

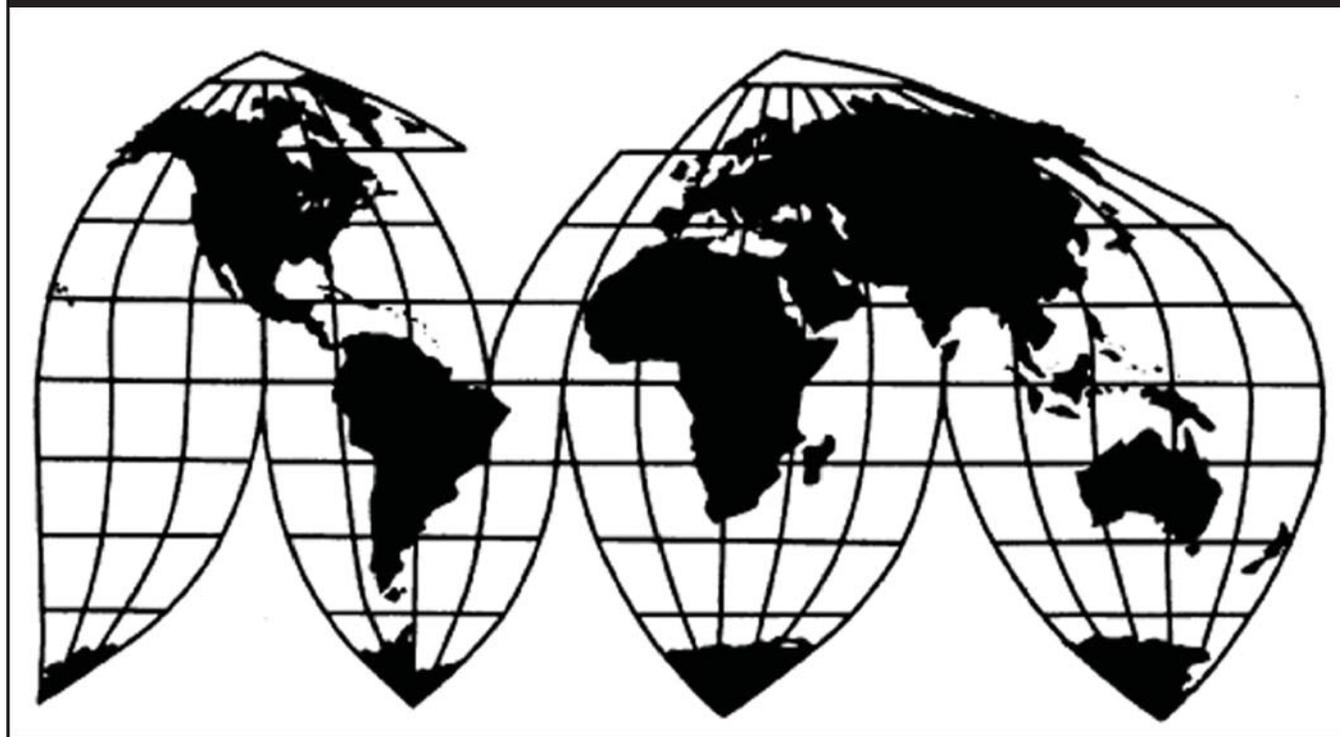
Biodiesel From Argentina And Indonesia

Investigation Nos. 701-TA-571-572 (Final)

Publication 4748

December 2017

U.S. International Trade Commission



Washington, DC 20436

U.S. International Trade Commission

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Betsy Haines, Supervisory Investigator

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

U.S. International Trade Commission

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UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 701-TA-571-572 (Final)
Biodiesel from Argentina and Indonesia

DETERMINATIONS

On the basis of the record¹ developed in the subject investigations, the United States International Trade Commission (“Commission”) determines, pursuant to the Tariff Act of 1930 (“the Act”), that an industry in the United States is materially injured by reason of imports of biodiesel from Argentina and Indonesia, provided for in subheadings 3826.00.10 and 3826.00.30 of the Harmonized Tariff Schedule of the United States, that have been found by the Department of Commerce (“Commerce”) to be subsidized by the governments of Argentina and Indonesia.

BACKGROUND

The Commission, pursuant to sections 705(b) of the Act (19 U.S.C. 1671d(b)), instituted these investigations effective March 23, 2017, following receipt of a petition filed with the Commission and Commerce by the National Biodiesel Board Fair Trade Coalition, Washington DC. The final phase of the investigations was scheduled by the Commission following notification of preliminary determinations by Commerce that imports of biodiesel from Argentina and Indonesia were subsidized within the meaning of section 703(b) of the Act (19 U.S.C. 1671b(b)). Notice of the scheduling of the final phase of the Commission’s investigations 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 August 28, 2017 (82 FR 4399). The hearing was held in Washington, DC, on November 9, 2017, and all persons who requested the opportunity were permitted to appear in person or by counsel.

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

Views of the Commission

Based on the record in the final phase of these investigations, we determine that an industry in the United States is materially injured by reason of imports of biodiesel found by the U.S. Department of Commerce (“Commerce”) to be subsidized by the governments of Argentina and Indonesia.

I. Background

The National Biodiesel Board Fair Trade Coalition filed the petitions in these investigations on March 23, 2017.¹ Petitioner is an *ad hoc* association comprised of the National Biodiesel Board and 15 domestic producers which collectively account for the majority of U.S. biodiesel production. Counsel to petitioner appeared at the hearing with industry witnesses and submitted prehearing and posthearing briefs.

Several respondent entities participated in these investigations. Counsel to Camara Argentina de Biocombustibles (CARBIO), an association of producers and exporters of subject merchandise, and its eight individual member companies, Aceitera General Deheza S.A., Bunge Argentina S.A., Cargill S.A.C.I., COFCO Argentina S.A., LDC Argentina S.A., Molinos Agro S.A., Renova S.A. and Vicentin S.A.I.C. (collectively, “Argentine Respondents”) appeared at the hearing and submitted joint prehearing and posthearing briefs. Domestic producer and importer Louis Dreyfus Company Agricultural Industries LLC (“Louis Dreyfus”) filed a posthearing brief.

Counsel to PT Wilmar Bioenergi Indonesia and PT Musim Mas, producers and exporters of the subject merchandise in Indonesia, and Wilmar Oleo North America LLC, an importer of the subject merchandise (collectively, “Indonesian Respondents”), appeared at the hearing and submitted joint prehearing and posthearing briefs. Counsel to Biosphere Fuels, LLC (“Biosphere”), an importer of subject merchandise, appeared at the hearing, and also filed a prehearing brief. Importers Targray Industries, Inc. and Vitol Inc. filed a joint prehearing and posthearing brief, as did importer Noble Americas Corp. Finally, a minister from the Embassy of Argentina and the commercial attache from the Embassy of Indonesia appeared at the hearing, and the Government of Argentina filed a posthearing submission concerning subsidies provided by the Government of Argentina.

U.S. industry data are based on the questionnaire responses of 25 producers, accounting for approximately 90 percent of U.S. production of biodiesel in 2016.² U.S. import data are based on official Commerce import statistics and questionnaire responses from 14 U.S. importers, representing a large majority of subject imports from Argentina and Indonesia in

¹ The National Biodiesel Board Fair Trade Coalition filed petitions for antidumping and countervailing duty investigations concerning biodiesel from Argentina and Indonesia on the same day. Because Commerce has not yet completed its antidumping investigations, these final determinations concern only the countervailing duty investigations. The Commission will make determinations in the antidumping investigations after Commerce has made its final antidumping determinations.

² Confidential Report (“CR”) at I-5, III-1 & n.2, Public Report (“PR”) at I-4, III-1, III-1 n.2.

2016.³ The Commission received responses to its questionnaires from ten producers of subject merchandise in Argentina, accounting for approximately 87 percent of subject imports from that country in 2016.⁴ The Commission received responses to its questionnaires from four firms in Indonesia, whose exports to the United States accounted for all U.S. imports of biodiesel from Indonesia during 2016.⁵

II. Domestic Like Product

A. In General

In determining whether an industry in the United States is materially injured or threatened with material injury by reason of imports of subject merchandise, the Commission first defines the “domestic like product” and the “industry.”⁶ Section 771(4)(A) of the Tariff Act of 1930, as amended (“the Tariff Act”), defines the relevant domestic industry as the “producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product.”⁷ In turn, the Tariff Act defines “domestic like product” as “a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation.”⁸

The decision regarding the appropriate domestic like product in an investigation is a factual determination, and the Commission has applied the statutory standard of “like” or “most similar in characteristics and uses” on a case-by-case basis.⁹ No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.¹⁰ The Commission looks for clear dividing lines among possible like products and disregards minor variations.¹¹ Although the Commission must accept

³ CR at I-5, IV-1 & n.2, PR at I-4, IV-1, IV-1 n.2.

