory costs (i.e., conversion costs) vary from company to company. These costs generally reflect underlying differences in input costs and conversion costs (labor and overhead). The highest average raw material costs as a ratio to sales were reported by \*\*\* while \*\*\*.

After raw materials, the largest component of reported COGS is other factory costs, which as a ratio to sales irregularly declined from 26.6 percent to 24.6 percent (and was the same at \$0.51 per pound of sales) from 2008 to 2013. Direct labor costs, the smallest component of COGS, also rose irregularly between 2008 and 2013 as a ratio to sales and on a per-unit basis. Both other factory costs and direct labor have more of a fixed cost component than do raw material costs (which have more of a variable cost component). With the decline in

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<sup>7</sup> This does not include \*\*\*.

production and capacity utilization, other factory costs rose on a per-unit basis from 2011 to 2013 while direct labor costs fluctuated and were lower in 2013 than in 2012.<sup>8</sup>

SG&A expenses were lower in absolute dollars, as a ratio to sales, and on a per-unit basis in 2013 than in 2008. Of eight reporting firms (\*\*\*) , SG&A expenses were lower for three firms and higher for five firms in 2013 than in 2008.

## **Profitability**

Table III-10 shows that the industry's gross profit, on an absolute and relative basis, rose substantially from 2008 to 2010 but fell dramatically from 2010 through 2013 and was lower in January-June 2014 than in the period one year earlier. Operating income rose from a loss in 2008 to profitability in 2009 and to substantially higher and more profitable levels in 2010 and 2011, falling thereafter to lower levels (but profitable) in 2012 and 2013. Although the industry as a whole reported an operating income in the January-June 2014 period, the operating income was much lower than that reported in the comparable period one year earlier. The number of firms reporting operating losses fell as the industry's profitability improved from 2009 to 2010 and 2011 and the number increased as the industry's profitability fell in 2012 and 2013 and the number reporting losses was lower in January-June 2014 (\*\*\*) . The experience of individual firms is depicted in table III-11.<sup>9</sup> Net income before taxes and cash flow generally followed the trends of operating income/(loss) for the industry and for each firm.<sup>10</sup>

## **Variance analysis**

A variance analysis for the operations of U.S. producers of PET film is presented in table III-12.<sup>11</sup> The information for this variance analysis is derived from table III-10. As the data depict, operating income increased between 2008 and 2013, attributable to a favorable price variance (unit prices increased between the periods) that was greater than the unfavorable net cost/expense variance (unit costs increased). Between 2011-12 and 2012-13 operating income fell because the unfavorable price variance (unit prices fell) was greater than a favorable net

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<sup>8</sup> The cost structure of \*\*\*.

<sup>9</sup> Domestic interested parties stated that \*\*\*. Posthearing brief of domestic interested parties, answers to questions, p. 47.

<sup>10</sup> \*\*\*.

<sup>11</sup> The Commission's variance analysis is calculated in three parts: Sales variance, cost of sales variance (COGS variance), and SG&A expense variance. Each part consists of a price variance (in the case of the sales variance) or a cost or expense variance (in the case of the COGS and SG&A expense variance), and a volume variance. The sales or cost/expense variance is calculated as the change in unit price or per-unit cost/expense times the new volume, while the volume variance is calculated as the change in volume times the old unit price or per-unit cost/expense. Summarized at the bottom of the table, the price variance is from sales; the cost/expense variance is the sum of those items from COGS and SG&A variances, respectively, and the volume variance is the sum of the volume components of the net sales, COGS, and SG&A expense variances. The overall volume component of the variance analysis is generally small.

cost/expense variance (unit costs and expenses decreased). Operating income was lower in January-June 2014 than in January-June 2013 because the unfavorable price variance was greater than a favorable net cost/expense variance.

**Table III-12**  
**PET film: Variance analysis on the operations of U.S. producers, fiscal years, 2008-13, January-June 2013, and January-June 2014**

Item	Between fiscal years						January to June
	2008-13	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Commercial sales variance:							
Price variance	48,720	(46,599)	86,027	131,523	(65,049)	(48,835)	(31,146)
Volume variance	(75,985)	(111,722)	107,649	(120,392)	(9,095)	49,228	56,946
Net sales variance	(27,265)	(158,321)	193,676	11,131	(74,144)	393	25,800
Internal consumption variance:							
Price variance	***	***	***	***	***	***	***
Volume variance	***	***	***	***	***	***	***
Net sales variance	***	***	***	***	***	***	***
Transfers variance:							
Price variance	***	***	***	***	***	***	***
Volume variance	***	***	***	***	***	***	***
Net sales variance	***	***	***	***	***	***	***
Net sales:							
Price variance	76,958	(28,248)	77,156	174,648	(60,168)	(72,192)	(52,536)
Volume variance	(202,282)	(132,621)	86,971	(148,549)	(65,017)	42,696	61,004
Net sales variance	(125,324)	(160,869)	164,127	26,099	(125,185)	(29,496)	8,468
Cost of sales:							
Cost/expense variance	(69,098)	55,492	2,499	(169,258)	1,403	41,969	34,488
Volume variance	181,392	118,925	(75,401)	120,032	54,056	(37,423)	(53,563)
Total cost of sales variance	112,294	174,417	(72,902)	(49,226)	55,459	4,546	(19,075)
Gross profit variance:	(13,030)	13,548	91,225	(23,127)	(69,726)	(24,950)	(10,607)
SG&A expenses:							
Cost/expense variance	7,381	(4,182)	16,725	(8,486)	5,854	(831)	8,602
Volume variance	21,839	14,319	(10,010)	13,868	5,647	(3,684)	(5,489)
Total SG&A expense variance:	29,220	10,137	6,715	5,382	11,501	(4,515)	3,113
Operating income variance:	16,190	23,685	97,940	(17,745)	(58,225)	(29,465)	(7,494)
Summarized as:							
Price variance	76,958	(28,248)	77,156	174,648	(60,168)	(72,192)	(52,536)
Net cost/expense variance	(61,718)	51,310	19,224	(177,744)	7,257	41,138	43,090
Net volume variance	950	623	1,560	(14,649)	(5,314)	1,589	1,952

Note.—Unfavorable variances are shown in parentheses; all others are favorable. The data are comparable to changes in operating income as presented in table III-10.

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

### Capital expenditures and research and development expenses

Table III-13 presents data on capital expenditures and research and development (“R&D”) expenses by firm. Capital expenditures, which were at a high level in 2008 (\*\*\*)

declined through 2010; they increased in 2011, 2012, and in 2013, attributable to \*\*\*. Capital expenditures were lower in January-June 2014 than in the interim period one year earlier. Five firms reported that they incurred R&D expenses (\*\*\*), which irregularly increased from 2008 to 2013. Reported R&D expenses were \*\*\* lower in January-June 2014 than in the interim period one year earlier.

**Table III-13**  
**PET film: Capital expenditures and research and development expenses of U.S. producers, fiscal years, 2008-13, January-June 2013, and January-June 2014**

Firm	Fiscal years						January-June	
	2008	2009	2010	2011	2012	2013	2013	2014
	Value (1,000 dollars)							
<b>Capital expenditures</b>								
3M Company	***	***	***	***	***	***	***	***
Carestream	***	***	***	***	***	***	***	***
Curwood	***	***	***	***	***	***	***	***
DuPont Teijin	***	***	***	***	***	***	***	***
Flex Films (USA)	***	***	***	***	***	***	***	***
Kodak	***	***	***	***	***	***	***	***
Mitsubishi Polyester	***	***	***	***	***	***	***	***
Polyplex USA	***	***	***	***	***	***	***	***
SKC	***	***	***	***	***	***	***	***
Terphane	***	***	***	***	***	***	***	***
Toray Plastics	***	***	***	***	***	***	***	***
Total	***	***	***	***	***	***	***	***
<b>R&amp;D expenses</b>								
3M Company	***	***	***	***	***	***	***	***
Carestream	***	***	***	***	***	***	***	***
Curwood	***	***	***	***	***	***	***	***
DuPont Teijin	***	***	***	***	***	***	***	***
Flex Films (USA)	***	***	***	***	***	***	***	***
Kodak	***	***	***	***	***	***	***	***
Mitsubishi Polyester	***	***	***	***	***	***	***	***
Polyplex USA	***	***	***	***	***	***	***	***
SKC	***	***	***	***	***	***	***	***
Terphane	***	***	***	***	***	***	***	***
Toray Plastics	***	***	***	***	***	***	***	***
Total	***	***	***	***	***	***	***	***

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

In the recent reviews on PET film from India and Taiwan, U.S. firms described the nature of their capital expenditures, which are shown in the tabulation below:<sup>12</sup>

<sup>12</sup> Because these questionnaire responses concern the same product as these reviews, and were completed and submitted recently, they have been placed in the record of these reviews.

Firm	Nature or focus of the firm's capital expenditures
DuPont Teijin . . . . . ***.	
Mitsubishi Polyester. . . ***.	
SKC . . . . . ***.	
Kodak . . . . . ***.	
Terphane . . . . . ***.	
Toray Plastics . . . . . ***.	
3M Company . . . . . ***.	
Carestream . . . . . ***.	
Flex Films (USA) . . . . . ***.	

**Assets and return on investment**

Table III-14 presents data on the U.S. producers' total net assets related to PET film and their return on investment ("ROI"). The total value of net assets increased between 2012 and

2013 largely due to the \*\*\*. ROI, calculated as the reported operating income divided by net assets, increased irregularly (the operating loss lessened) between 2008 and 2013.

**Table III-14**  
**PET film: U.S. producers' total assets and return on investment, fiscal years, 2008-13**

Item	Fiscal years					
	2008	2009	2010	2011	2012	2013
	<b>Total net assets (1,000 dollars)</b>					
3M Company	***	***	***	***	***	***
Carestream	***	***	***	***	***	***
Curwood, Inc.	***	***	***	***	***	***
DuPont Teijin Films	***	***	***	***	***	***
Flex Films (USA) Inc.	***	***	***	***	***	***
Kodak	***	***	***	***	***	***
Mitsubishi Polyester Film	***	***	***	***	***	***
Polyplex USA LLC	***	***	***	***	***	***
SKC INC	***	***	***	***	***	***
Terphane Inc. <sup>1</sup>	***	***	***	***	***	***
Toray Plastics (America), Inc	***	***	***	***	***	***
All firms	1,191,466	1,043,445	1,024,962	1,069,592	1,025,386	1,186,108
	<b>Return on investment ratio (percent)</b>					
3M Company	***	***	***	***	***	***
Carestream	***	***	***	***	***	***
Curwood, Inc.	***	***	***	***	***	***
DuPont Teijin Films	***	***	***	***	***	***
Flex Films (USA) Inc.	***	***	***	***	***	***
Kodak	***	***	***	***	***	***
Mitsubishi Polyester Film	***	***	***	***	***	***
Polyplex USA LLC	***	***	***	***	***	***
SKC INC	***	***	***	***	***	***
Terphane Inc.	***	***	***	***	***	***
Toray Plastics (America), Inc	***	***	***	***	***	***
Average	(0.5)	1.7	11.3	9.2	3.9	0.9

<sup>1</sup> \*\*\*.

<sup>2</sup> Not applicable: (\*\*\*) .

<sup>3</sup> \*\*\*.

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



## PART IV: U.S. IMPORTS AND THE FOREIGN INDUSTRIES

### U.S. IMPORTS

#### Overview

The Commission issued questionnaires to 30 firms believed to import the subject product between 2008 and 2014. Nineteen firms provided data and information in response to the questionnaires, while eleven firms indicated that they had not imported product during the period for which data were collected.<sup>1</sup> Based on official Commerce statistics for imports of PET film (less Canada and Oman), based on quantity, importers' questionnaire data accounted for \*\*\* percent of total U.S. imports during 2008-2013 and \*\*\* percent of total imports during January to June 2014. Importer responses also accounted for \*\*\* percent of total subject imports during 2008-13. Firms responding to the Commission's questionnaire accounted for the following shares of the individual subject countries' subject imports (as a share of official import statistics, by value) during the period examined.

- \*\*\* percent of the subject imports from Brazil during 2008-2013.
- \*\*\* percent of the subject imports from China during 2008-2013.
- \*\*\* percent of the subject imports from the UAE during 2008-2013.

Official Commerce statistics for PET film imported under statistical reporting number 3920.62.00.90 may be overstated as they include nonsubject products, e.g. "equivalent PET film," and possibly amorphous ("APET") and crystalline ("CPET") PET film. Further, as discussed in Part I of this report, there have been two scope reviews concerning PET film, one excluding amorphous PET film that is not biaxially orientated from Brazil; the second excluding amorphous PET, glycol-modified PET, and coextruded APET with PETG on its outer surfaces from China. Therefore, in light of the data coverage by the Commission's questionnaires, possible overstatement of Commerce statistics, and scope exclusions, the PET film import data in this report are based on questionnaire responses.