⁴ CR at I-5, PR at I-4.

⁵ CR at I-5, PR at I-4.

⁶ 19 U.S.C. § 1677(4)(A).

⁷ 19 U.S.C. § 1677(4)(A).

⁸ 19 U.S.C. § 1677(10).

⁹ 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); *Torrington Co. v. United States*, 747 F. Supp. 744, 749 n.3 (Ct. Int’l Trade 1990), *aff’d*, 938 F.2d 1278 (Fed. Cir. 1991) (“every like product determination ‘must be made on the particular record at issue’ and the ‘unique facts of each case’”). The Commission generally considers a number of factors, including the following: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) customer and producer perceptions of the products; (5) common manufacturing facilities, production processes, and production employees; and, where appropriate, (6) price. See *Nippon*, 19 CIT at 455 n.4; *Timken Co. v. United States*, 913 F. Supp. 580, 584 (Ct. Int’l Trade 1996).

¹⁰ See, e.g., S. Rep. No. 96-249 at 90-91 (1979).

¹¹ *Nippon*, 19 CIT at 455; *Torrington*, 747 F. Supp. at 748-49; see also S. Rep. No. 96-249 at 90-91 (Congress has indicated that the like product standard should not be interpreted in “such a narrow (Continued...)”).

Commerce's determination as to the scope of the imported merchandise that is subsidized or sold at less than fair value,¹² the Commission determines what domestic product is like the imported articles Commerce has identified.¹³

B. Product Description

Commerce defined the imported merchandise within the scope of the investigations as:

Biodiesel, which is a fuel comprised of mono-alkyl esters of long chain fatty acids derived from vegetable oils or animal fats, including biologically-based waste oils or greases, and other biologically-based oil or fat sources. The investigations cover biodiesel in pure form (B100) as well as fuel mixtures containing at least 99 percent biodiesel by volume (B99). For fuel mixtures containing less than 99 percent biodiesel by volume, only the biodiesel component of the mixture is covered by the scope of the investigation.

Biodiesel is generally produced to American Society for Testing and Materials International (ASTM) D6751 specifications, but it can also be made to other specifications. Biodiesel commonly has one of the following Chemical Abstracts Service (CAS) numbers, generally depending upon the feedstock used: 67784-80-9 (soybean oil methyl esters); 91051-34-2 (palm oil methyl esters); 91051-32-0 (palm kernel oil methyl esters); 73891-99-3 (rapeseed oil methyl esters); 61788-61-2 (tallow methyl esters); 68990-52-3 (vegetable oil methyl esters); 129828-16-6 (canola oil methyl esters); 67762-26-9 (unsaturated alkylcarboxylic acid

(...Continued)

fashion as to permit minor differences in physical characteristics or uses to lead to the conclusion that the product and article are not 'like' each other, nor should the definition of 'like product' be interpreted in such a fashion as to prevent consideration of an industry adversely affected by the imports under consideration.").

¹² See, e.g., *USEC, Inc. v. United States*, 34 Fed. Appx. 725, 730 (Fed. Cir. 2002) ("The ITC may not modify the class or kind of imported merchandise examined by Commerce."); *Algoma Steel Corp. v. United States*, 688 F. Supp. 639, 644 (Ct. Int'l Trade 1988), *aff'd*, 865 F.3d 240 (Fed. Cir.), *cert. denied*, 492 U.S. 919 (1989).

¹³ *Hosiden Corp. v. Advanced Display Mfrs.*, 85 F.3d 1561, 1568 (Fed. Cir. 1996) (the Commission may find a single like product corresponding to several different classes or kinds defined by Commerce); *Cleo*, 501 F.3d at 1298 n.1 ("Commerce's {scope} finding does not control the Commission's {like product} determination."); *Torrington*, 747 F. Supp. at 748-52 (affirming the Commission's determination defining six like products in investigations in which Commerce found five classes or kinds).

methyl ester); or 68937–84–8 (fatty acids, C12–C18, methyl ester).¹⁴

C. Arguments of the Parties

Petitioner argues that the Commission should find a single domestic like product, coextensive with the scope of Commerce’s investigations, as it did in the preliminary determinations.¹⁵ Respondents did not specifically address the definition of the domestic like product in the final phase of these investigations.

D. Domestic Like Product Analysis

Based on the record, we define a single domestic like product consisting of all biodiesel within the scope of investigations.

In its preliminary determinations, the Commission found a single domestic like product consisting of biodiesel that was coextensive with Commerce’s scope.¹⁶ The Commission found that domestically produced biodiesel products within the scope definition share the same physical characteristics and uses and are used interchangeably. All biodiesel is generally produced through the same production process, and is used for transportation and heating fuel. All biodiesel within the scope is also sold through the same channels of distribution. Given these considerations, the Commission found that the domestic like product should consist of biodiesel described in the scope definition.¹⁷

The record in these final phase investigations does not contain any new information concerning the domestic like product factors, and the scope is unchanged from the preliminary phase.¹⁸ Therefore, for the same reasons set forth in the preliminary determinations, and because no party has argued for a different result in these final phase investigations, we define a single domestic like product consisting of all biodiesel, coextensive with Commerce’s scope.

¹⁴ *Biodiesel From the Republic of Argentina: Final Affirmative Countervailing Duty Determination*, 82 Fed. Reg. 53477, 53479 (Nov. 16, 2017); *Biodiesel From the Republic of Indonesia: Final Affirmative Countervailing Duty Determination*, 82 Fed. Reg. 53471, 53473 (Nov. 16, 2017). The B100 product subject to the investigation is currently classifiable under subheading 3826.00.1000 of the Harmonized Tariff Schedule of the United States (HTSUS), while the B99 product is currently classifiable under HTSUS subheading 3826.00.3000. *Id.* The scope of the antidumping and countervailing duty investigations is the same.

¹⁵ *Biodiesel from Argentina and Indonesia*, Inv. Nos. 701-TA-571-572 and 731-TA-1347-1348 (Preliminary), USITC Pub. 4690 at 7 (May 2017) (“USITC Pub. 4690”).

¹⁶ USITC Pub. 4690 at 7.

¹⁷ USITC Pub. 4690 at 7-9.

¹⁸ *See generally* CR at I-9-I-20, PR at I-21.

III. Domestic Industry

The domestic industry is defined as the domestic “producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product.”¹⁹ 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.²⁰

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.²¹ Exclusion of such a producer is within the Commission’s discretion based upon the facts presented in each investigation.²²

¹⁹ 19 U.S.C. § 1677(4)(A).

²⁰ In the preliminary phase of the investigations the Commission considered whether blending biodiesel in pure form (B100) with small amounts of petrodiesel (.01 percent to 1.00 percent) to produce B99 constitutes sufficient production-related activity to deem domestic firms who solely blend biodiesel to be members of the domestic industry. Both domestic producers and importers described blending as a minimally complex activity that requires little or no technical expertise, capital investment, or additional employment. The additional costs required for blending were described as minimal and often only the cost of the blended petrodiesel. To the extent it could be considered value added to the product, any value added by blending to B99 was limited to triggering eligibility for the blenders’ tax credit (BTC). Given these findings and the lack of any contrary argument, the record indicated that the act of blending B100 to B99 did not constitute sufficient production-related activity to deem blenders members of the domestic industry. See USITC Pub. 4690 at 8-9. In the final phase of these investigations there is no new information concerning blending operations that would warrant further examination of this issue. Further, none of the parties in the final phase addressed the issue. Therefore, for the reasons stated in the preliminary determinations, we do not include blenders in the definition of the domestic industry.

²¹ 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).

²² The primary factors the Commission has examined in deciding whether appropriate circumstances exist to exclude a related party include the following:

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

(Continued...)

As explained below, three domestic producers – Louis Dreyfus Company Agricultural Industries LLC ("Louis Dreyfus"), Cargill, Inc. ("Cargill"), and American Greenfuels – are subject to exclusion under the related party provision.

A. Arguments of the Parties

Petitioner's Arguments. Petitioner contends that Cargill and Louis Dreyfus should be excluded from the domestic industry because they benefited from their imports of subject merchandise. Petitioner contends that exports from Louis Dreyfus's affiliated Argentine exporter have grown and exceeded Louis Dreyfus's production in 2016.²³ Petitioner also claims Louis Dreyfus shields its production from competition with subject imports, and that Louis Dreyfus performed *** during 2016 and the first six months of 2017 ("interim 2017").²⁴ Petitioner additionally argues that Cargill's imports of subject merchandise from Argentina have increased, it opposes the petitions, it shields its domestic production from competition with the subject imports, and it outperformed the industry average.²⁵

Respondents' Arguments. Louis Dreyfus argues that it is a significant domestic producer of biodiesel and that the quantity of its related exporter's overall exports to unaffiliated U.S. importers and purchasers does not justify the Commission exercising its discretion to exclude it from the domestic industry. It maintains that its sales of the domestic product are not shielded from competition with the subject imports.²⁶

B. Analysis

Cargill. Cargill was the *** largest domestic producer in 2016, accounting for *** percent of domestic production.²⁷ It is a related party because its wholly-owned subsidiary, Cargill SACI, is an exporter of the subject merchandise and because Cargill directly imported subject merchandise from Argentina during the POI.²⁸ Imports of subject merchandise by Cargill were *** gallons in 2015 (the equivalent of *** percent of Cargill's domestic production), and *** gallons in 2016 (the equivalent of *** percent of Cargill's domestic production).²⁹

(...Continued)

(5) whether the primary interest of the importing producer lies in domestic production or importation. *Changzhou Trina Solar Energy Co. v. USITC*, 100 F. Supp.3d 1314, 1326-31 (Ct. Int'l. Trade 2015); see also *Torrington Co. v. United States*, 790 F. Supp. at 1168.

²³ Petitioner's Prehearing Brief at 16-18.

²⁴ Petitioner's Prehearing Brief at 18-19.

²⁵ Petitioner's Prehearing Brief at 20-21.

²⁶ Louis Dreyfus's Posthearing Brief at 1-6.

²⁷ CR/PR at Table III-1.

²⁸ CR/PR at Tables III-2 and III-12.

²⁹ CR/PR at Table III-12. Cargill *** subject merchandise in 2014. Its imports of biodiesel from Argentina during January-June (interim) 2016 were *** gallons, the equivalent of *** percent of Cargill's (Continued...)

Cargill ***.³⁰ Cargill explained that it ***.³¹

We find that the appropriate circumstances do not exist to exclude Cargill from the domestic industry as its primary interest lies in domestic production. Its U.S. production was considerably larger than its imports of subject merchandise, and its stated reason that it imported subject merchandise because of its inability to produce more biodiesel domestically ***. Moreover, there is no indication that it was shielded from the effects of subject imports to any significant degree.

Louis Dreyfus. Domestic producer Louis Dreyfus is a related party both because it imported subject merchandise from Argentina during the January 2014-June 2017 period of investigation (“POI”) and because it is related to an importer and an exporter of the subject merchandise.³² Louis Dreyfus is the *** largest domestic producer, accounting for *** percent of domestic production during 2016.³³ Imports of subject merchandise by Louis Dreyfus were *** gallons in 2016 and *** gallons in interim 2017, and were the equivalent of *** percent and *** percent of its domestic production during each of those periods.³⁴ The ratio of its affiliate’s exports of biodiesel to the United States to Louis Dreyfus’s domestic production increased from *** percent in 2014 to *** percent in 2015 and *** percent during 2016. It was *** percent in interim 2016 and *** percent in interim 2017.³⁵

Louis Dreyfus *** the petitions and indicated that it imported subject merchandise because ***.³⁶

Louis Dreyfus *** in 2016.³⁷ Additionally, its capacity utilization was high throughout the POI, indicating that its ability to serve the market through increased U.S. production was limited.³⁸ The record also does not demonstrate that it was shielded from the effects of the subject imports. In view of these considerations, despite the increasing exports of subject merchandise from its affiliate, the record indicates that Louis Dreyfus’s primary interest is in

(...Continued)

domestic production), and *** gallons during interim 2017 (the equivalent of *** percent of Cargill’s domestic production). *Id.*

³⁰ CR/PR at Table III-1.

³¹ Cargill’s Postconference Brief at 3. Cargill’s capacity utilization was *** percent in 2014, *** percent in 2015, and *** percent in 2016. CR/PR at Table III-5. It was *** percent in interim 2016 and *** percent in interim 2017. *Id.* During the period of investigation, Cargill’s net income to net sales ratio ***. *Id.*

³² Louis’ Dreyfus’s ***. Louis Dreyfus is also ***. CR/PR at Table III-2.

³³ CR/PR at Table III-1.

³⁴ CR/PR at Table III-12. It *** in 2014 or 2015. *Id.*

³⁵ See Louis Dreyfus’s Producer Questionnaire at II-8a; LDC Argentina S.A. Foreign Producer Questionnaire at II-11.

³⁶ CR/PR at Table III-12.

³⁷ CR at Table III-5. Louis Dreyfus’s capital expenditures totaled \$*** in 2014, \$*** in 2015 and \$*** in 2016. CR/PR at Table VI-5.

³⁸ Louis Dreyfus’s capacity utilization ranged from *** percent in interim 2016 to *** percent in 2015. CR/PR at Table III-5. Louis Dreyfus’ operating income to net sales ratio was ***. CR/PR at Table VI-3.

domestic production. We therefore find that appropriate circumstances do not exist to exclude Louis Dreyfus from the domestic industry.

American Greenfuels. American Greenfuels, LLC. (“American Greenfuels”) is a related party because its parent, Kolmar Americas, Inc., imported subject merchandise during the POI. American Greenfuels began production in 2015 and only accounted for *** percent of domestic production during 2016.³⁹ Kolmar Americas, Inc.’s imports of subject merchandise from Argentina totaled *** gallons in 2015 and *** gallons in 2016.⁴⁰ American Greenfuels’ production was *** gallons in 2015 and *** million gallons in 2016.⁴¹ Thus, the ratio of its parent’s imports of subject merchandise to its production was *** percent in 2015 and *** percent in 2016. American Greenfuels *** the petitions.⁴²

American Greenfuels’ interests lie in domestic production as it began production and expanded its facility during the POI, and it did not directly import any subject merchandise. Moreover, its parent company’s imports of subject merchandise ***. There is no evidence that it has benefitted from its relationship with Kolmar Americas, Inc. No party has argued for American Greenfuels to be excluded from the domestic industry. We therefore find that appropriate circumstances do not exist to exclude American Greenfuels’ from the domestic industry.

In light of our decision not to exclude any of the related parties from the domestic industry, we define the domestic industry as all U.S. producers of biodiesel.

³⁹ CR/PR at Table III-1, VI-1. American Greenfuels stated that it is expanding its facility from ***. American Greenfuels’ Questionnaire Response at II-2. Its capital expenditures totaled \$*** in 2015 and \$*** in 2016. They were \$*** in interim 2016 and \$*** in interim 2017. American Greenfuels’ Questionnaire Response at III-14.

⁴⁰ Kolmar Americas, Inc.’s Questionnaire Response at II-8a. It *** subject merchandise in interim 2017. *Id.*

⁴¹ American Greenfuels’ Questionnaire Response at II-8a. Its production was *** gallons in interim 2017 compared to *** gallons in interim 2016. *Id.*

⁴² CR/PR at Table III-1. American Greenfuels’ operating income and net income to net sales ratios were ***. CR/PR at Table VI-3.

IV. Cumulation⁴³

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

- (1) the degree of fungibility between subject imports from different countries and between subject imports and the domestic like product, including consideration of specific customer requirements and other quality related questions;
- (2) the presence of sales or offers to sell in the same geographic markets of subject imports from different countries and the domestic like product;
- (3) the existence of common or similar channels of distribution for subject imports from different countries and the domestic like product; and
- (4) whether the subject imports are simultaneously present in the market.⁴⁴

While no single factor is necessarily determinative, and the list of factors is not exclusive, these factors are intended to provide the Commission with a framework for determining whether the subject imports compete with each other and with the domestic like product.⁴⁵ Only a “reasonable overlap” of competition is required.⁴⁶

⁴³ Pursuant to Section 771(24) of the Tariff Act, imports from a subject country of merchandise corresponding to a domestic like product that account for less than 3 percent of all such merchandise imported into the United States during the most recent 12 months for which data are available preceding the filing of the petition shall be deemed negligible. 19 U.S.C. §§ 1671b(a), 1673b(a), 1677(24)(A)(i), 1677(24)(B); *see also* 15 C.F.R. § 2013.1 (developing countries for purposes of 19 U.S.C. § 1677(36)). The statute further provides that subject imports from a single country which comprise less than 3 percent of total such imports of the product may not be considered negligible if there are several countries subject to investigation with negligible imports and the sum of such imports from all those countries collectively accounts for more than 7 percent of the volume of all such merchandise imported into the United States. 19 U.S.C. § 1677(24)(A)(ii). In the case of countervailing duty investigations involving developing countries (as designated by the United States Trade Representative), the statute indicates that the negligibility limits are 4 percent and 9 percent, rather than 3 percent and 7 percent. 19 U.S.C. § 1677(24)(B).