#### Imports from subject and nonsubject countries

Table IV-1 presents information on U.S. imports of PET film from Brazil, China, the UAE, and all other sources over the period of review. One U.S. importer, \*\*\*, accounted for \*\*\* of the U.S. PET film imported from Brazil during the period of review. \*\*\*. PET film imports from Brazil declined sharply from 2008 to 2009, the last year Terphane reported imports of subject product from Brazil.

With respect to China, two importers accounted for an aggregate \*\*\* percent \*\*\*.

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<sup>1</sup> \*\*\* submitted a questionnaire without providing usable data.

Three importers accounted for an aggregate of \*\*\* percent \*\*\* of U.S. PET film imported from the UAE from 2008-13. \*\*\* experienced a \*\*\* decrease in imports from 2008 to 2010, with its share of imports of PET film \*\*\*. Pilcher Hamilton's U.S. imports \*\*\*.

**Table IV-1**  
**PET film: U.S. imports by source, 2008-2013, January to June 2013, and January to June 2014**

Item	Calendar year						January to June	
	2008	2009	2010	2011	2012	2013	2013	2014
	<b>Quantity (1,000 pounds)</b>							
U.S. imports from.-- Brazil	***	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***	***
UAE	***	***	***	***	***	***	***	***
Subtotal, subject sources	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***
Total U.S. imports	139,205	107,212	187,728	208,384	219,145	167,513	91,905	58,608
	<b>Value (1,000 dollars)</b>							
U.S. imports from.-- Brazil	***	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***	***
UAE	***	***	***	***	***	***	***	***
Subtotal, subject sources	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***
Total U.S. imports	201,772	131,525	273,661	386,062	305,118	225,023	128,477	91,482
	<b>Unit value (dollars per pound)</b>							
U.S. imports from.-- Brazil	***	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***	***
UAE	***	***	***	***	***	***	***	***
Subtotal, subject sources	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***
Total U.S. imports	1.45	1.23	1.46	1.85	1.39	1.34	1.40	1.56
	<b>Share of quantity (percent)</b>							
U.S. imports from.-- Brazil	***	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***	***
UAE	***	***	***	***	***	***	***	***
Subtotal, subject sources	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***
Total U.S. imports	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	<b>Share of value (percent)</b>							
U.S. imports from.-- Brazil	***	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***	***
UAE	***	***	***	***	***	***	***	***
Subtotal, subject sources	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***
Total U.S. imports	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	<b>Ratio to U.S. production (percent)</b>							
U.S. imports from.-- Brazil	***	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***	***
UAE	***	***	***	***	***	***	***	***
Subtotal, subject sources	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***
Total U.S. imports	22.5	19.5	31.2	40.7	44.2	31.0	35.3	19.5

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

Table IV-2 presents information based on official Commerce statistics for U.S. importers of PET film from major nonsubject countries.

**Table IV-2**

**PET film: U.S. imports from nonsubject sources, by source, 2008-13, January to June 2013, and January to June 2014**

Item	Calendar year						January to June	
	2008	2009	2010	2011	2012	2013	2013	2014
	Quantity (1,000 pounds)							
Nonsubject U.S. imports from.-- Mexico	3,757	17,466	38,136	51,830	78,375	56,107	31,440	28,577
Korea	59,161	43,287	45,987	38,149	31,140	34,202	18,447	14,452
Taiwan	22,588	21,489	21,715	17,176	13,542	11,078	6,461	6,907
India	3,719	4,149	7,210	12,200	7,965	7,980	3,870	3,479
Turkey	12,977	11,426	18,654	20,978	21,631	10,018	7,297	1,278
Thailand	11,848	5,795	10,521	15,965	18,902	17,943	8,839	5,554
Indonesia	2,100	1,079	6,495	9,335	10,646	10,327	4,938	3,527
Japan	4,996	3,961	5,473	4,259	3,276	4,201	1,946	2,504
All other sources	16,943	19,039	17,166	17,069	19,555	21,975	9,087	26,217
Imports from nonsubject sources	138,089	127,691	171,357	186,961	205,032	173,831	92,325	92,495
	Share of total imports (percent)							
Nonsubject U.S. imports from.-- Mexico	2.7	13.7	22.3	27.7	38.2	32.3	34.1	30.9
Korea	42.8	33.9	26.8	20.4	15.2	19.7	20.0	15.6
Taiwan	16.4	16.8	12.7	9.2	6.6	6.4	7.0	7.5
India	2.7	3.2	4.2	6.5	3.9	4.6	4.2	3.8
Turkey	9.4	8.9	10.9	11.2	10.5	5.8	7.9	1.4
Thailand	8.6	4.5	6.1	8.5	9.2	10.3	9.6	6.0
Indonesia	1.5	0.8	3.8	5.0	5.2	5.9	5.3	3.8
Japan	3.6	3.1	3.2	2.3	1.6	2.4	2.1	2.7
All other sources	12.3	14.9	10.0	9.1	9.5	12.6	9.8	28.3
Imports from nonsubject sources	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Compiled from official import statistics for HTS reporting number 3920.62.00.90 excluding data imported from Canada and Oman as out-of-scope merchandise.

The top three nonsubject countries for U.S. imports of PET film accounted for an aggregate \*\*\* percent of nonsubject imports of PET film in 2013: \*\*\*, based on official statistics. \*\*\*.<sup>2</sup> As noted earlier, Korea was previously subject to a U.S. antidumping duty order from 1991 to 2011. Thailand, a subject country in the original investigations, is no longer a subject country, as explained in part I of this report.

#### U.S. IMPORTERS' IMPORTS SUBSEQUENT TO JUNE 30, 2014

The Commission requested importers to indicate whether they had imported or arranged for importation of PET film from Brazil, China, the UAE, or any other source for delivery after June 30, 2014. Table IV-3 presents the U.S. import quantities on order.

<sup>2</sup> Staff interview with \*\*\*, October 14, 2014.

**Table IV-3**  
**PET film: U.S. importers' arranged imports, July 2014 through June 2015**

\* \* \* \* \*

**U.S. IMPORTERS' INVENTORIES**

Table IV-4 presents data for inventories of U.S. imports of PET film from Brazil, China, the UAE, and all other sources held in the United States. \*\*\*. \*\*\* held the majority of end-of-period inventories of U.S. imports of PET film from China over the period of review, while the majority of end-of-period inventories of U.S. imports of PET film from the UAE were held by \*\*\* in 2008 and \*\*\* from 2009-13. With respect to end-of-period inventories of U.S. imports of PET film from all other sources, \*\*\*.

**Table IV-4**  
**PET film: U.S. importers' end-of-period inventories of imports, by source, 2008-13, January to June 2013, and January to June 2014**

\* \* \* \* \*

## Cumulation considerations<sup>3 4</sup>

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

### Presence in the market

Imports generally have been simultaneously present in the U.S. market throughout the period of review. Imports of PET film from China and the UAE entered the United States in all 72 months from 2008-13. Subject PET film from Brazil has not entered the United States since 2009.

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<sup>3</sup> With regard to cumulation, Terphane stated “the Commission should determine that imports from Brazil are likely to have no discernible impact on the domestic industry and, therefore, that cumulation of imports from Brazil with imports from China and the UAE is prohibited. Alternatively, the Commission should exercise its discretion not to cumulate imports from Brazil with imports from China and the UAE based on differences in the likely conditions of competition. These include differences in export-orientation, size, availability of capacity, product mix, and sales strategies with respect to the U.S. market. When imports from Brazil are appropriately viewed in isolation, the evidence demonstrates that imports from Brazil are not likely to lead to a continuation or recurrence of material injury within a reasonably foreseeable time.” Terphane’s posthearing brief, pp. 2-3.

On the other hand, domestic interested parties argue that the evidence supports cumulation of subject imports from Brazil with other subject imports. Specifically, domestic interested parties summarize their argument by saying “Terphane would have the Commission believe that it is a uniquely benign force in the PET film market, while the rest of the foreign producers in Latin America and elsewhere threaten the domestic industry with material injury. . . . Terphane’s incentives are similar to those of other foreign producers of subject and identical merchandise. Terphane’s U.S. affiliate provides it with a convenient beachhead for rapidly increasing subject exports to the United States in the event of revocation. Terphane’s large and rapidly increasing Brazilian subject capacity provides it with the means. The history of this order demonstrates with unparalleled clarity that the Order has had a strong disciplining effect on Terphane – and if the Order were revoked Terphane’s exports to the United States would resume at their pre-Order levels.” Domestic Interested Parties posthearing brief, pp. 2-3.

<sup>4</sup> In their posthearing brief, counsel for JBF RAK LLC argued against cumulation of UAE imports stating “... the conditions of competition are very different. The Brazil and China industries have incentive to maximize their home market production and have no meaningful disincentive to shipping their product to the United States. In contrast, all of the producers in the UAE have good alternative sources to supply the U.S. market, which alternate sources are superior to the UAE even if there were no antidumping duty order in place on the UAE.” JBF RAK LLC posthearing brief, p. 4.

## Geographical markets

Table IV-5 presents U.S. imports of PET film by subject country source and customs district of entry, 2008-13 and January to June 2013-14. Imports of PET film from China and the UAE compete for users without regard to geographical location in the United States. While U.S. imports of PET film from China and the UAE may enter select customs districts, the product is generally sold nationwide (see part II of this report). For the period of review of these five-year reviews, imports of PET film from Brazil principally entered through the customs district of New York, NY; imports of PET film from China principally entered through the customs district of Chicago, IL, whereas U.S. imports of PET film from the UAE principally entered through the customs districts of New York, NY and Charleston, SC.

**Table IV-5**  
**PET film: Subject U.S. imports by source and Customs District of entry, 2008-13, January to June 2013, and January to June 2014.**

Region	Calendar year						January to June	
	2008	2009	2010	2011	2012	2013	2013	2014
	Share of total quantity (percent)							
U.S. imports from Brazil:								
East <sup>1</sup>	97.2	36.1	33.2	32.4	5.0	0.0	0.0	0.0
South <sup>2</sup>	0.3	1.7	0.7	0.3	0.0	0.1	0.0	0.0
Mid West <sup>3</sup>	0.0	23.6	66.1	67.3	0.0	93.7	2.3	100.0
West <sup>4</sup>	2.5	38.6	0.0	0.0	95.0	6.2	95.4	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
U.S. imports from China:								
East <sup>1</sup>	28.3	30.4	15.8	17.8	20.6	16.4	12.8	39.6
South <sup>2</sup>	8.8	4.8	1.9	1.9	2.3	4.2	4.1	0.8
Mid West <sup>3</sup>	50.5	58.6	74.5	65.4	42.5	55.6	55.0	41.4
West <sup>4</sup>	12.4	6.2	7.9	15.0	34.6	23.9	28.2	18.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
U.S. imports from UAE:								
East <sup>1</sup>	95.9	95.4	90.2	99.2	99.1	85.5	96.1	77.9
South <sup>2</sup>	1.9	0.0	0.3	0.4	0.1	0.8	1.1	2.8
Mid West <sup>3</sup>	1.9	2.3	0.3	0.1	0.0	11.7	1.2	15.9
West <sup>4</sup>	0.4	2.3	9.2	0.3	0.8	2.1	1.6	3.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

<sup>1</sup> Includes Baltimore, MD; Boston, MA; Buffalo, NY; Charlotte, NC; Charleston, SC; New York, NY; Norfolk, VA; Ogdensburg, NY; Philadelphia, PA; Savannah, GA; Washington, DC.

<sup>2</sup> Includes Dallas-Fort Worth, TX; El Paso, TX; Houston-Galveston, TX; Laredo, TX; Miami, FL; Mobile, AL; New Orleans, LA; Nogales, AZ; San Juan, PR; Tampa, FL.

<sup>3</sup> Includes Chicago, IL; Cleveland, OH; Detroit, MI; Duluth, MN; Milwaukee, WI; Minneapolis, MN; St. Louis, MO.

<sup>4</sup> Includes Anchorage, AK; Columbia-Snake River, OR; Great Falls, MT; Honolulu, HI; Los Angeles, CA; Pembina, ND; San Diego, CA; San Francisco, CA; Seattle, WA.

Source: Official import statistics using HTS statistical reporting number 3920.62.0090.

## SUBJECT COUNTRY PRODUCERS

According to industry sources, installed PET film capacity in China is \*\*\* PET film capacity in Brazil and the UAE combined (table IV-6).

**Table IV-6**  
**PET film: Brazil, China, and the UAE capacity, 2012.**

Country	Capacity (1,000 metric tons)	Capacity (1,000 pounds)
<b>Brazil:</b>		
Terphane Ltda. ("Terphane")	***	***
Total Brazil	***	***
<b>China:</b>		
Anhui Guofeng Plastic Industry Co., Ltd.	***	***
Changzhou Electrical Insulation Main Works Co., Ltd.	***	***
Changzhou Zhongheng New Material Co., Ltd.	***	***
Dubang Hongji Films (Ningbo) Co., Ltd.	***	***
DuPont Hongji Films Foshan Co., Ltd.	***	***
Fuwei Films (Shandong) Co., Ltd.	***	***
Hangzhou Dahua Plastic	***	***
Hefei Lucky Film Corporation	***	***
Jiangsu Leihua Material Co., Ltd.	***	***
Jiangsu YuXing Film Technology Co., Ltd.	***	***
Jiangsu Zhongda New Material (Group) Co., Ltd.	***	***
Nanfang Plastic Film (Hubei Co., Ltd.	***	***
Nanjing Lanpucheng Co., Ltd.	***	***
Ningbo Sun Plastics Technology Industrial Co., Ltd.	***	***
Shanghai Bangkai Plastic Products Technology Co., Ltd.	***	***
Shanghai Zidong Film Material Co., Ltd.	***	***
Shantou SOE First Polyester Films	***	***
Shaoxing Zhongfa Industry Group	***	***
Shaxing Xiangyu Green Package Co., Ltd.	***	***
Sichuan Dongfang Insulating Material	***	***
Suqian Color Plastic Packing Co., Ltd.	***	***
Tianjin Wanhua co., Ltd.	***	***
Tong'ai Electronic Materials Co., Ltd.	***	***
Yihua Toray Polyester Film Co., Ltd.	***	***
Zhejiang Dadongnan Package Co., Ltd.	***	***
Zhejiang Euro-Asia Film Materials Co., Ltd.	***	***
Zhejiang Nanyang Technology Co., Ltd.	***	***
Zhejiang Qiangmeng Industry Co., Ltd.	***	***
Zhejiang Wuming Leather & Plastic Group Co., Ltd.	***	***
Total China	***	***
<b>United Arab Emirates:</b>		
Flex Middle East ZTE	***	***
JBF RAK LLC	***	***
Total UAE	***	***

Source: \*\*\*.



Trade balances for Brazil, China and the UAE are presented in table IV-7.

**Table IV-7**  
**PET film: Brazil, China and UAE exports, imports, and trade balances, 2008-13**

Reporting country	Calendar year					
	2008	2009	2010	2011	2012	2013
	<b>Quantity (1,000 pounds)</b>					
Subject:						
UAE:						
Exports	71,437	111,202	196,556	177,315	199,198	164,632
Imports	9,372	5,795	13,137	15,279	8,898	11,403
Trade balance	62,065	105,407	183,419	162,036	190,300	153,229
Brazil:						
Exports	34,370	21,993	24,078	18,837	16,143	15,955
Imports	24,965	35,157	35,940	31,407	32,303	39,748
Trade balance	9,405	(13,164)	(11,862)	(12,570)	(16,160)	(23,793)
China:						
Exports	203,840	139,159	359,393	310,402	332,569	403,839
Imports	278,004	315,688	464,800	520,920	610,591	676,380
Trade balance	(74,164)	(176,529)	(105,407)	(210,518)	(278,022)	(272,541)

Note:-- Ranked high to low (positive to negative) on 2013 trade balance data. Export and import figures for HTS subheading 3920.62 include nonsubject products, e.g. metallized PET film, "equivalent PET film," and possibly amorphous ("APET") and crystalline ("CPET") film.

Source: Global Trade Atlas, accessed October 2, 2014.

\*\*\*<sup>5</sup>

## THE INDUSTRY IN BRAZIL

### Operations on PET film

During the original investigations and the period of these five-year reviews, there has been \*\*\*.<sup>6</sup> Terphane Ltda., related to U.S. producer and importer Terphane, Inc., submitted the only response to the Commission questionnaire for these five-year reviews.

Terphane Ltda. reported that its share of production of PET film in Brazil was \*\*\* percent in 2013 and Terphane Ltda. \*\*\*.<sup>7</sup> Terphane Ltda. indicated that the firm's total sales accounted for by PET film in its most recent fiscal year was \*\*\* percent.<sup>8</sup> PET film capacity,

<sup>5</sup> Foreign producer questionnaire response, section II-8.

<sup>6</sup> U.S. based Tredegar Corporation acquired Terphane Holdings LLC in October 2011.

<sup>7</sup> \*\*\*.

<sup>8</sup> Foreign producer questionnaire response, section II-6.

production, shipments, and inventories in Brazil, 2008-2013, January to June 2013, and January to June 2014 are presented in table IV-8.<sup>9</sup>

**Table IV-8**

**PET film: Brazil capacity, production, shipments, and inventories, 2008-13, January to June 2013, January to June 2014**

\* \* \* \* \*

\*\*\*.<sup>10</sup>

Terphane Ltda. produces a variety of value-added specialty and commodity products.

Terphane Ltda. \*\*\*.<sup>11</sup>

Terphane Ltda. reported that it expected \*\*\*. Terphane Ltda. notes that \*\*\*. Terphane does expect an \*\*\*.<sup>12</sup>

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<sup>9</sup> Domestic interested parties argue Terphane's calculation of its production capacity for subject merchandise was flawed and should be disregarded by the Commission. They assert that Terphane could reasonably expect to attain a production capacity equal to its subject production plus all unused PET film production capacity since Terphane could achieve this volume of subject production without displacing any nonsubject production. See Domestic Interested Parties prehearing brief, pp. 9-12.

In its foreign producer submission, Terphane describes the methodology used to calculate production capacity as \*\*\*. See foreign producer questionnaire response, section II-12.

<sup>10</sup> Data compiled from foreign producer questionnaire, section II-2, II-3; Hearing transcript, pp. 20-21.

<sup>11</sup> \*\*\*; Hearing transcript, pp. 17-18.

<sup>12</sup> Foreign producer questionnaire response, section II-11.

Table IV-9 presents export country destinations for PET film produced in Brazil.

**Table IV-9**  
**PET film: Brazilian exports destinations, 2008-13**

Item	Calendar year					
	2008	2009	2010	2011	2012	2013
	Quantity (1,000 pounds)					
World	34,370	21,993	24,078	18,837	16,143	15,955
Argentina	9,606	6,861	10,161	10,213	9,838	7,766
United States	6,187	5,717	7,982	4,855	1,883	3,151
Chile	5,192	2,916	3,345	1,844	2,285	2,341
Colombia	3,310	1,704	626	193	458	940
Venezuela	1,483	743	504	424	257	569
Guatemala	791	22	0	40	448	316
Uruguay	269	202	291	158	184	249
Mexico	927	443	340	635	403	249
Paraguay	163	44	213	200	242	214
Ecuador	633	236	94	81	106	102
All Other Sources	5,810	3,105	521	194	40	58

Note: Export and import figures for HTS subheading 3920.62 include nonsubject products, e.g. metallized PET film, "equivalent PET film," and possibly amorphous ("APET") and crystalline ("CPET") film.

Source: Global Trade Atlas, accessed October 9, 2014.

## THE INDUSTRY IN CHINA

### Overview

A summary of PET film supply and demand in China is presented in table IV-10.

**Table IV-10**  
**PET film: China capacity, production, imports, exports, and consumption, 2011**

\* \* \* \* \*

According to industry sources, China has \*\*\*.

### Operations on PET film

In the original investigations, eight firms responded with usable questionnaire data. One producer, Mitsubishi Polyester Film Suzhou Co., Ltd., responded to the Commission's questionnaires for these five-year reviews. \*\*\*.

PET film capacity, production, shipments, and inventories in China during the period of review are presented in table IV-11.

**Table IV-11:**

**PET film: China capacity, production, shipments, and inventories, 2008-13, January to June 2013, and January to June 2014**

\* \* \* \* \*

Mitsubishi Polyester Film Suzhou Co., Ltd. reported \*\*\*,<sup>13</sup>

Table IV-12 presents China export destinations over the period of review.

**Table IV-12**

**PET film: China exports destinations, 2008-13**

Item	Calendar year					
	2008	2009	2010	2011	2012	2013
	Quantity (1,000 pounds)					
World	203,840	139,159	359,393	310,402	332,569	403,839
Indonesia	3,825	5,733	33,543	20,318	32,561	40,090
Japan	23,870	16,391	30,793	41,280	37,494	39,291
Taiwan	19,643	18,397	21,278	23,534	32,181	37,187
Malaysia	2,571	1,623	11,927	16,952	25,116	35,189
United States	23,706	12,528	23,504	16,899	16,609	25,610
Vietnam	2,843	3,290	10,172	9,724	14,884	25,039
Thailand	3,073	1,311	6,731	6,310	13,701	16,517
Philippines	3,659	1,959	9,109	11,770	11,945	15,080
Canada	5,624	5,926	15,767	13,323	11,569	14,722
Germany	5,578	2,804	11,329	10,636	11,063	13,442
All Other Sources	109,448	69,197	185,241	139,656	125,448	141,672

Note: Export and import figures for HTS subheading 3920.62 include nonsubject products, e.g. metallized PET film, "equivalent PET film," and possibly amorphous ("APET") and crystalline ("CPET") film.

Source: Global Trade Atlas, accessed October 9, 2014.

## THE INDUSTRY IN THE UNITED ARAB EMIRATES

### Overview

During the original investigations, the UAE had only one producer, Flex Middle East. In 2008, a joint venture enterprise between JBF Industries Ltd., India, and Ras Al Khaimah Investment Authority (RAKIA), established a second producer, JBF RAK. Both Flex Middle East and JBF RAK provided responses to the Commission questionnaires for the period of this five-year review.

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<sup>13</sup> Data compiled from foreign producer questionnaire, section II-9, II-11.

## Operations on PET film

JBF RAK and Flex Middle East reported estimates of \*\*\* percent, respectively, of total production of PET film in the UAE from 2008 to 2013. JBF RAK reported that its share of production rose to \*\*\* percent of total production during interim period January to June 2014. JBF RAK reported irregularly increasing PET film exports accounting for \*\*\* percent of total UAE exports to the United States from 2008 to 2013 and accounting for \*\*\* of total exports to the United States for January to June 2014. Flex Middle East reported declining exports to the United States over the period of review; decreasing to only \*\*\* pounds of PET film exports to the United States in the first half of 2014. JBF RAK reported that \*\*\* percent of the firm's total sales in the most recent fiscal year was represented by PET film, while Flex Middle East reported \*\*\* percent of total sales as PET film.

PET film capacity, production, shipments, and inventories in the UAE, 2008-2013, January to June 2013, and January to June 2014 are presented in table IV-13.

### Table IV-13

**PET film: UAE capacity, production, shipments, and inventories, 2008-13, January to June 2013, January to June 2014**

\* \* \* \* \*

\*\*\*.<sup>14</sup>

According to industry sources, \*\*\*.<sup>15</sup> \*\*\*.

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<sup>14</sup> Foreign producer questionnaire response, section II-11.

<sup>15</sup> \*\*\*.

Table IV-14 presents UAE export destinations over the period of review.

**Table IV-14**  
**PET film: UAE exports destinations, 2008-13**

Item	Calendar year					
	2008	2009	2010	2011	2012	2013
	Quantity (1,000 pounds)					
World	71,437	111,202	196,556	177,315	199,198	164,632
Italy	12,516	25,179	51,103	38,527	47,847	35,995
United States	15,345	10,370	34,827	33,933	42,847	34,191
Germany	15,356	17,550	29,200	31,586	26,973	24,980
Austria	3	2,256	7,360	5,828	6,263	8,924
Turkey	294	2,085	5,979	7,024	10,438	7,600
China	-	496	1,752	911	3,381	7,062
Poland	3,554	4,656	8,661	4,633	9,788	5,624
Belgium	1,056	5,003	10,989	7,105	9,507	5,103
India	588	9,662	3,796	5,528	273	4,967
United Kingdom	-	5,970	10,138	9,440	9,961	4,530
All Other Sources	22,728	27,975	32,751	32,799	31,921	25,655

Note: Export and import figures for HTS subheading 3920.62 include nonsubject products, e.g. metallized PET film, "equivalent PET film," and possibly amorphous ("APET") and crystalline ("CPET") film.

Source: Global Trade Atlas, accessed October 9, 2014.

### THE INDUSTRIES IN BRAZIL, CHINA, AND THE UAE COMBINED

Table IV-15 presents reported data on the PET film industries in Brazil, China, and the UAE combined.

**Table IV-15**  
**PET film: Data on industry in subject countries combined, 2008-13, January to June 2013, and January to June 2014**

\* \* \* \* \*

### GLOBAL MARKET

The PET film industry is global in nature with operations on virtually every continent. Asia dominates global capacity (\*\*% percent in 2013), followed by North America (U.S. and Mexico), \*\*% percent, Europe, \*\*% percent, the Middle East and Africa (UAE and Egypt), \*\*% percent, and South America (Brazil), \*\*% percent, accounting for the majority of the current global PET film annual supply capability of roughly \*\* million metric tons in 2013.<sup>16 17</sup>

<sup>16</sup> \*\*\*.