Subject imports from Argentina and Indonesia accounted for 62.9 percent and 15.4 percent, respectively, of total U.S. imports of biodiesel in the 12-month period preceding the filing of the petition (March 2016 through February 2017). CR at IV-7, PR at IV-7. Accordingly, we find that subject imports from each subject country are not negligible.

⁴⁴ *See Certain Cast-Iron Pipe Fittings from Brazil, the Republic of Korea, and Taiwan*, Inv. Nos. 731-TA-278-280 (Final), USITC Pub. 1845 (May 1986), *aff'd*, *Fundicao Tupy, S.A. v. United States*, 678 F. Supp. 898 (Ct. Int’l Trade), *aff'd*, 859 F.2d 915 (Fed. Cir. 1988).

⁴⁵ *See, e.g., Wieland Werke, AG v. United States*, 718 F. Supp. 50 (Ct. Int’l Trade 1989).

A. Arguments of the Parties

The parties dispute whether the statutory prerequisites for cumulation are satisfied.

Petitioner's Arguments. Petitioner argues that the Commission should cumulatively assess imports from Argentina and Indonesia, as it did in the preliminary determinations. It contends that biodiesel from subject sources and the domestic like product are generally fungible as all biodiesel is produced to ASTM specification D6751 and is either sold for heating oil or as a blend stock into petroleum diesel.⁴⁷ It asserts that the fact that biodiesel from Indonesia qualifies for a D6 "Renewable Identification Number" ("RIN") as compared to biodiesel from the United States or Argentina (which qualifies for a D4 RIN) simply makes biodiesel from Indonesia less valuable.⁴⁸ Petitioner also acknowledges that biodiesel from Indonesia is less suitable for use as a transportation fuel in cold weather due to its higher cloud point.⁴⁹ Notwithstanding these acknowledged differences in RIN value and cloud point, petitioner contends that the "reasonable overlap" standard is satisfied as biodiesel from different sources is used interchangeably.⁵⁰

Respondents' Argument. The Indonesian Respondents argue that, according to the U.S. Environmental Protection Agency (EPA), PME (palm-oil based biodiesel) from Indonesia is not biodiesel as a matter of U.S. environmental regulation and is instead a "conventional renewable fuel," a distinction which means it earns a D6 RIN rather than the D4 RIN that soybean-based biodiesel from Argentina generates. This, according to the Indonesian Respondents, in addition to the higher cloud point of the palm-based Indonesian product, results in customers placing a lower value on subject imports from Indonesia.⁵¹

(...Continued)

⁴⁶ The Statement of Administrative Action (SAA) to the Uruguay Round Agreements Act (URAA), expressly states that "the new section will not affect current Commission practice under which the statutory requirement is satisfied if there is a reasonable overlap of competition." H.R. Rep. No. 103-316, Vol. I at 848 (1994) (*citing Fundicao Tupy, S.A. v. United States*, 678 F. Supp. at 902; *see Goss Graphic Sys., Inc. v. United States*, 33 F. Supp. 2d 1082, 1087 (Ct. Int'l Trade 1998) ("cumulation does not require two products to be highly fungible"); *Wieland Werke, AG*, 718 F. Supp. at 52 ("Completely overlapping markets are not required.")).

⁴⁷ Petitioner's Prehearing Brief at 37-38.

⁴⁸ There are different classes of RINs depending on the feedstock. A D4 RIN for soybean oil feedstock and a D6 RIN for palm oil feedstock are the most common. CR at I-21, PR at I-17. The D4 RIN is more valuable because it can be used to satisfy the biomass based diesel obligation, advanced biofuel, and total renewable fuel standard. The D6 RIN can only be used to satisfy the total renewable fuel obligation. *See* EPA Final Rule, *Renewable Fuel Standard Program: Standards for 2017 and Biomass-Based Diesel Volume for 2018*, 81 Fed. Reg. 89746, 89796 nn.196, 197 (Dec. 12, 2016). The difference in value of D4 and D6 RINs is typically small but increased during interim 2017 due to speculation in the RIN market. *See* CR at V-10, Fig. V-3, PR at V-6-V-7.

⁴⁹ Cloud point is the temperature at which small solid crystals start to form and the fuel begins to congeal. CR at I-13 n.24, PR at I-10 n.24.

⁵⁰ Petitioner's Prehearing Brief at 37-38.

⁵¹ Indonesian Prehearing Respondents' Brief at 20-22.

The Indonesian Respondents contend that, due to its higher cloud point, subject imports from Indonesia are unacceptable to some customers. Further, they contend that subject imports from Indonesia are absent from certain major U.S. markets, including California, Minnesota, Oregon, and New York City, which effectively or outright prohibit the participation of palm-based biodiesel in biofuels programs.⁵²

B. Analysis and Conclusion

The threshold requirement for cumulation is satisfied because petitioner filed the antidumping and countervailing duty petitions with respect to biodiesel from Argentina and Indonesia on the same day, March 23, 2017.⁵³ As discussed below, we find a reasonable overlap of competition between and among the subject imports from both countries and the domestic like product.

Fungibility. The record in the final phase of these investigations indicates that biodiesel is at least moderately fungible, regardless of source. We find that there is sufficient fungibility between and among subject imports from Argentina, subject imports from Indonesia, and the domestic like product to satisfy the reasonable overlap standard. Market participants generally perceive products from different sources to be interchangeable, including subject imports from Indonesia.⁵⁴ They also found the domestic like product and subject imports from Argentina

⁵² Indonesian Respondents' Prehearing Brief at 22

⁵³ None of the statutory exceptions to cumulation is applicable.

⁵⁴ Almost all responding purchasers and importers reported that biodiesel from Argentina and the domestic like product were either "always" or "frequently" interchangeable. The great majority of responding U.S. producers reported that biodiesel from all sources was either "always" or "frequently" interchangeable. CR/PR at Table II-11.

The majority of purchasers indicated that subject imports from Indonesia and the domestic like product were "always" or "frequently" interchangeable with the remainder indicating that they were "sometimes" interchangeable. The majority of importers reported that subject imports from Indonesia and the domestic like product were "sometimes" interchangeable, while the balance of responses indicated that they were either "always" or "frequently" interchangeable. CR/PR at Table II-11.

Half of responding purchasers indicated that the subject imports from Indonesia and subject imports from Argentina were "sometimes" interchangeable with all but one of the other purchasers reporting that they were either "always" or "frequently" interchangeable. The great majority of responding importers indicated that the subject imports from Indonesia and subject imports from Argentina were "sometimes" interchangeable, with the balance indicating that they were "always" interchangeable. CR/PR at Table II-11.

When comparing biodiesel from all sources, the vast majority of responding U.S. producers reported that differences other than price were "sometimes" or "never" significant. (These differences can include quality, specifications, RINs acceptance, freight rates and transportation network, logistics, EPA compliance status, seasonal restrictions, and availability. CR at II-35, PR at II-24.) A majority of responding purchasers and importers reported that there were "sometimes" or "never" differences other than price between subject imports from Argentina and subject imports from Indonesia. Likewise when comparing the domestic like product to subject imports from Argentina and subject imports from (Continued...)

comparable to subject imports from Indonesia with respect to product characteristics unrelated to RIN classification.⁵⁵ In addition, Biosphere’s large-scale blending of domestically produced biodiesel and biodiesel from both subject countries at its affiliated truck stops for transportation fuel supports a finding of substantial fungibility of biodiesel from different sources.⁵⁶ The fact that all biodiesel is produced to ASTM specification D6751 also suggests fungibility of biodiesel from different sources.⁵⁷ Consequently, the record does not support Indonesian Respondents’ contentions that product distinctions between subject imports from Indonesia, on the one hand, and subject imports from Argentina or the domestic like product, on the other, are of sufficient magnitude to support a finding that the products are not fungible.⁵⁸

Channels of Distribution. Almost half of domestic production and the great majority of subject imports from both Argentina and Indonesia were sold to distributors and independent blenders.⁵⁹

Geographic Overlap. U.S. producers reported selling biodiesel to all regions of the contiguous United States.⁶⁰ Subject imports from Argentina were sold in the Central Southwest, Southeast, Northeast and Mountains regions while subject imports from Indonesia

(...Continued)

Indonesia, a majority of responding purchasers and importers reported that differences other than price were “sometimes” or “never” significant. CR/PR at Table II-13.