Global PET film domestic consumption patterns in 2013 generally track production capability patterns, but differ somewhat considering trade patterns. Asia accounts for \*\*\* percent of total global consumption; North America, \*\*\* percent; Europe, \*\*\* percent; the Middle East and Africa \*\*\* percent; and South America, \*\*\* percent in aggregate.<sup>18</sup>

### Global supply and demand patterns 2008-13

During the period of review encompassing the 2008-13 period, global PET film industry capacity grew at an average compound annual rate of about \*\*\* percent, compared to \*\*\* demand growth of about \*\*\* percent, indicative of an \*\*\* situation which began to develop during the \*\*\* period.<sup>19</sup> In comparison, capacity and demand in the world outside Asia during the period of review followed similar trends but at lower volumes as capacity \*\*\* demand by some \*\*\*. Asia dominated \*\*\*, and \*\*\* was by far the largest factor in these increases, experiencing capacity growth of \*\*\* percent and demand growth of \*\*\* percent.<sup>20</sup>

In commenting on the current state of the global PET film industry, principals at PCI Films Consulting Ltd. noted that while the PET film industry has become more global in recent years, regional supplier/customer relationships are still reportedly very important. Thus, the current oversupply situation in China was thought to have minimal impact on supply balances in Europe and North America because customers' demands as to quality and lead times are such that domestic suppliers, even at marginally higher prices, are believed to still be preferred. At the same time, PCI describes the current commodity PET film environment as a buyer's market with consequent lower profit margins and pricing compared to 2010, when producers experienced high levels of profitability owing principally to supply shortages which PCI believes will not be repeated in the near future. Additionally, there is a reported current oversupply situation in the purified terephthalic acid (PTA) feedstock market which is also expected to dampen upward pressure on film pricing.<sup>21</sup>

The swings between supply and demand trends in global PET film during the period 2008-13 reflect the cyclical nature of the industry owing to the fundamental laws of supply and demand.<sup>22</sup> The global industry operated at a relatively comfortable \*\*\* percent of capacity in the 2008-09 period, followed by tight fundamental balance of supply and demand at \*\*\* percent of capacity in 2010 which, in turn, led to increases in profitability and prices, thus encouraging many producers, particularly in Asia, to plan capacity additions. The consequent higher prices and margins following the tight supply and demand situation of 2010 reportedly attracted interest in a new round of global capacity expansion during the 2011-13 period.<sup>23 24</sup>

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(...continued)

<sup>17</sup> \*\*\* supplemental response to producers' questionnaire, section I-8.

<sup>18</sup> \*\*\*.

<sup>19</sup> Ibid.

<sup>20</sup> Ibid.

<sup>21</sup> *New strategies required for the global BOPET film industry*,

<http://pcifilms.com/category/polyester-film/>, retrieved October 14, 2014.

<sup>22</sup> \*\*\* producers' questionnaire response, section II-3.

<sup>23</sup> \*\*\*.

New capacity which came onstream during the 2011-13 period, gradually created an imbalance between supply and demand at the global level as capacity utilization rates fell from \*\*\* percent in 2011 to \*\*\* percent in 2013.<sup>25</sup> During periods of oversupply, producers may choose, depending upon their particular market situation, to rationalize or idle more obsolete capacity, delay new plant startups, throttle back more competitive capacity and ride out the lower periods of the downturn, or plan to capitalize on exports of certain available surplus capacity. Certain producers may also opt to import commodity films of lower margin potential to maximize profitability in higher valued films.<sup>26</sup> A myriad of external factors may prove to affect the duration of fundamental PET film supply and demand cycles, including the global economic climate, exchange rate fluctuations, petroleum and natural gas prices, demographics and geopolitics.<sup>27</sup>

In 2010, the global PET film industry reportedly operated at an effective capacity utilization rate of more than \*\*\* percent owing to pent up consumer demand in association with recovery from the recessionary period of 2008-09. Producers' inventories were drawn down<sup>28</sup> on top of near full capacity operations as consumers rebuilt inventories and demanded additional supplies to satisfy recovering consumer demand.<sup>29</sup> The growth in emerging markets for optical and photovoltaic applications was reportedly a major driver of market demand together with the return of industrial and electrical applications. Industrial and electrical applications were reported to have been more strongly affected during the recession compared to packaging applications which are related to less discretionary food consumption. Even though the rate of demand contracted somewhat during the recessionary period, supply and demand reportedly remained reasonably balanced because of the lack of capacity additions and the closure of old lines during the previous years.<sup>30</sup>

### **Global supply and demand patterns 2013-18<sup>31</sup>**

Available data suggest that global PET film supply capability will \*\*\* through 2015 and \*\*\* before leveling off, after which demand growth is expected to \*\*\* any additional increases in supply; however, \*\*\* is expected to be available throughout the forecast period encompassing 2013-18. Global capacity utilization rates are estimated to approximate \*\*\* percent in 2013, and fall to a low of \*\*\* percent in 2015, before rising to \*\*\* percent by 2018. Overall, global capacity during the five year period 2013-2018 is expected to \*\*\* at a compound annual rate of about \*\*\* percent, and demand at a higher rate of \*\*\* percent. China is

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(...continued)

<sup>24</sup> PET film prices \*\*\* in 2010. \*\*\* supplement response to producers' questionnaire, section I-8.

<sup>25</sup>\*\*\*.

<sup>26</sup> \*\*\* Importers' questionnaire response, section II-4.

<sup>27</sup> Commission staff research and questionnaire responses.

<sup>28</sup> \*\*\* producers' questionnaire response, section II-4.

<sup>29</sup> \*\*\* supplement response to producers' questionnaire, section I-8.

<sup>30</sup>\*\*\*.

<sup>31</sup>\*\*\*.



expected to continue to \*\*\* during the five year period at compound annual rates of about \*\*\* percent and \*\*\* percent respectively, and to \*\*\* capacity from \*\*\* percent of the global total in 2013 to \*\*\* percent by 2015. Countries outside Asia in aggregate are expected to experience annual capacity growth of around \*\*\* percent during the five year forecast period, and demand growth of about \*\*\* percent. These countries experienced weighted average capacity utilization rates of \*\*\* percent at the top of the market in 2010, decreasing to \*\*\* percent in 2013, to a forecast \*\*\* of \*\*\* percent in 2015, but climbing to \*\*\* percent by 2018.

Global consumption of PET film by major end-use markets is expected to continue to experience positive average annual growth of \*\*\* percent in aggregate. Packaging, the \*\*\* global end-use market, is expected to grow at a compound average annual rate of \*\*\* percent; Electrical, \*\*\* percent, and other Industrial, \*\*\* percent. Imaging demand is expected to continue to decline at an average annual rate of \*\*\* percent, while demand for magnetic tape is \*\*\* and it has all but \*\*\* from the marketplace. Packaging is expected to increase from \*\*\* percent of total end use demand in 2013, to \*\*\* percent by 2018; Electrical to remain steady at a \*\*\* percent share, with other Industrial ranging between \*\*\* percent, while, the share of Imaging is expected to fall from \*\*\* percent to \*\*\* percent.<sup>32 33</sup>

### **Regional supply and demand patterns 2013-18**

Terphane Ltda. is Brazil's only PET film producer and operates manufacturing facilities at Cabo de Santo Agostinho (Cabo) near Recife on Brazil's northeastern coast. Terphane was the lone producer of PET film in Latin America (Central and South America) until mid-2013 when OPP Film SA commenced operations near Lima, Peru, designed to eventually produce 35,000 metric tons of PET film annually.<sup>34 35</sup> After experiencing a sold out position and losing business in Brazil and other Latin American markets,<sup>36</sup> Terphane is also in the process of bringing a new 28,000 annual metric ton PET film line onstream which commenced operations in October 2014. Terphane produces both subject and nonsubject PET films, and together with capacity from existing lines of 31,000 tons, during a period of some 18 months or so of sequentially introducing new capacity, should reach an estimated total annual production capability of about 60,000 tons.<sup>37</sup> Thus, the increase in Brazilian and Peruvian PET film capacity if fully implemented is projected to increase by some \*\*\* tons and reach a total of roughly \*\*\* tons during the 2013-18 period.

According to \*\*\* estimates, PET film demand in Latin America is expected to grow at a compound annual rate of about \*\*\* percent during the 2013-18 period, from about \*\*\* tons in 2013 to \*\*\* tons in 2018 \*\*\*. Brazil, \*\*\* percent growth, is the leading consumer of PET film in

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<sup>32</sup> \*\*\*.

<sup>33</sup> \*\*\* supplemental response to producers' questionnaire, section I-8.

<sup>34</sup> Terphane's prehearing brief, \*\*\*.

<sup>35</sup> Ibid. \*\*\*.

<sup>36</sup> Hearing transcript. p. 93 (Roy).

<sup>37</sup> Ibid, p. 93; 131 (Roy).

the region with about \*\*\* percent of the total regional demand, and is expected to account for about \*\*\* tons or \*\*\* percent of the total Latin American increase. Brazil has imposed definitive antidumping measures on imports of PET film from Mexico, Turkey, and the UAE, and there are pending Brazilian antidumping investigations concerning imports of PET film from China, Egypt, and India. Terphane reports that in late November 2014, the Brazilian authorities initiated a countervailing duty investigation with respect to imports of PET film from India, and the authorities published notice of provisional antidumping duties with respect to imports of PET film from China, Egypt, and India.<sup>38</sup> Brazil and Peru in aggregate are forecast to increase production by a total of about \*\*\* tons during the period with capacity utilization rates ranging around \*\*\* percent during the 2015-16 period, swinging upwards to around \*\*\* percent by 2018; however, Terphane is projecting a planned capacity utilization rate of \*\*\* percent in 2015.<sup>39 40</sup>

Brazil's exports of PET film during the January – October 2014 period fell slightly to 5,400 metric tons, from the 6,300 metric tons exported during the same period in 2013, of which less than 1,000 tons was shipped to the United States. During the period January – September 2014, Peru exported about 6,000 metric tons (8,000 tons annualized) of PET film, of which about 4,000 tons or 67 percent was shipped equally to Brazil and the United States, with the remainder going principally to other Latin American countries.<sup>41</sup> Most of Peru's capacity is reported to be destined for export markets in \*\*\*<sup>42</sup> as \*\*\* projects domestic consumption at only about \*\*\* tons. This relatively small volume of exports and domestic consumption considering Peru's nameplate capacity of 35,000 tons is indicative of the lengthy teething or commissioning phase period required to ramp up a new greenfield plant of this nature.<sup>43</sup> Domestic interested parties argue that the new Brazilian capacity is coming onstream into a global supply glut, just as new supply from OPP Film in Peru is exacerbating oversupply in Latin America, with the result that capacity in Terphane's home and regional markets is far outstripping demand.<sup>44</sup>

## Global Trade

The following tables present global data trends of the leading exporting and importing countries of PET film during the five year period 2008-13, together with corresponding country

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<sup>38</sup> Terphane's posthearing brief, pp. 66 – 68; World Trade Organization "Semi-Annual Report Under Article 16.4 of the Agreement (Brazil)", September 23, 2014.

<sup>39</sup> \*\*\*.

<sup>40</sup> Terphane Ltda. projects that of its new 28,000 ton P4 line, \*\*\* tons will be available in 2015, and that after adjustments for its idled 3,300 ton F1 line, total effective capacity availability will be \*\*\*. Terphane's posthearing brief, Exhibit 1, pp. 6-7.

<sup>41</sup> Global Trade Atlas data, November 28, 2014.

<sup>42</sup> Terphane's posthearing brief, Exhibit 1, pp. 10-11.

<sup>43</sup> Peru has an FTA in force with the United States, and also is an associate member of the Mercosur region countries in Latin America which provides duty free treatment to member countries.

<sup>44</sup> Hearing transcript, p. 10 (McLain).

trade balances. Data were sourced from information available on the Global Trade Atlas (GTIS) database at the 6-digit HTS level (3920.62) as subject PET film under international conventions is not definitively broken out at the 10-digit level (3920.62.0090) applicable to U.S. trade statistics. Thus, the individual country trade data reported at the 6-digit international level potentially contain nonsubject sources of PET film, although the data as reported are believed to be indicative of individual country trends in the trade of subject PET films. The trade data tables which follow are reported on a volume basis in thousands of pounds and are ranked on a high to low basis by country on calendar year 2013.

Table IV-16 details the leading 17 global exporting countries of PET film, and Brazil. European Union (EU-28) external export trade is also reported.