When asked whether the domestic like product and subject imports from Argentina met minimum quality specifications, most responding purchasers reported “always” or “usually” and none indicated “rarely” or “never.” Most responding purchasers reported “usually” or “sometimes” with respect to whether the subject imports from Indonesia satisfy minimum quality requirements. CR/PR at Table II-12.

⁵⁵ Majorities or pluralities of purchasers found both the domestic product and subject imports from Argentina superior to subject imports from Indonesia with respect to the factors of RIN classification and RIN value. With respect to the 20 other non-price related purchasing factors, however, majorities or pluralities of purchasers found the domestic like product and subject imports from Indonesia comparable in 18, and subject imports from Argentina and Indonesia comparable in 19. Majorities of purchasers found the domestic like product and subject imports from Argentina comparable for all 22 non-price-related factors. CR/PR at Table II-10.

⁵⁶ Biosphere was the *** purchaser of domestically produced biodiesel and the ***. Biosphere accounted for *** percent of subject imports from *** during 2016. CR/PR at Table V-12; CR at V-14 n.24, V-24 n.26; PR at V-9, n.24, V-13 n.26. Additionally, we observe that at least three purchasers that responded to the lost sales lost revenue survey reported purchasing imports from both subject countries instead of domestically produced products. See CR/PR at Table V-14a.

⁵⁷ CR at I-15, PR at I-12.

⁵⁸ The primary limitations on substitutability are that: (1) palm oil-based Indonesian biodiesel is less suitable for use as a transportation fuel in cold weather because of its higher cloud point and (2) biodiesel from Indonesia qualifies for a less valuable D6 RIN than does biodiesel from the United States or Argentina. See CR at II-13, II-22, II-34, II-35, PR at II-8, II-13, II-14, II-23.

⁵⁹ CR/PR at Table II-1.

⁶⁰ CR/PR at Table II-2; CR at II-4, PR at II-2.

were sold in the Central Southwest, Southeast, and Northeast.⁶¹ Subject imports from Argentina and Indonesia both entered at ports at the Southern and Eastern regions of the United States.⁶² While there are state and local restrictions on palm-based biodiesel, the record in the final phase of the investigations indicates that they affect a relatively modest portion of the overall market.⁶³

Simultaneous Presence in Market. Subject imports from both countries were present in the U.S. market during 26 months of the 42-month POI.⁶⁴

Conclusion. The record indicates that there is a reasonable overlap of competition between and among subject imports and the domestic like product. The record shows at least moderate fungibility between the domestic like product and imports from each subject source, notwithstanding certain product differences. There is also substantial geographic overlap notwithstanding some state and local restrictions on palm-based biodiesel. We consequently analyze subject imports from Argentina and Indonesia on a cumulated basis for our analysis of whether there is material injury by reason of subject imports.

V. Material Injury by Reason of Subject Imports

Based on the record in the final phase of these investigations, we find that an industry in the United States is materially injured by reason of subject imports of biodiesel from Argentina and Indonesia.

A. Legal Standards

In the final phase of antidumping and countervailing duty investigations, the Commission determines whether an industry in the United States is materially injured or threatened with material injury by reason of the imports under investigation.⁶⁵ In making this determination, the Commission must consider the volume of subject imports, their effect on prices for the domestic like product, and their impact on domestic producers of the domestic

⁶¹ CR/PR at Table II-2.

⁶² See CR/PR at Table IV-9. See also CR/PR at Table II-2 (showing overlap in subject imports and domestic product shipments in the Central Southwest).

⁶³ The state and local restrictions have the effect of excluding subject imports from Indonesia from 13 percent of the U.S. biodiesel market. CR at II-21, PR at II-13; Indonesian Respondents' Prehearing Brief at 12.

⁶⁴ CR/PR at Table IV-10. Pricing data for product 4 also show sales of subject imports from Argentina, subject imports from Indonesia, and the domestic product during 11 of the 14 quarters of the POI. CR/PR at Tables V-8.

⁶⁵ 19 U.S.C. §§ 1671d(b), 1673d(b). The Trade Preferences Extension Act of 2015, Pub. L. 114-27, amended the provisions of the Tariff Act pertaining to Commission determinations of material injury and threat of material injury by reason of subject imports in certain respects. We have applied these amendments here.

like product, but only in the context of U.S. production operations.⁶⁶ The statute defines “material injury” as “harm which is not inconsequential, immaterial, or unimportant.”⁶⁷ In assessing whether the domestic industry is materially injured by reason of subject imports, we consider all relevant economic factors that bear on the state of the industry in the United States.⁶⁸ No single factor is dispositive, and all relevant factors are considered “within the context of the business cycle and conditions of competition that are distinctive to the affected industry.”⁶⁹

Although the statute requires the Commission to determine whether the domestic industry is “materially injured or threatened with material injury by reason of” unfairly traded imports,⁷⁰ it does not define the phrase “by reason of,” indicating that this aspect of the injury analysis is left to the Commission’s reasonable exercise of its discretion.⁷¹ In identifying a causal link, if any, between subject imports and material injury to the domestic industry, the Commission examines the facts of record that relate to the significance of the volume and price effects of the subject imports and any impact of those imports on the condition of the domestic industry. This evaluation under the “by reason of” standard must ensure that subject imports are more than a minimal or tangential cause of injury and that there is a sufficient causal, not merely a temporal, nexus between subject imports and material injury.⁷²

In many investigations, there are other economic factors at work, some or all of which may also be having adverse effects on the domestic industry. Such economic factors might include nonsubject imports; changes in technology, demand, or consumer tastes; competition among domestic producers; or management decisions by domestic producers. The legislative history explains that the Commission must examine factors other than subject imports to ensure that it is not attributing injury from other factors to the subject imports, thereby inflating an otherwise tangential cause of injury into one that satisfies the statutory material

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

⁶⁷ 19 U.S.C. § 1677(7)(A).

⁶⁸ 19 U.S.C. § 1677(7)(C)(iii).

⁶⁹ 19 U.S.C. § 1677(7)(C)(iii).

⁷⁰ 19 U.S.C. §§ 1671d(a), 1673d(a).

⁷¹ *Angus Chemical Co. v. United States*, 140 F.3d 1478, 1484-85 (Fed. Cir. 1998) (“{T}he statute does not ‘compel the commissioners’ to employ {a particular methodology}.”), *aff’g*, 944 F. Supp. 943, 951 (Ct. Int’l Trade 1996).

⁷² The Federal Circuit, in addressing the causation standard of the statute, observed that “[a]s long as its effects are not merely incidental, tangential, or trivial, the foreign product sold at less than fair value meets the causation requirement.” *Nippon Steel Corp. v. USITC*, 345 F.3d 1379, 1384 (Fed. Cir. 2003). This was further ratified in *Mittal Steel Point Lisas Ltd. v. United States*, 542 F.3d 867, 873 (Fed. Cir. 2008), where the Federal Circuit, quoting *Gerald Metals, Inc. v. United States*, 132 F.3d 716, 722 (Fed. Cir. 1997), stated that “this court requires evidence in the record ‘to show that the harm occurred ‘by reason of’ the LTFV imports, not by reason of a minimal or tangential contribution to material harm caused by LTFV goods.’” *See also Nippon Steel Corp. v. United States*, 458 F.3d 1345, 1357 (Fed. Cir. 2006); *Taiwan Semiconductor Industry Ass’n v. USITC*, 266 F.3d 1339, 1345 (Fed. Cir. 2001).

injury threshold.⁷³ In performing its examination, however, the Commission need not isolate the injury caused by other factors from injury caused by unfairly traded imports.⁷⁴ Nor does the “by reason of” standard require that unfairly traded imports be the “principal” cause of injury or contemplate that injury from unfairly traded imports be weighed against other factors, such as nonsubject imports, which may be contributing to overall injury to an industry.⁷⁵ It is clear that the existence of injury caused by other factors does not compel a negative determination.⁷⁶

Assessment of whether material injury to the domestic industry is “by reason of” subject imports “does not require the Commission to address the causation issue in any particular way” as long as “the injury to the domestic industry can reasonably be attributed to the subject imports” and the Commission “ensure{s} that it is not attributing injury from other sources to

⁷³ SAA at 851-52 (“{T}he Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports.”); S. Rep. 96-249 at 75 (1979) (the Commission “will consider information which indicates that harm is caused by factors other than less-than-fair-value imports.”); H.R. Rep. 96-317 at 47 (1979) (“in examining the overall injury being experienced by a domestic industry, the ITC will take into account evidence presented to it which demonstrates that the harm attributed by the petitioner to the subsidized or dumped imports is attributable to such other factors;” those factors include “the volume and prices of nonsubsidized imports or imports sold at fair value, contraction in demand or changes in patterns of consumption, trade restrictive practices of and competition between the foreign and domestic producers, developments in technology and the export performance and productivity of the domestic industry”); *accord Mittal Steel*, 542 F.3d at 877.