**Table IV-16**  
**PET film: Top exporting countries and regions, 2008-13**

Reporting country	Calendar year					
	2008	2009	2010	2011	2012	2013
	<b>Quantity (1,000 pounds)</b>					
China	203,840	139,159	359,393	310,402	332,569	403,839
Korea	334,404	284,952	311,484	330,067	325,706	346,037
Japan	261,486	271,907	384,338	340,295	329,708	315,064
Germany	213,912	197,091	239,569	243,111	228,827	252,276
Taiwan	50,974	50,124	70,607	168,124	210,184	214,492
India	92,397	50,301	122,316	211,527	197,374	206,965
United States	185,115	168,672	212,795	177,429	168,176	175,671
United Arab Emirates (UAE)	71,437	111,202	196,556	177,315	199,198	164,632
Netherlands	49,295	20,678	87,399	21,747	58,308	157,505
Thailand	87,857	90,054	98,805	115,790	104,016	137,402
Italy	88,213	80,952	105,092	93,967	87,134	104,479
Belgium	46,371	69,033	97,318	97,924	98,646	103,491
Poland	19,630	22,305	33,879	34,741	53,888	95,950
Portugal	56,573	76,116	87,900	96,089	100,865	89,224
Indonesia	66,161	56,757	69,647	73,270	75,091	82,369
Malaysia	95,111	71,830	95,102	87,833	81,310	80,264
Hong Kong	72,491	82,047	80,046	70,551	71,508	80,064
Brazil (ranks 25 <sup>th</sup> )	34,370	21,993	24,078	18,837	16,143	15,955
Total of countries shown	2,029,637	1,865,173	2,676,324	2,669,019	2,738,651	3,025,679
Regions:						
EU28 (External Trade)	139,253	124,069	162,776	164,983	164,330	182,926

Note:--Ranked on calendar year 2013. Export figures for HTS subheading 3920.62 include nonsubject products, e.g. metallized PET film, "equivalent PET film," and possibly amorphous ("APET") and crystalline ("CPET") film. UAE exports are derived from partner country statistics.

Source: Global Trade Atlas, accessed October 2, 2014.

A total of 3.3 billion pounds of PET film of all types was exported by some 70 countries in 2013. The 18 exporting countries shown accounted for 3.0 billion pounds, or 91 percent of total global export trade of PET film. Subject country China was the global leader of PET film

exports, followed by Korea, Japan, Germany, Taiwan, India, the United States, and subject country UAE, which together accounted for 2.1 billion pounds, or about 70 percent of the aggregate total shown. Brazil, the remaining country subject to this investigation, ranked 25<sup>th</sup> in order of global PET film exports in 2013. Exporting countries included in this listing that are currently subject to antidumping duty orders but are nonsubject to these investigations are India and Taiwan. According to the data reported, total exports of the 17 leading exporting countries and Brazil experienced a compound annual growth rate of 8.3 percent during the 6 year period 2008-13, and 4.2 percent for the 4 year period 2010-13. The higher growth rate calculated over the 5 year period may have been influenced by downward volume pressure experienced during the global recession of 2008-09.

The leading 17 global importing countries of PET film of all types, together with Brazil and the UAE, are detailed in table IV-17 along with EU-28 external import trade.

**Table IV-17**  
**PET film: Top importing countries and regions, 2008-13**

Reporting country	Calendar year					
	2008	2009	2010	2011	2012	2013
	<b>Quantity (1,000 pounds)</b>					
China	278,004	315,688	464,800	520,920	610,591	676,380
United States	294,599	281,592	422,979	442,730	546,151	534,708
Japan	254,151	207,173	292,482	341,760	279,035	290,874
Germany	194,821	166,815	239,104	250,580	218,371	267,515
Italy	164,317	135,467	200,890	173,476	182,461	201,397
United Kingdom	131,883	133,274	184,402	170,130	167,255	147,557
Belgium	71,895	82,719	106,991	104,302	130,601	123,505
France	103,509	90,437	107,393	115,805	122,297	122,418
Korea	47,813	55,473	109,900	87,919	81,132	102,402
Spain	77,863	85,489	205,315	91,150	80,567	81,486
Taiwan	43,234	53,044	72,379	71,926	70,438	79,031
Canada	72,608	72,942	84,530	77,874	81,845	75,775
Indonesia	15,932	19,429	36,756	36,934	62,327	73,276
Switzerland	52,318	49,730	64,002	65,032	64,284	68,077
Poland	27,129	31,690	41,197	43,196	59,196	67,368
Mexico	48,364	40,259	75,168	69,449	60,096	62,886
Hong Kong	115,981	89,312	92,991	61,939	63,731	55,548
Brazil (ranks 22 <sup>nd</sup> )	24,965	35,157	35,940	31,407	32,303	39,748
UAE (ranks 39 <sup>th</sup> )	9,372	5,795	13,137	15,279	8,898	11,403
Total of countries shown	2,028,758	1,951,485	2,850,356	2,771,808	2,921,579	3,081,354
Regions:						
EU28 (External Trade)	312,260	290,428	469,514	428,016	465,439	474,765

Note:--Ranked on 2013. Export figures for HTS subheading 3920.62 include nonsubject products, e.g. metallized PET film, "equivalent PET film," and possibly amorphous ("APET") and crystalline ("CPET") film.

Source: Global Trade Atlas, accessed October 2, 2014.

In 2013, China was the leading global importer of PET film in all forms, followed in order by the United States,<sup>45</sup> Japan, Germany, Italy, the United Kingdom, Belgium and France. These eight countries accounted for 2.4 billion pounds (77 percent) of the 3.1 billion pounds of PET film imported in total by the countries shown. Imports of PET film by EU-28 countries from outside the region were also of significance. The large majority of China's and Japan's leading imports were confined to other Asian countries. China's imports were largely confined to Korea, Taiwan, and Japan, while Japan's imports were largely confined to Korea, Taiwan, Malaysia, Indonesia, and China. U.S. imports, excluding nonsubject out-of-scope imports from Oman and Canada, were sourced, in order, principally from Mexico, Korea, the UAE, Thailand, China, and India. European imports were mostly from cross-border trade with other European countries, and from Asia and the Mideast. According to available data, Imports of the 17 leading importing countries, together with Brazil and the UAE, grew in aggregate at a compound annual growth rate of 8.7 percent during the 6 year period, 2008-13, and at 2.6 percent during the 2010-13 period.

Trade balances refer to the calculated difference between exports and imports, and thus provide a relative gauge of various countries' export capability or import dependency trends as shown in table IV-18. Some countries engage in both relatively significant export and import activities with respect to PET film.

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<sup>45</sup> U.S. imports of PET film at the 6-digit HTS level are overstated relative to subject PET film at the 10-digit level, and in 2013 by approximately 282 million pounds, or 53 percent. This is due to the inclusion of 235 million pounds of nonsubject amorphous (APET) sheet from Oman, and 47 million pounds of APET from Canada. The corrected aggregate share for the eight countries cited would be reduced by 3 percentage points to 74 percent.

Table IV-18

## PET film: Subject-country and nonsubject-country exports, imports, and trade balances, 2008-13

Reporting country	Calendar year					
	2008	2009	2010	2011	2012	2013
	Quantity (1,000 pounds)					
Korea:						
Exports	334,404	284,952	311,484	330,067	325,706	346,037
Imports	47,813	55,473	109,900	87,919	81,132	102,402
Trade balance	286,591	229,479	201,584	242,148	244,574	243,635
India:						
Exports	92,397	50,301	122,316	211,527	197,374	206,965
Imports	4,051	18,033	20,596	15,685	9,923	32,320
Trade balance	88,346	32,268	101,720	195,842	187,451	174,645
United Arab Emirates:						
Exports	71,437	111,202	196,556	177,315	199,198	164,632
Imports	9,372	5,795	13,137	15,279	8,898	11,403
Trade balance	62,065	105,407	183,419	162,036	190,300	153,229
Taiwan:						
Exports	50,974	50,124	70,607	168,124	210,184	214,492
Imports	43,234	53,044	72,379	71,926	70,438	79,031
Trade balance	7,740	(2,920)	(1,772)	96,198	139,746	135,461
Netherlands:						
Exports	49,295	20,678	87,399	21,747	58,308	157,505
Imports	52,110	46,264	62,848	17,280	48,399	43,961
Trade balance	(2,815)	(25,586)	24,551	4,467	9,909	113,544
Thailand:						
Exports	87,857	90,054	98,805	115,790	104,016	137,402
Imports	3,745	7,152	13,125	16,419	25,844	33,533
Trade balance	84,112	82,902	85,680	99,371	78,172	103,869
Portugal:						
Exports	56,573	76,116	87,900	96,089	100,865	89,224
Imports	11,262	9,779	10,386	11,392	10,659	11,676
Trade balance	45,311	66,337	77,514	84,697	90,206	77,548
Malaysia:						
Exports	95,111	71,830	95,102	87,833	81,310	80,264
Imports	16,409	15,702	27,220	32,622	35,097	42,860
Trade balance	78,702	56,128	67,882	55,211	46,213	37,404
Japan						
Exports	261,486	271,907	384,338	340,295	329,708	315,064
Imports	254,151	207,173	292,482	341,760	279,035	290,874
Trade balance	7,335	64,734	91,856	(1,465)	50,673	24,190

Table continued on next page.

**Table IV-18--Continued**

**PET film: Subject- and nonsubject-country exports, imports, and trade balances, 2008-13**

Reporting country	Calendar year					
	2008	2009	2010	2011	2012	2013
	<b>Quantity (1,000 pounds)</b>					
Indonesia:						
Exports	66,161	56,757	69,647	73,270	75,091	82,369
Imports	15,932	19,429	36,756	36,934	62,327	73,276
Trade balance	50,229	37,328	32,891	36,336	12,764	9,093
Germany:						
Exports	213,912	197,091	239,569	243,111	228,827	252,276
Imports	194,821	166,815	239,104	250,580	218,371	267,515
Trade balance	19,091	30,276	465	(7,469)	10,456	(15,239)
Belgium:						
Exports	46,371	69,033	97,318	97,924	98,646	103,491
Imports	71,895	82,719	106,991	104,302	130,601	123,505
Trade balance	(25,524)	(13,686)	(9,673)	(6,378)	(31,955)	(20,014)
Brazil						
Exports	34,370	21,993	24,078	18,837	16,143	15,955
Imports	24,965	35,157	35,940	31,407	32,303	39,748
Trade balance	9,405	(13,164)	(11,862)	(12,570)	(16,160)	(23,793)
United Kingdom:						
Exports	72,785	61,909	86,178	59,923	53,836	61,706
Imports	131,883	133,274	184,402	170,130	167,255	147,557
Trade balance	(59,098)	(71,365)	(98,224)	(110,207)	(113,419)	(85,851)
Italy:						
Exports	88,213	80,952	105,092	93,967	87,134	104,479
Imports	164,317	135,467	200,890	173,476	182,461	201,397
Trade balance	(76,104)	(54,515)	(95,798)	(79,509)	(95,327)	(96,918)
France						
Exports	6,571	9,564	6,919	6,101	2,826	2,564
Imports	103,509	90,437	107,393	115,805	122,297	122,418
Trade balance	(96,938)	(80,873)	(100,474)	(109,704)	(119,471)	(119,854)
China:						
Exports	203,840	139,159	359,393	310,402	332,569	403,839
Imports	278,004	315,688	464,800	520,920	610,591	676,380
Trade balance	(74,164)	(176,529)	(105,407)	(210,518)	(278,022)	(272,541)
United States:						
Exports	185,115	168,672	212,795	177,429	168,176	175,671
Imports	294,599	281,592	422,979	442,730	546,151	534,708
Trade balance	(109,484)	(112,920)	(210,184)	(265,301)	(377,975)	(359,037)

Note:--Trade balance data ranked on 2013. Export and import figures for HTS subheading 3920.62 include nonsubject products, e.g. metallized PET film, "equivalent PET film," and possibly amorphous ("APET") and crystalline ("CPET") film. U.S. imports of subject PET film are overstated at the six-digit HTS level as previously noted, e.g., by 282 million pounds, 53 percent, in 2013.

Source: Global Trade Atlas, accessed October 2, 2014.

The Asian countries of Korea, India and Taiwan,<sup>46</sup> Thailand and Malaysia, together with subject country UAE in the Mideast, are examples of countries which experience relatively significant positive trade balances in PET film. In Europe, Portugal also reflects this trend, and recently the Netherlands did in 2013. Japan and Germany are good examples of countries which export and import relatively large, balanced volumes of PET film, while subject China experiences a relatively significant trade deficit in PET film, but at the same time also exports large volumes of PET film.

China, the U.S., France, Italy, and the United Kingdom have traditionally experienced trade deficits in PET film and thus are net importers of PET film. The EU-28 countries overall display a significant trade deficit in PET film with countries from outside the region. Subject country Brazil since 2009 has experienced a moderate trade deficit in PET film that has been growing to some extent, reaching a deficit of 24 million pounds in 2013. Brazil imported 40 million pounds of PET film in 2013, of which 16 million pounds was imported from Egypt, 8 million pounds from India, with the remainder coming principally from the United States, China, Chile, and Korea. Brazil's exports of 16 million pounds in 2013 were principally to Argentina, the United States, Chile, and Colombia, in order of importance.

### **Foreign demand**

Firms' responses regarding PET film demand outside the United States since 2008 and anticipated future demand are summarized in table IV-19. Most firms reported that demand outside of the United States has increased since 2008 and most anticipated that demand would continue to increase.

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<sup>46</sup> India and Taiwan are each nonsubject countries subject to existing antidumping duty orders.



**Table IV-19****PET film: Firms' responses regarding demand outside of the United States**

Item	Number of firms reporting			
	Increase	No change	Decrease	Fluctuate
Demand in the United States:				
U.S. producers	8	0	1	2
Importers	11	2	1	1
Purchasers	9	3	2	3
Foreign producers	4	0	0	0
Anticipated future demand in the United States:				
U.S. producers	7	1	1	2
Importers	8	3	1	2
Purchasers	10	3	2	1
Foreign producers	4	0	0	0
Anticipated demand in home market:				
Foreign producers	4	0	0	0

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

Firms cited demand growth in developing countries particularly in Asia (including China) and South America. One firm stated that demand is expected to grow faster and greater than GDP in emerging markets and to pace GDP in mature markets. Firms reported increased growth in packaging applications with population growth and as consumers demand more convenient packaging options. Firms also cited increased PET film demand in other applications including optical films, flexible printed electronics, and solar applications.

On the other hand, \*\*\* stated that "demand has increased in Asia and South America through 2011 but is weak throughout the world." Another firm noted a decline in demand for imaging films.

Foreign producer \*\*\* reported that supply is increasing more quickly than demand. \*\*\* reported that emerging markets such as China, India, Eastern Europe, Latin America, and Africa have grown as a result of increased demand for consumer products, and that demand in mature markets has also grown.

\*\*\*<sup>47</sup>

### Prices

In comparing prices of PET film in U.S. and foreign markets, firms generally reported that PET film prices in the U.S. market were higher or the same as prices in other markets. U.S. producer \*\*\* reported that in the first quarter of 2014 prices were \$0.30 to \$0.40 per pound higher in the U.S. market than in China and in Europe. \*\*\* reported that U.S. prices are general much higher than in other countries. \*\*\* reported that prices are generally similar in all regions

<sup>47</sup> \*\*\*

of the world, except that prices in Asia are 10 percent lower. \*\*\* reported that prices tend to be lower in Europe. \*\*\* reported higher prices generally in the U.S. market including compared to Brazil, China, and the UAE.

Importer \*\*\* and that there are no significant price differences in the markets in North America, South America, Europe, and Asia. \*\*\* reported that prices in the Japanese market are higher than U.S. prices. Foreign producer \*\*\* reported that the United States and Japan are the highest priced markets, and Chinese product prices are very low. \*\*\* reported that commodity PET film prices are much higher in Brazil than in the United States.

PET film prices in the United States, Europe, and Asia reported by \*\*\* are presented in table IV-20.

**Table IV-20**

**PET film: Prices for 12 micron corona treated, packaging grade in Europe, United States, and Asia**

\* \* \* \* \*

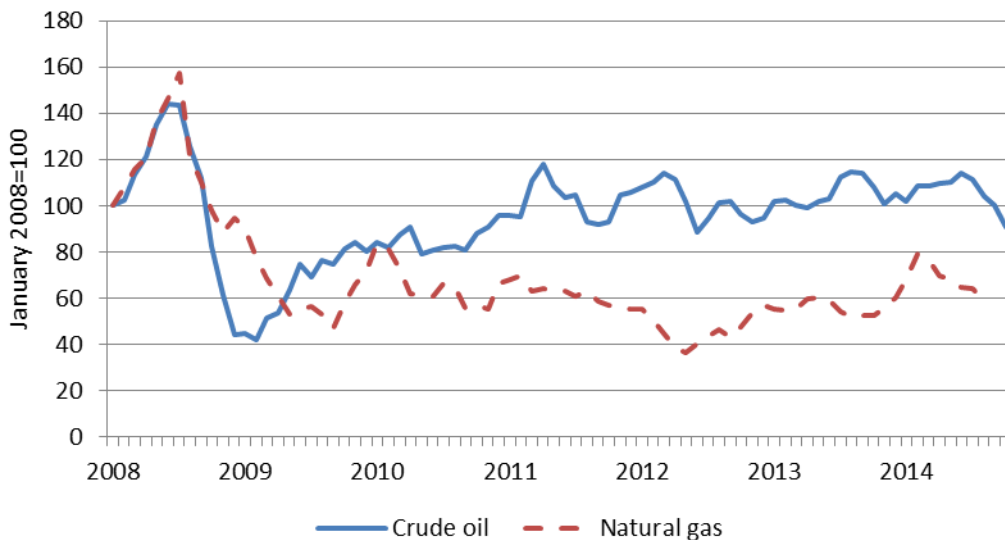
## PART V: PRICING DATA

### FACTORS AFFECTING PRICES

#### Raw material costs

Raw materials are an important consideration in the price of PET film, accounting for between 48.3 and 60.1 percent of U.S. producers' costs of goods sold during the review period. 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.<sup>1</sup> Ethylene usually is manufactured from natural gas while xylene is a byproduct from oil refineries. Thus, raw material costs are greatly affected by crude oil and natural gas prices. After peaking in 2008, natural gas and crude oil prices declined greatly in 2009 (figure V-1). Natural gas prices have remained lower, with some fluctuations, and were 35 percent lower in January 2014 than in January 2008. Crude oil prices trended upwards, increasing above their January 2008 levels by 2011 and have since fluctuated within a narrow range.

**Figure V-1**  
**Raw materials: Crude oil and natural gas price indices, January 2008-October 2014**



Note: Natural gas prices only available through August 2014.

Source: U.S. Energy Information Administration, [www.eia.gov](http://www.eia.gov), retrieved November 24, 2014.

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<sup>1</sup> DMT is derived from PTA by reacting PTA with methanol. \*\*\*.

Most U.S. producers (5 of 9) reported that raw material prices had increased during the review period while three reported that prices had fluctuated and one reported no change. One producer reported that PET film prices change monthly based on market prices of paraxylene and ethylene glycol, while another producer reported that there is a lag of 3 to 6 months between raw material price changes and PET film price changes. Several producers noted the wide fluctuations in price earlier in the review period but stated that more recently prices have fluctuated in a more narrow range.

Most producers (5 of 9) anticipate fluctuations in raw material pricing, and three expect increases in raw material prices. Firms anticipate higher costs due to global political events, global supply and demand issues, and increased prices for oil due to the U.S. economic expansion. \*\*\*.<sup>2</sup>

### **Transportation costs to the U.S. market**

Transportation costs for PET film shipped from subject countries to the United States were 4.8 percent of the c.i.f. import value for Brazil, 9.1 percent for China, and 11.6 percent for UAE. These estimates are derived from official import data and represent the transportation and other charges on imports.<sup>3</sup>

All but one responding importer (13 of 14) reported that the exporter arranged international transportation to the customer. All four responding foreign producers reported arranging transport to the importer. Only two importers and two foreign producers reported shipping costs. Transportation costs to the United States reported by importers and foreign producers equate to \*\*\* percent of the import value for China and \*\*\* percent for UAE.<sup>4</sup>

### **U.S. inland transportation costs**

All nine responding U.S. producers and 6 of 8 importers reported that they typically arrange transportation to their customers. U.S. producers reported that their U.S. inland transportation costs ranged from 3 to 7 percent. Importers generally reported that costs ranged from 2 to 11 percent.

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<sup>2</sup> Polyplex is setting up a PET resin plant in Decatur, AL. Polyplex's website, <http://www.polyplex.com/about-us/global-presence/polyplex-usa>, retrieved Apr. 24, 2014.

<sup>3</sup> The estimated transportation costs were obtained by subtracting the customs value from the c.i.f. value of the imports for 2013 and then dividing by the customs value based on HTS 3920.62.0090.

<sup>4</sup> \*\*\*. The average unit value of PET film imports from China in 2013 was \$3,343 per short ton (landed duty-paid value based on official import statistics); transportation costs of \*\*\* per short ton equate to \*\*\* percent of the landed duty-paid value. The average unit value of PET film imports from UAE in 2013 was \$2,212 per short ton (landed duty-paid value based on official import statistics); transportation costs of \*\*\* per short ton equate to \*\*\* percent of the landed duty-paid value. No firm reported transportation costs from Brazil.

## PRICING PRACTICES

### Pricing methods

U.S. producers and importers sell on a transaction-by-transaction basis and also through contracts (table V-1).

**Table V-1**  
**PET film: U.S. producers and importers reported price setting methods, by number of responding firms<sup>1</sup>**

Method	U.S. producers	U.S. importers
Transaction-by-transaction	9	13
Contract	8	9
Set price list	2	4
Other	1	2

<sup>1</sup> 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.

Over half of U.S. producers' sales in 2013 were on a contract basis (table V-2); 28 percent of sales were subject to long-term contracts and 25 percent were subject to short-term contracts. Most importers' sales were on a short-term contract basis for product from China and on a spot basis for UAE.<sup>5</sup> U.S. producers' short-term contracts are typically for one year and their long-term contracts are for two to four years. Most U.S. producers reported that prices can be renegotiated during the contract. Among importers, \*\*\*.<sup>6</sup>

**Table V-2**  
**PET film: U.S. producers' and importers' shares of U.S. commercial shipments by type of sale, 2013**

Type of sale	Share of commercial U.S. shipments (percent)		
	U.S. producers	U.S. importers	
		China	UAE
Long-term contracts	28.4	2.0	0.0
Short-term contracts	24.6	97.6	0.0
Spot sales	47.0	0.4	100.0

Note.--There were no imports from Brazil in 2013.

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

<sup>5</sup> No imports were reported for Brazil in 2013.

<sup>6</sup> \*\*\*.

Three purchasers reported that they purchase product daily, eight weekly, and five monthly. No purchaser reported that it expects its purchasing patterns to change in the next two years. Most purchasers contact one to three suppliers before making a purchase.

### **Sales terms and discounts**

Five producers reported quoting delivered prices and four reported quoting f.o.b. prices. Most importers quote prices on a delivered basis.

Some producers and importers offer quantity and/or total volume discounts while others do not offer discounts. Of the 10 responding producers, 4 offer quantity discounts, 7 offer total volume discounts, 3 offer other discounts, and 4 offer no discounts. Six of 17 responding importers offer quantity discounts, 8 offer total volume discounts, 6 offer other discounts, and 4 offer no discounts.

The most common sales terms are net 30 days. Nine producers reported sales terms of net 30, although producers also reported net 60 (3 firms), 2/10 net 30 (3 firms), and other terms (3 firms). Nine importers reported net 30, but importers also reported net 60 (5 firms), 2/10 net 30 (2 firms), and other terms (5 firms).

### **Price leadership**

Purchasers reported that the following suppliers were price leaders in the PET film market: DuPont Teijin (listed by 9 purchasers), Mitsubishi (5), SKC (3), Toray (2), and Flex (1). In addition, one firm \*\*\* reported that there are currently no price leaders and that the market is oversupplied.

### **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 film products shipped to unrelated U.S. customers during January 2008-June 2014.

**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

**Product 4.**-- 92 gauge plain film for packaging/industrial markets

**Product 5.**-- 120 gauge plain film for packaging/industrial markets

**Product 6.**-- 500-1000 gauge plain film for industrial/electrical markets

**Product 7.**-- 200-500 gauge plain film for industrial/electrical markets

**Product 8.**-- 1000-1400 gauge plain film for motors/insulation markets

Eight U.S. producers, one importer from Brazil, three importers from China, and four importers from UAE provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters. Pricing data reported by these firms accounted for 36.5 percent of U.S. producers' U.S. commercial shipments of PET film, 98.4

percent of U.S. commercial shipments of subject imports from Brazil, all U.S. commercial shipments of subject imports from China, and 99.2 percent of U.S. commercial shipments of imports from UAE during the review period. Price data for products 1-8 are presented in tables V-3 to V-10 and figures V-1 to V-8.