⁷⁴ SAA at 851-52 (“{T}he Commission need not isolate the injury caused by other factors from injury caused by unfair imports.”); *Taiwan Semiconductor Industry Ass’n*, 266 F.3d at 1345 (“{T}he Commission need not isolate the injury caused by other factors from injury caused by unfair imports Rather, the Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports.” (emphasis in original)); *Asociacion de Productores de Salmon y Trucha de Chile AG v. United States*, 180 F. Supp. 2d 1360, 1375 (Ct. Int’l Trade 2002) (“{t}he Commission is not required to isolate the effects of subject imports from other factors contributing to injury” or make “bright-line distinctions” between the effects of subject imports and other causes.); *see also Softwood Lumber from Canada*, Inv. Nos. 701-TA-414 and 731-TA-928 (Remand), USITC Pub. 3658 at 100-01 (Dec. 2003) (Commission recognized that “{i}f an alleged other factor is found not to have or threaten to have injurious effects to the domestic industry, *i.e.*, it is not an ‘other causal factor,’ then there is nothing to further examine regarding attribution to injury”), *citing Gerald Metals*, 132 F.3d at 722 (the statute “does not suggest that an importer of LTFV goods can escape countervailing duties by finding some tangential or minor cause unrelated to the LTFV goods that contributed to the harmful effects on domestic market prices.”).

⁷⁵ S. Rep. 96-249 at 74-75; H.R. Rep. 96-317 at 47.

⁷⁶ *See Nippon Steel Corp.*, 345 F.3d at 1381 (“an affirmative material-injury determination under the statute requires no more than a substantial-factor showing. That is, the ‘dumping’ need not be the sole or principal cause of injury.”).

the subject imports.”⁷⁷ Indeed, the Federal Circuit has examined and affirmed various Commission methodologies and has disavowed “rigid adherence to a specific formula.”⁷⁸

The Federal Circuit’s decisions in *Gerald Metals*, *Bratsk*, and *Mittal Steel* all involved cases where the relevant “other factor” was the presence in the market of significant volumes of price-competitive nonsubject imports. The Commission interpreted the Federal Circuit’s guidance in *Bratsk* as requiring it to apply a particular additional methodology following its finding of material injury in cases involving commodity products and a significant market presence of price-competitive nonsubject imports.⁷⁹ The additional “replacement/benefit” test looked at whether nonsubject imports might have replaced subject imports without any benefit to the U.S. industry. The Commission applied that specific additional test in subsequent cases, including the *Carbon and Certain Alloy Steel Wire Rod from Trinidad and Tobago* determination that underlies the *Mittal Steel* litigation.

Mittal Steel clarifies that the Commission’s interpretation of *Bratsk* was too rigid and makes clear that the Federal Circuit does not require the Commission to apply an additional test nor any one specific methodology; instead, the court requires the Commission to have “evidence in the record” to “show that the harm occurred ‘by reason of’ the LTFV imports,” and requires that the Commission not attribute injury from nonsubject imports or other factors to subject imports.⁸⁰ Accordingly, we do not consider ourselves required to apply the replacement/benefit test that was included in Commission opinions subsequent to *Bratsk*.

The progression of *Gerald Metals*, *Bratsk*, and *Mittal Steel* clarifies that, in cases involving commodity products where price-competitive nonsubject imports are a significant factor in the U.S. market, the Court will require the Commission to give full consideration, with adequate explanation, to non-attribution issues when it performs its causation analysis.⁸¹

⁷⁷ *Mittal Steel*, 542 F.3d at 877-78; see also *id.* at 873 (“While the Commission may not enter an affirmative determination unless it finds that a domestic industry is materially injured ‘by reason of’ subject imports, the Commission is not required to follow a single methodology for making that determination ... {and has} broad discretion with respect to its choice of methodology.”) citing *United States Steel Group v. United States*, 96 F.3d 1352, 1362 (Fed. Cir. 1996) and S. Rep. 96-249 at 75. In its decision in *Swiff-Train v. United States*, 793 F.3d 1355 (Fed. Cir. 2015), the Federal Circuit affirmed the Commission’s causation analysis as comports with the Court’s guidance in *Mittal*.

⁷⁸ *Nucor Corp. v. United States*, 414 F.3d 1331, 1336, 1341 (Fed. Cir. 2005); see also *Mittal Steel*, 542 F.3d at 879 (“*Bratsk* did not read into the antidumping statute a Procrustean formula for determining whether a domestic injury was ‘by reason’ of subject imports.”).

⁷⁹ *Mittal Steel*, 542 F.3d at 875-79.

⁸⁰ *Mittal Steel*, 542 F.3d at 873 (quoting from *Gerald Metals*, 132 F.3d at 722), 875-79 & n.2 (recognizing the Commission’s alternative interpretation of *Bratsk* as a reminder to conduct a non-attribution analysis).

⁸¹ To that end, after the Federal Circuit issued its decision in *Bratsk*, the Commission began to present published information or send out information requests in the final phase of investigations to producers in nonsubject countries that accounted for substantial shares of U.S. imports of subject merchandise (if, in fact, there were large nonsubject import suppliers). In order to provide a more complete record for the Commission’s causation analysis, these requests typically seek information on capacity, production, and shipments of the product under investigation in the major source countries that export to the United States. The Commission plans to continue utilizing published or requested (Continued...)

The question of whether the material injury threshold for subject imports is satisfied notwithstanding any injury from other factors is factual, subject to review under the substantial evidence standard.⁸² Congress has delegated this factual finding to the Commission because of the agency's institutional expertise in resolving injury issues.⁸³

B. Conditions of Competition and the Business Cycle

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

1. Overview of the Renewable Fuel Market

The Renewable Fuel Standard ("RFS") program, created by the EPA under the authority of the Energy Policy Act of 2005, established the first renewable fuel mandates in the United States. In 2007, Congress expanded and modified the RFS program to include biodiesel.⁸⁴ This program became the basis for the current RFS2 program, which became effective mid-2010 and mandated much larger annual volumes and established separate requirements for different classes of biofuels.⁸⁵ Biodiesel producers must undergo a registration process in order to participate in the RFS2 program.⁸⁶

The RFS program's stated goals are to reduce greenhouse gas emissions and expand the nation's renewable fuels sector while reducing reliance on imported oil.⁸⁷ The EPA does so by requiring minimum volumes of renewable fuel to replace or reduce the quantity of petroleum-based transportation fuel, heating oil, or jet fuel.⁸⁸ For a biofuel to qualify toward the RFS mandated volume, it must be made from renewable biomass, and it must also achieve a significant reduction in life cycle greenhouse gas emissions compared to petroleum-based diesel or gasoline fuel.⁸⁹

Biodiesel, or what the EPA calls "biomass-based diesel," is one of the four renewable fuel categories in the RFS; the three other categories are cellulosic biofuel, advanced biofuel

(...Continued)

information in the final phase of investigations in which there are substantial levels of nonsubject imports.

⁸² We provide in our discussion below a full analysis of other factors alleged to have caused any material injury experienced by the domestic industry.

⁸³ *Mittal Steel*, 542 F.3d at 873; *Nippon Steel Corp.*, 458 F.3d at 1350, citing *U.S. Steel Group*, 96 F.3d at 1357; S. Rep. 96-249 at 75 ("The determination of the ITC with respect to causation is ... complex and difficult, and is a matter for the judgment of the ITC.").