**Table V-3**

**PET film: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 and margins of underselling/(overselling), by quarters, January 2008-June 2014**

\* \* \* \* \*

**Table V-4**

**PET film: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 and margins of underselling/(overselling), by quarters, January 2008-June 2014**

\* \* \* \* \*

**Table V-5**

**PET film: Weighted-average f.o.b. prices and quantities of domestic and imported product 3 and margins of underselling/(overselling), by quarters, January 2008-June 2014**

\* \* \* \* \*

**Table V-6**

**PET film: Weighted-average f.o.b. prices and quantities of domestic and imported product 4 and margins of underselling/(overselling), by quarters, January 2008-June 2014**

\* \* \* \* \*

**Table V-7**

**PET film: Weighted-average f.o.b. prices and quantities of domestic and imported product 5 and margins of underselling/(overselling), by quarters, January 2008-June 2014**

\* \* \* \* \*

**Table V-8**

**PET film: Weighted-average f.o.b. prices and quantities of domestic and imported product 6 and margins of underselling/(overselling), by quarters, January 2008-June 2014**

\* \* \* \* \*

**Table V-9**

**PET film: Weighted-average f.o.b. prices and quantities of domestic and imported product 7 and margins of underselling/(overselling), by quarters, January 2008-June 2014**

\* \* \* \* \*

**Table V-10**

**PET film: Weighted-average f.o.b. prices and quantities of domestic and imported product 8 and margins of underselling/(overselling), by quarters, January 2008-June 2014**

\* \* \* \* \*

**Figure V-1**

**PET film: Weighted-average prices and quantities of domestic and imported products 1-8, by quarters, January 2008-June 2014**

\* \* \* \* \*

### Price trends

Prices generally increased from 2008 through 2011 and then declined. Table V-11 summarizes the price trends, by country and by product. \*\*\*.<sup>7</sup>

### Price comparisons<sup>8</sup>

As shown in table V-12, prices for PET film imported from Brazil were below those for U.S.-produced product in 13 of 14 instances; margins of underselling ranged from 4.2 to 23.2 percent. In the remaining instance, prices for PET film from Brazil were 19.6 percent above prices for the domestic product. Prices for PET film imported from China were below those for U.S.-produced product in 34 of 103 instances; margins of underselling ranged from 0.0 to 31.8 percent. In the remaining 69 instances, prices for PET film from China were between 0.1 and 142.8 percent above prices for the domestic product. Prices for PET film imported from UAE were below those for U.S.-produced product in 151 of 172 instances; margins of underselling ranged from 0.3 to 65.3 percent. In the remaining 21 instances, prices for PET film from UAE were between 0.4 and 43.2 percent above prices for the domestic product.

**Table V-11**  
**PET film: Summary of weighted-average f.o.b. prices for products 1-8 from the United States, Brazil, China, and UAE**

\* \* \* \* \*

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<sup>7</sup> \*\*\*.

<sup>8</sup> In the original investigations, subject imports from Brazil were priced lower than domestic product in 25 of 36 comparisons, with underselling margins ranging from \*\*\* to \*\*\* percent; subject imports from China were priced lower than domestic product in 54 of 61 comparisons, with underselling margins ranging from 0.5 to 25.6 percent; and subject imports from UAE were priced lower than domestic product in 52 of 60 comparisons, with underselling margins ranging from \*\*\* to \*\*\* percent. Polyethylene Terephthalate Film, Sheet, and Strip from Brazil, China, Thailand, and the United Arab Emirates, Inv. Nos. 731-TA-1131-1134 (Final), USITC Publication 4040, October 2008, table V-8. Confidential staff report for the original investigations (memorandum INV-FF-125, October 6, 2008), table V-8.



**Table V-12****PET film: Instances of underselling/overselling and the range and average of margins, by country, January 2008-June 2014**

<b>Source</b>	<b>Underselling</b>			<b>Overselling</b>		
	<b>Number of instances</b>	<b>Range (percent)</b>	<b>Average margin (percent)</b>	<b>Number of instances</b>	<b>Range (percent)</b>	<b>Average margin (percent)</b>
Brazil	13	4.2 to 23.2	11.8	1	(19.6) to (19.6)	(19.6)
China	34	0.0 to 31.8	14.8	69	(0.1) to (142.8)	(48.6)
United Arab Emirates	151	0.3 to 65.3	23.3	21	(0.4) to (43.2)	(12.2)
Total	198	0.0 to 65.3	21.1	91	(0.1) to (142.8)	(39.9)

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](http://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
79 FR 60311 October 1, 2013	<i>Polyethylene Terephthalate Film, Sheet, and Strip from Brazil, China, and the United Arab Emirates: Institution of Five-Year Reviews</i>	<a href="#">Institution of Five-Year Reviews</a>
78 FR 60253 October 1, 2013	<i>Initiation of Five-Year (“Sunset”) Reviews</i>	<a href="#">Initiation of Five-Year Reviews</a>
78 FR 959 January 7, 2013	<i>Polyethylene Terephthalate Film, Sheet, and Strip from Brazil, China, and the United Arab Emirates: Notice of Commission Determination To Conduct Full-Five-Year Reviews</i>	<a href="http://www.gpo.gov/fdsys/pkg/FR-2013-01-07/pdf/2013-00048.pdf">http://www.gpo.gov/fdsys/pkg/FR-2013-01-07/pdf/2013-00048.pdf</a>
78 FR 693 January 4, 2013	<i>Polyethylene Terephthalate Film, Sheet, and Strip from Brazil, China, and the United Arab Emirates: Final Results of the Expedited Sunset Reviews of the Antidumping Duty Orders</i>	<a href="http://www.gpo.gov/fdsys/pkg/FR-2013-01-04/pdf/2012-31727.pdf">http://www.gpo.gov/fdsys/pkg/FR-2013-01-04/pdf/2012-31727.pdf</a>
78 FR 9937 February 12, 2013	<i>Polyethylene Terephthalate Film, Sheet, and Strip from Brazil, China, and the United Arab Emirates: Scheduling of Full Five-Year Reviews</i>	<a href="http://www.gpo.gov/fdsys/pkg/FR-2013-02-12/pdf/2013-03088.pdf">http://www.gpo.gov/fdsys/pkg/FR-2013-02-12/pdf/2013-03088.pdf</a>
<p>Note.—The press release announcing the Commission’s determinations concerning adequacy and the conduct of a full or expedited review can be found at <a href="#">PET Film Full Five-Year Reviews Press Release</a>. A summary of the Commission’s votes concerning adequacy and the conduct of a full or expedited review can be found at <a href="#">Vote Summary on Adequacy</a>. The Commission’s explanation of its determinations can be found at <a href="#">Explanation of Commission Determinations on Adequacy</a>.</p>		



**APPENDIX B**

**LIST OF HEARING WITNESSES**





## CALENDAR OF PUBLIC HEARING

Those listed below appeared as witnesses at the United States International Trade Commission's hearing:

**Subject:** Polyethylene Terephthalate Film, Sheet, and Strip  
("PET Film") from Brazil, China, and the United  
Arab Emirates

**Inv. Nos.:** 731-TA-1131, 1132, and 1134 (Review)

**Date and Time:** November 18, 2014 - 9:30 a.m.

Sessions were held in connection with these investigations in the Main Hearing Room (room 101), 500 E Street, SW, Washington, DC.

### **OPENING REMARKS:**

In Support of Continuation (**Patrick J. McLain**, Wilmer Cutler  
Pickering Hale and Dorr LLP)

In Opposition to Continuation (**Stephen A. Jones**, King & Spalding LLP)

### **In Support of the Continuation of Antidumping Duties:**

Wilmer Cutler Pickering Hale and Dorr LLP  
Washington, DC  
on behalf of

DuPont Teijin Films ("DTF")  
Mitsubishi Polyester Film, Inc. ("Mitsubishi")  
SKC, Inc. ("SKC")

**Ronald H. Kasoff**, Supply Chain Director, DTF

**Carlton Winn**, Purchasing and Administrative Affairs  
Director, Mitsubishi

**Patrick J. McLain** )  
**Jeffrey I. Kessler** ) – OF COUNSEL  
**David P. Levine** )

**In Opposition to the Continuation of  
Antidumping Duties:**

King & Spalding LLP  
Washington, DC  
on behalf of

Terphane, Inc.  
Terphane, Ltda.

**Danis J. Roy**, General Manager, Terphane, Inc.

**Stephen A. Jones**                    )  
                                                  ) – OF COUNSEL  
**J. Michael Taylor**                 )

**REBUTTAL/CLOSING REMARKS:**

In Support of Continuation (**Patrick J. McLain**, Wilmer Cutler Pickering  
Hale and Dorr LLP)  
In Opposition to Continuation (**J. Michael Taylor**, King & Spalding LLP)

**-END-**

**APPENDIX C**  
**SUMMARY DATA**



**Table C-1**  
**PET film: Summary data concerning the U.S. market, 2008-13, January to June 2013, and January to June 2014**  
(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						
	2008	Calendar year 2009	2010	2011	2012	2013	January to June 2013	January to June 2014	2008-13	Calendar year 2008-09	2009-10	2010-11	2011-12	2012-13	Jan-Mar 2013-14
<b>U.S. consumption quantity:</b>															
Amount.....	711,479	622,585	727,389	678,463	671,313	671,764	338,661	334,591	(5.6)	(12.5)	16.8	(6.7)	(1.1)	0.1	(1.2)
Producers' share (1).....	81.8	83.0	75.2	70.5	67.7	74.9	72.0	82.1	(6.9)	1.2	(7.8)	(4.8)	(2.7)	7.2	10.0
Importers' share (1):															
Brazil.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
China.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
UAE.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Subject, subtotal.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
All others sources.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total imports.....	18.2	17.0	24.8	29.5	32.3	25.1	28.0	17.9	6.9	(1.2)	7.8	4.8	2.7	(7.2)	(10.0)
<b>U.S. consumption value:</b>															
Amount.....	1,312,917	1,097,776	1,345,047	1,460,435	1,280,233	1,217,976	628,454	599,650	(7.2)	(16.4)	22.5	8.6	(12.3)	(4.9)	(4.6)
Producers' share (1).....	84.5	87.0	79.3	72.9	75.2	80.4	77.8	84.9	(4.2)	2.4	(7.7)	(6.4)	2.3	5.2	7.1
Importers' share (1):															
Brazil.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
China.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
UAE.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Subject, subtotal.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
All others sources.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total imports.....	15.5	13.0	20.7	27.1	24.8	19.6	22.2	15.1	4.2	(2.4)	7.7	6.4	(2.3)	(5.2)	(7.1)
<b>U.S. importers' U.S. shipments of imports from:</b>															
<b>Brazil:</b>															
Quantity.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Value.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Unit value.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ending inventory quantity.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>China:</b>															
Quantity.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Value.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Unit value.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ending inventory quantity.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>UAE:</b>															
Quantity.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Value.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Unit value.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ending inventory quantity.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>Subject countries, subtotal:</b>															
Quantity.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Value.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Unit value.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ending inventory quantity.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>All other sources:</b>															
Quantity.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Value.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Unit value.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ending inventory quantity.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>Total imports:</b>															
Quantity.....	129,511	105,823	180,260	200,455	216,756	168,400	94,766	60,016	30.0	(18.3)	70.3	11.2	8.1	(22.3)	(36.7)
Value.....	202,923	142,908	279,024	396,453	317,560	239,072	139,739	90,509	17.8	(28.6)	95.2	42.1	(19.3)	(24.7)	(35.2)
Unit value.....	\$1.57	\$1.35	\$1.55	\$1.98	\$1.47	\$1.42	\$1.47	\$1.51	(9.4)	(13.8)	14.6	27.8	(25.9)	(3.1)	2.3
Ending inventory quantity.....	21,607	17,951	15,930	19,555	17,497	12,471	10,269	9,908	(40.8)	(14.8)	(11.3)	22.8	(10.5)	(28.7)	(3.5)
<b>U.S. producers:</b>															
Average capacity quantity.....	720,103	702,908	700,955	624,565	620,163	710,024	379,592	404,616	(1.4)	(2.4)	(0.3)	(10.9)	(0.7)	14.5	6.6
Production quantity.....	619,284	549,316	601,474	511,728	495,338	540,727	260,594	300,199	(12.7)	(11.3)	9.5	(14.9)	(3.2)	9.2	15.2
Capacity utilization (1).....	86.0	78.1	85.8	81.9	79.9	76.2	68.7	74.2	(9.8)	(7.9)	7.7	(3.9)	(2.1)	(3.7)	5.5
<b>U.S. shipments:</b>															
Quantity.....	581,968	516,762	547,129	478,008	454,557	503,364	243,895	274,575	(13.5)	(11.2)	5.9	(12.6)	(4.9)	10.7	12.6
Value.....	1,109,994	954,868	1,066,023	1,063,982	962,673	978,904	488,715	509,141	(11.8)	(14.0)	11.6	(6.2)	(9.5)	1.7	4.2
Unit value.....	\$1.91	\$1.85	\$1.95	\$2.23	\$2.12	\$1.94	\$2.00	\$1.85	2.0	(3.1)	5.4	14.2	(4.9)	(8.2)	(7.5)
<b>Export shipments:</b>															
Quantity.....	32,723	28,501	44,933	39,359	34,861	33,803	18,425	19,577	3.3	(12.9)	57.7	(12.4)	(11.4)	(3.0)	6.3
Value.....	64,187	58,444	111,416	139,557	115,682	104,660	60,126	47,464	63.1	(8.9)	90.6	25.3	(17.1)	(9.5)	(21.1)
Unit value.....	\$1.96	\$2.05	\$2.48	\$3.55	\$3.32	\$3.10	\$3.26	\$2.42	57.8	4.5	20.9	43.0	(6.4)	(6.7)	(25.7)
Ending inventory quantity.....	60,547	56,657	61,019	50,201	52,158	49,838	44,266	50,429	(17.7)	(6.4)	7.7	(17.7)	(4.9)	(4.4)	13.9
<b>Inventories/total shipments (1):</b>															
Production workers.....	2,196	2,020	2,017	1,857	1,834	1,935	1,612	1,595	(11.9)	(8.0)	(0.1)	(7.9)	(1.2)	5.5	(1.1)
Hours worked (1,000s).....	4,366	3,978	3,981	3,735	3,749	3,933	2,376	2,361	(9.9)	(8.9)	0.1	(6.2)	0.4	4.9	(0.6)
Wages paid (\$1,000).....	149,435	138,357	134,079	133,884	136,276	141,614	87,857	86,380	(5.2)	(7.4)	(3.1)	(0.1)	1.8	3.9	(1.7)
Hourly wages.....	\$34.23	\$34.78	\$33.68	\$35.85	\$36.35	\$36.01	\$36.98	\$36.59	5.2	1.6	(3.2)	6.4	1.4	(0.9)	(1.1)
Productivity (short tons per 1,000 hours).....	141.8	138.1	151.1	137.0	132.1	137.5	109.7	127.2	(3.1)	(2.6)	9.4	(9.3)	(3.6)	4.1	15.9
Unit labor costs.....	\$0.24	\$0.25	\$0.22	\$0.26	\$0.26	\$0.26	\$0.34	\$0.29	6.5	4.4	(11.5)	17.4	5.2	(4.8)	(14.7)
<b>Net Sales:</b>															
Quantity.....	614,691	545,263	592,062	517,366	489,417	508,795	264,472	293,906	(17.2)	(11.3)	8.6	(12.6)	(5.4)	4.0	11.1
Value.....	1,174,181	1,013,312	1,177,439	1,203,538	1,078,353	1,048,857	548,139	556,607	(10.7)	(13.7)	16.2	2.2	(10.4)	(2.7)	1.5
Unit value.....	\$1.91	\$1.86	\$1.99	\$2.33	\$2.20	\$2.06	\$2.07	\$1.89	7.9	(2.7)	7.0	17.0	(5.3)	(6.4)	(8.6)
<b>Cost of goods sold (COGS):</b>															
Quantity.....	1,052,922	878,505	951,407	1,000,633	945,174	940,628	481,280	500,355	(10.7)	(16.6)	8.3	5.2	(5.5)	(0.5)	4.0
Gross profit of (loss).....	121,259	134,807	226,032	202,905	133,179	108,229	66,859	56,252	(10.7)	11.2	67.7	(10.2)	(6.8)	(18.7)	(15.9)
SG&A expenses.....	126,771	116,634	109,919	104,537	93,036	97,551	49,318	46,205	(23.0)	(8.0)	(5.8)	(4.9)	(11.0)	4.9	(6.3)
Operating income or (loss).....	(6,512)	18,173	116,113	98,368	40,143	10,678	17,541	10,047	(2)	(2)	538.9	(15.3)	(59.2)	(73.4)	(42.7)
Capital expenditures.....	123,403	40,342	35,933	53,020	128,410	129,782	103,234	23,906	5.2	(67.3)	(10.9)	47.6	142.2	1.1	(76.8)
Unit COGS.....	\$1.71	\$1.61	\$1.61	\$1.93	\$1.93	\$1.85	\$1.82	\$1.70	7.9	(5.9)	(0.3)	20.4	(0.1)	(4.3)	(6.4)
Unit SG&A expenses.....	\$0.21	\$0.21	\$0.19	\$0.20	\$0.19	\$0.19	\$0.19	\$0.16	(7.0)	3.7	(13.2)	8.8	(5.9)	0.9	(15.7)
Unit operating income or (loss).....	-\$0.01	\$0.03	\$0.20	\$0.19	\$0.08	\$0.02	\$0.07	\$0.03	(2)	(2)	488.4	(3.1)	(56.9)	(74.4)	(48.5)
COGS/sales (1).....	89.7	86.7	80.8	83.1	87.6	89.7	87.8	89.9	0.0	(3.0)	(5.9)	2.3	4.5	2.0	2.1
Operating income or (loss)/sales (1).....	(0.5)	1.8	9.9	8.2	3.7	1.0	3.2	1.8	1.5	2.3	8.1	(1.7)	(4.5)	(2.7)	(4.4)