⁸⁴ CR at I-20, PR at I-16.

⁸⁵ CR at I-21, PR at I-16-I-17.

⁸⁶ CR at I-21, PR at I-17.

⁸⁷ EPA Final Rule, *Renewable Fuel Standard Program: Standards for 2017 and Biomass-Based Diesel Volume for 2018*, 81 Fed. Reg. 89746, 89747 (Dec. 12, 2016).

⁸⁸ CR at VI-2 n.4, PR at VI-2 n.4.

⁸⁹ See CR at I-22 n.65, PR at I-18 n.65.

and total renewable fuel.⁹⁰ The EPA sets minimum volumes for biodiesel and the other fuel categories and has increased these volumes each year since 2013.⁹¹

The EPA requires “obligated parties,” which are producers and importers of gasoline or diesel fuel, to meet its volume targets for the different categories of renewable fuel. An obligated party’s annual renewable volume obligation (RVO) is calculated by multiplying an obligated party’s total gasoline and diesel sales by the annual renewable fuel percentage standards announced by EPA in a rulemaking scheduled each year.⁹² The volumes required for biomass-based diesel (renewable diesel and biodiesel) increased from 1.63 billion gallons in 2014 to 1.73 billion gallons in 2015 to 1.90 billion gallons in 2016.⁹³

The EPA ensures that obligated parties comply with the RVOs through the use of a tradable credit system under which obligated parties must submit to EPA Renewable Identification Numbers (RINs) that equal the number of gallons of renewable fuel in their RVO.⁹⁴ Each gallon of biodiesel produced in or imported into the United States generates about 1.5 RINs.⁹⁵ There are different classes of RINs depending on the feedstock used to produce the renewable fuel. A D4 RIN is generated by soybean oil feedstock while a D6 RIN is generated by corn-starch based feedstock (ethanol) or another qualifying feedstock such as palm oil-based biodiesel from Indonesia.⁹⁶ Each RIN type has a different market value, but the RIN prices usually track each other and generally have been relatively close in value.⁹⁷

RINs may be used by the party that generates them to satisfy its RVO or traded and sold on a secondary market so that other obligated parties may use them to satisfy their RVOs.⁹⁸ RINs are separated when owned by an obligated party or blended to B80 by a producer or blender.⁹⁹ The EPA Moderated Transaction System (EMTS) is used to register RIN transactions.¹⁰⁰

⁹⁰ EPA Final Rule, 81 Fed. Reg. at 89747.

⁹¹ EPA Final Rule, 81 Fed. Reg. at 89747. The biodiesel volume requirement is nested within the advanced biofuel requirement and the advanced biofuel requirement is, in turn, nested within the total renewable fuel volume requirement. This means that each gallon of biodiesel used to satisfy the biodiesel volume requirement can also be used to satisfy the advanced fuel and total renewable fuel requirements. *Id.* at 89748.

⁹² CR at I-21 n.62, PR at I-17 n.62.

⁹³ CR at II-16, PR at II-10.

⁹⁴ CR at I-21 to I-22, PR at I-17.

⁹⁵ CR at I-21, PR at I-17.

⁹⁶ CR at I-22, II-2 n.5, PR at I-17, II-1 n.5. Ethanol falls within the total renewable fuel category and generates a D6 RIN. CR at II-2 n.5, PR at II-1 n.5.

⁹⁷ CR at V-10, PR at V-6-V-7; CR/PR at Fig. V-3. As noted, during 2017, the value of D6 RINs diverged from that of D4 RINs due market speculation. *Id.* A D4 RIN should always be more valuable than a D6 RIN because when an obligated party retires a biodiesel D4 RIN to help satisfy its biodiesel obligation, the nested nature of the biodiesel standard means that this RIN also counts towards satisfying its advanced and total renewable fuel obligations. D6 RINs count towards only the total renewable fuel obligation. See EPA Final Rule, 81 Fed. Reg. at 89796 n.196.

⁹⁸ CR at I-21, PR at I-17.

⁹⁹ CR at VI-3 n.4, PR at VI-2 n.4.

¹⁰⁰ CR at I-21, PR at I-17.

A federal blender's tax credit (BTC), when in effect, also drives demand in the biodiesel market. This tax credit permits blenders of domestically produced or imported biodiesel to claim a \$1 per gallon refundable tax credit.¹⁰¹ The BTC can be used to offset excise tax liability or can be exchanged for cash, and is viewed as a revenue stream by market participants.¹⁰² The blender's tax credit is intended to help make biodiesel prices competitive with petroleum diesel fuel.¹⁰³ Blenders need only blend one percent petrodiesel (or less) with biodiesel to be eligible for this credit and often sell this B99 blend when the BTC is in place.¹⁰⁴ The seller and purchaser of biodiesel may allocate the right to the BTC in sales contracts, often splitting the right to the credit.¹⁰⁵

The availability of the BTC was uncertain at times during the POI. It lapsed on December 31, 2013 and was retroactively reinstated for 2014 on December 19, 2014.¹⁰⁶ On December 18, 2015, the BTC was retroactively reinstated for 2015 and was in effect until December 31, 2016.¹⁰⁷ The BTC lapsed again on January 1, 2017, and had not been renewed at the time the record closed in these investigations.¹⁰⁸

2. Demand Considerations

Biodiesel is blended with petrodiesel for use as a transportation fuel and for home heating oil. About two-thirds of biodiesel consumption is for transportation fuel, mainly by truckers.¹⁰⁹ Demand for biodiesel is largely driven by the RFS's increasing volume requirements, rather than by end use demand trends.¹¹⁰ State and local tax credits and mandates also tend to increase demand for biodiesel. States that offer tax credits for biodiesel include California, Illinois, Iowa, and Texas, and demand tends to be higher in these states.¹¹¹ In addition, states and localities, including Louisiana, Massachusetts, Minnesota, New Mexico, New York City, Oregon, Pennsylvania, Rhode Island, and Washington, mandate a minimum level of biodiesel to be used in petroleum diesel.¹¹²

Demand for biodiesel is seasonal, increasing in the second and third quarters of the year and stabilizing or declining in the fourth quarter.¹¹³ Apparent U.S. consumption has also

¹⁰¹ CR at VI-3, PR at VI-2.

¹⁰² CR at VI-3, PR at VI-2.

¹⁰³ CR at I-25, PR at I-20. The availability of the BTC generally results in lower sales values for biodiesel. CR at VI-3, PR at VI-2.

¹⁰⁴ CR at VI-4, PR at VI-2.

¹⁰⁵ CR at V-12, VI-3-VI-4, PR at V-8, VI-2-VI-3.

¹⁰⁶ CR at VI-3 n.5, PR at VI-2 n.5.

¹⁰⁷ CR at VI-3 n.5, PR at VI-2 n.5.

¹⁰⁸ CR at VI-3 n.5, PR at VI-2 n.5; Petitioner's Prehearing Brief at 27; Tr. at 159 (Frederico); Tr. at 87 (Stone).

¹⁰⁹ CR at II-14, PR at II-9.

¹¹⁰ CR at II-14, PR at II-9.

¹¹¹ CR at II-18, PR at II-11-II-12.

¹¹² CR at II-18, PR at II-11-II-12.

¹¹³ CR at II-17 n.32; IV-27-IV-28, PR at II-11 n.32, IV-15-IV-16.

increased in the fourth quarter when the blender's tax credit was set to expire, as was the case in 2016.¹¹⁴ Discretionary blenders who are not obligated parties may also create additional demand for biodiesel, buying and blending biodiesel for the BTC when the price of biodiesel is sufficiently low relative to diesel.¹¹⁵

Apparent U.S. consumption of biodiesel increased from 1.4 billion gallons in 2014 to 1.5 billion gallons in 2015 and 2.2 billion gallons in 2016.¹¹⁶ Apparent U.S. consumption was lower in interim 2017 after the expiration of the BTC (844.1 million gallons) than in interim 2016 (875.7 million gallons).¹¹⁷

3. Supply Considerations

There are at least 25 producers of biodiesel in the United States, with the six largest producers (***) accounting for well over half of domestic biodiesel production.¹¹⁸ The domestic industry was the largest supplier to the U.S. market over the POI. Its share of apparent U.S. consumption was 86.2 percent in 2014, 76.7 percent in 2015, 67.9 percent in 2016, 76.6 percent in interim 2016 and 75.9 percent in interim 2017.¹¹⁹

The domestic industry increased its production capacity over the POI from 1.4 billion gallons in 2014 to 1.8 billion gallons in 2016.¹²⁰ Its capacity totaled 885.0 million gallons in interim 2016 and 893.4 million gallons in interim 2017.¹²¹

Soybean oil was used to produce just over half of the biodiesel produced in the United States. Other products used for U.S. biodiesel production included tallow, lard, canola and used cooking oil.¹²² Biodiesel produced from these feedstocks often has a higher cloud point than biodiesel produced from soybean oil.¹²³ Some of the larger domestic producers are located near soybean processing plants that crush soybeans to produce animal feed and soybean oil.¹²⁴ Although much of the domestic industry's production capacity is located in the Midwest, there are also plants on the East, West, and Gulf coasts.¹²⁵

¹¹⁴ See CR at II-17 n.32; II-18, PR at II-11, II-11 n.32.