Notes:  
(1)--Report data are in percent and period changes are in percentage points.  
(2)--Undefined.

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

**Table C-2**  
**PET film: Summary data concerning the U.S. merchant market, 2008-13, January to June 2013, and January to June 2014**  
(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							
	2008	Calendar year		2011		2012		January to June		2008-13	Calendar year		2010-11		2011-12	2012-13
		2009	2010	2011	2012	2013	2014	2013	2014	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	
<b>U.S. consumption quantity (1):</b>																
Amount.....	517,088	438,072	559,457	529,629	551,217	553,153	281,365	275,222	7.0	(15.3)	27.7	(5.3)	4.1	0.4	(2.2)	
Producers' share (2).....	75.0	75.8	67.8	62.2	60.7	69.6	66.3	78.2	(5.4)	0.9	(6.1)	(5.6)	(1.5)	8.9	11.9	
Importers' share (2):	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Brazil.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
China.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
UAE.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Subject, subtotal.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
All others sources.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Total imports.....	25.0	24.2	32.2	37.8	39.3	30.4	33.7	21.8	5.4	(0.9)	8.1	5.6	1.5	(8.9)	(11.9)	
<b>U.S. consumption value:</b>																
Amount.....	908,876	704,746	995,830	1,138,355	1,008,639	961,166	501,229	473,745	5.8	(22.5)	41.3	14.3	(11.4)	(4.7)	(5.5)	
Producers' share (2).....	77.7	79.7	72.0	65.2	68.5	75.1	72.1	80.9	(2.5)	2.0	(7.7)	(6.9)	3.3	6.6	8.8	
Importers' share (2):	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Brazil.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
China.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
UAE.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Subject, subtotal.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
All others sources.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Total imports.....	22.3	20.3	28.0	34.8	31.5	24.9	27.9	19.1	2.5	(2.0)	7.7	6.8	(3.3)	(6.6)	(8.8)	
<b>U.S. importers' U.S. shipments of imports from:</b>																
<b>Brazil:</b>																
Quantity.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Value.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Unit value.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
<b>China:</b>																
Quantity.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Value.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Unit value.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
<b>UAE:</b>																
Quantity.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Value.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Unit value.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
<b>Subject countries, subtotal:</b>																
Quantity.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Value.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Unit value.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
<b>All other sources:</b>																
Quantity.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Value.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Unit value.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
<b>Total imports:</b>																
Quantity.....	129,511	105,823	180,260	200,455	216,756	168,400	94,766	60,016	30.0	(18.3)	70.3	11.2	8.1	(22.3)	(36.7)	
Value.....	202,923	142,908	279,024	396,453	317,560	239,072	139,739	90,509	17.8	(29.6)	95.2	42.1	(19.9)	(24.7)	(35.2)	
Unit value.....	\$1.57	\$1.35	\$1.55	\$1.98	\$1.47	\$1.42	\$1.47	\$1.51	(3.4)	(13.8)	14.6	27.8	(25.9)	(31.1)	2.3	
Ending inventory quantity.....	21,067	17,951	15,930	19,555	17,497	12,471	10,269	9,908	(40.8)	(14.8)	(11.3)	22.8	(10.5)	(28.7)	(3.5)	
<b>U.S. producers' (1):</b>																
Average capacity quantity.....	510,423	498,586	472,292	415,361	415,077	533,450	291,080	316,104	4.5	(2.3)	(5.3)	(12.1)	(0.1)	28.5	8.6	
Production quantity.....	448,010	382,560	437,318	361,428	366,548	428,724	204,409	243,345	(4.3)	(14.6)	14.3	(17.4)	1.4	17.0	19.0	
Capacity utilization (2).....	87.8	76.7	92.6	87.0	88.3	80.4	70.2	77.0	(7.4)	(11.0)	15.9	(5.6)	1.3	(7.9)	6.8	
<b>Commercial shipments:</b>																
Quantity.....	387,577	332,249	379,197	329,174	334,461	384,753	186,599	215,206	(0.7)	(14.3)	14.1	(13.2)	1.6	15.0	15.3	
Value.....	705,953	561,838	716,806	741,902	691,079	722,094	361,490	383,236	2.3	(20.4)	27.6	3.5	(6.9)	4.5	6.0	
Unit value.....	\$1.82	\$1.69	\$1.89	\$2.25	\$2.07	\$1.88	\$1.94	\$1.78	3.0	(7.2)	11.8	19.2	(8.3)	(9.2)	(8.1)	
<b>Export shipments:</b>																
Quantity.....	32,123	25,801	37,633	24,688	17,834	20,230	10,388	13,462	(37.0)	(19.7)	45.9	(34.4)	(27.8)	13.4	29.6	
Value.....	62,187	47,444	80,516	65,848	45,621	49,201	24,756	27,544	(20.9)	(23.7)	69.7	(18.2)	(30.7)	7.8	11.3	
Unit value.....	\$1.94	\$1.84	\$2.14	\$2.67	\$2.56	\$2.43	\$2.38	\$2.05	25.6	(5.0)	16.4	24.7	(4.1)	(4.9)	(14.1)	
Ending inventory quantity.....	51,006	47,530	46,517	34,886	38,786	39,028	31,745	38,915	(23.5)	(6.8)	(2.1)	(25.0)	11.2	0.6	22.6	
<b>Inventories total shipments (2):</b>																
Quantity.....	11.6	12.6	10.7	9.5	10.8	9.2	7.7	8.2	(2.3)	1.0	(1.8)	(1.3)	1.3	(1.6)	0.4	
Value.....	\$1.94	\$1.84	\$2.14	\$2.67	\$2.56	\$2.43	\$2.38	\$2.05	25.6	(5.0)	16.4	24.7	(4.1)	(4.9)	(14.1)	
<b>Production workers' (1):</b>																
Quantity.....	1,625	1,456	1,430	1,329	1,359	1,491	1,168	1,199	(8.2)	(10.4)	(1.8)	(7.1)	2.3	9.7	2.7	
Hours worked (1,000s).....	3,284	2,918	2,868	2,747	2,840	3,080	1,949	1,976	(6.2)	(11.1)	(1.7)	(4.2)	3.4	8.5	1.4	
Wages paid (\$1,000).....	107,378	101,121	96,836	93,595	99,278	107,187	70,693	71,138	(0.2)	(5.8)	(4.2)	(3.3)	6.1	8.0	0.6	
Hourly wages.....	33	35	34	34	35	35	36	36	6.4	6.0	(2.6)	0.9	2.6	(0.4)	(0.7)	
Productivity (short tons per hour).....	136	131	152	132	129	139	105	123	2.0	(3.9)	16.3	(13.7)	(1.9)	7.8	17.4	
Unit labor costs.....	\$0.24	\$0.26	\$0.22	\$0.26	\$0.27	\$0.25	\$0.35	\$0.29	4.3	10.3	(16.2)	16.9	4.6	(7.7)	(15.5)	
<b>Net Sales:</b>																
Quantity.....	433,096	371,788	435,224	371,680	367,635	381,399	206,621	236,153	(8.6)	(14.2)	17.1	(14.6)	(1.1)	6.5	14.3	
Value.....	789,234	630,913	824,589	835,720	761,576	781,969	398,421	424,221	(3.6)	(20.1)	34.7	1.3	(8.9)	0.1	6.5	
Unit value.....	\$1.82	\$1.70	\$1.89	\$2.25	\$2.07	\$1.95	\$1.93	\$1.80	6.8	(6.9)	11.6	18.7	(7.9)	(6.0)	(6.8)	
<b>Cost of goods sold (COGS):</b>																
Quantity.....	725,295	574,050	664,808	683,032	662,968	669,095	349,357	371,559	(7.7)	(20.9)	15.8	2.7	(2.9)	0.9	6.4	
Value.....	63,359	56,863	159,781	152,688	98,608	92,874	49,064	52,662	45.3	(11.1)	181.0	(4.4)	(35.4)	(5.9)	7.3	
SG&A expenses.....	80,269	72,257	76,011	73,632	74,293	79,752	40,211	37,898	(0.6)	(10.0)	5.2	(3.1)	0.9	7.4	(5.9)	
Operating income or (loss).....	(16,330)	(15,394)	83,770	79,056	24,315	13,083	8,853	14,774	(3)	(5.7)	(3)	(5.6)	(69.2)	(46.2)	66.9	
Unit COGS.....	\$0.19	\$0.19	\$0.17	\$0.20	\$0.20	\$0.20	\$0.19	\$0.16	10.0	4.9	(10.1)	13.4	2.0</			

**APPENDIX D**

**COMMENTS ON THE EXISTING ANTIDUMPING DUTY ORDERS AND THE LIKELY  
EFFECTS OF REVOCATION**





This section is confidential in its entirety

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