¹¹⁵ Tr. at 96 (Levy).

¹¹⁶ CR/PR at Table IV-11. When apparent U.S. consumption fell short of the RVO in 2014 and 2015, renewable diesel, a product distinct from biodiesel, was also used to fulfill the mandate. It is estimated, for example, that renewable diesel accounted for about *** percent of the mandate level in 2016. CR at II-16 n.29, PR at II-10 n.29.

¹¹⁷ CR/PR at Table IV-11.

¹¹⁸ CR/PR at Tables III-1 and III-5.

¹¹⁹ CR/PR at Table IV-11.

¹²⁰ CR/PR at Table III-5. ***. CR at III-8-III-9., PR at III-4.

¹²¹ CR/PR at Table III-5.

¹²² CR at III-11, PR at III-; CR/PR at Table III-6.

¹²³ CR/PR at Table IV-6

¹²⁴ CR/PR at II-1; Tr. at 158 (Frederico).

¹²⁵ See CR/PR at Fig. III-1.

Cumulated subject imports increased their share of apparent U.S. consumption from 7.0 percent in 2014 to 25.0 percent in 2016.¹²⁶ They accounted for 17.0 percent of apparent U.S. consumption in interim 2016 and 20.2 percent in interim 2017. One company, BioSphere, imported and used approximately *** the subject imports during 2016 at its affiliated truck stops.¹²⁷

Palm oil, which is generally not used as a biodiesel feedstock in the United States, is used for virtually all biodiesel production in Indonesia.¹²⁸ Because palm oil is the feedstock, biodiesel from Indonesia generally does not meet the RFS program's minimum greenhouse gas reduction threshold and therefore would not generate RINs when imported into the United States.¹²⁹ However, the EPA "grandfathered" two Indonesian production facilities (one owned by Wilmar and the other by Musim Mas) to continue supplying the U.S. market with biodiesel that qualifies as a renewable fuel and generates a D6 RIN upon importation.¹³⁰ All subject imports from Indonesia were from these facilities.¹³¹ In contrast, biodiesel produced in Argentina is made exclusively from soybean oil and generates a D4 RIN, as does the domestic like product.¹³²

Both domestic producers and importers generally sold biodiesel with RINs attached during the POI.¹³³ Domestic producers sold most of their biodiesel as B99 or B100 with RINs attached.¹³⁴ Importers generally sold subject imports from Argentina as B99 with RINs attached, although biodiesel from Argentina was also sold without RINs.¹³⁵ Importers sold subject imports from Indonesia as both B99 and B100 with or without RINs, though the product mix shifted towards B99 over the POI.¹³⁶

Nonsubject imports were relatively stable over the POI with their share of apparent U.S. consumption ranging from 3.9 percent to 7.1 percent.¹³⁷ Canada accounted for the majority of nonsubject imports.¹³⁸

4. Substitutability and Other Conditions

As discussed above in section IV.B., notwithstanding certain product distinctions, all biodiesel is produced to an ASTM specification and market participants indicated that subject

¹²⁶ CR/PR at Table IV-12.

¹²⁷ CR/PR at Table IV-1, CR at V-13 n.19, PR at V-8 n.19.

¹²⁸ CR at I-12 n.21, PR at I-10 n.21; CR/PR at Table VII-7.

¹²⁹ CR at VII-16, PR at VII-10.

¹³⁰ CR at V-29, VII-19, PR at V-15, VII-16.

¹³¹ CR at VII-13, PR at VII-9.

¹³² CR at V-6, PR at V-3-V-4; CR/PR at Table VII-3.

¹³³ See CR/PR at Tables III-9 and IV-8.

¹³⁴ See CR/PR at Table III-9.

¹³⁵ See CR/PR at Table IV-8.

¹³⁶ CR/PR at Table IV-8.

¹³⁷ CR/PR at Table IV-12.

¹³⁸ CR/PR at Table IV-12.

imports and the domestic like product are at least sometimes interchangeable.¹³⁹ Further, the record indicates that the largest purchaser/importer used subject imports from both countries and the domestic product for blending at its affiliated truck stops.¹⁴⁰ We therefore find that there is moderate-to-high substitutability between the subject imports and domestically produced biodiesel.¹⁴¹

Although there is no set formula for how biodiesel prices are determined, prices are a function of the value of the product itself, any associated RIN, and the availability of the BTC.¹⁴² Domestic producers and importers reported that federal and state incentives and tax credits were important factors in setting prices for biodiesel.¹⁴³

We find that price is an important factor in purchasing decisions. More purchasers ranked price as their top purchasing factor than any other factor.¹⁴⁴ Along with quality and availability, price was described as “very important” factor by almost all purchasers.¹⁴⁵ In response to a question regarding the significance of non-price factors when comparing the domestic like product and biodiesel from the subject countries, majorities of producers, importers, and purchasers reported that non-price factors are sometimes or never significant.¹⁴⁶ Further, 29 of 38 purchasers indicated that they always or usually purchase the lowest priced product.¹⁴⁷

The majority of sales of both of the domestic like product and subject imports are pursuant to short-term contracts.¹⁴⁸ Biodiesel prices are generally tied to a published petrodiesel price, such as the New York Mercantile Exchange Ultralow Sulphur Diesel (“USLD”)

¹³⁹ CR/PR at Table II-11. As discussed above, majorities of purchasers reported that the domestic product and subject imports from Argentina were comparable with respect to all non-price factors; majorities or pluralities of purchasers reported that the domestic product and subject imports from Indonesia were comparable to the domestic like product for all non-price factors except availability, discounts offered, RIN classification and RIN value. Majorities or pluralities of purchasers reported that the domestic like product was comparable to imports from each subject country with respect to reliability of supply and U.S. transportation costs. CR/PR at Table II-10.

Moreover, U.S. producers and importers also provided comparable estimates for inland transportation costs for their shipments of biodiesel. CR at V-3, PR at V-2-V-3. U.S. producers reported that their U.S. inland transportation costs ranged from 2 to 10 percent while importers reported costs of 1 to 8 percent. *Id.* A majority of purchasers indicated that inland transportation costs limited their ability to procure domestic product, and a minority of purchasers indicated the same for imports. CR at V-5, PR at V-3. Purchasers indicated that transportation costs vary by location and time of year. *Id.*

¹⁴⁰ As noted above, one of the largest importers, ***, imported biodiesel from *** and purchased biodiesel from domestic producers for blending with petrodiesel at its affiliated truck stops. CR at II-3, V-14 n.24, PR at II-2, V-9 n.24.

¹⁴¹ See also CR at II-23, PR at II-15.

¹⁴² CR at V-5, PR at V-3.

¹⁴³ CR/PR at Table V-1.

¹⁴⁴ CR/PR at Table II-7.

¹⁴⁵ CR/PR at Table II-8.

¹⁴⁶ CR/PR at Table II-13.

¹⁴⁷ CR at II-25, PR at II-16.

¹⁴⁸ CR/PR at Table V-3.

Futures index.¹⁴⁹ Biodiesel prices are influenced by petrodiesel prices, although biodiesel often sells at a premium due to the BTC and RINs.¹⁵⁰ Petrodiesel prices generally declined during 2014 and 2015 before increasing somewhat in 2016 and interim 2017.¹⁵¹

The price of soybean oil, a primary raw material for biodiesel production, fell by 12 percent overall during the POI, declining during 2014 and 2015, before increasing in 2016 and fluctuating in interim 2017.¹⁵² Raw materials accounted for between 85.1 and 87.7 percent of the cost of goods sold (COGS) during the POI.¹⁵³

C. Volume of Subject Imports

Section 771(7)(C)(i) of the Tariff Act provides that the “Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States, is significant.”¹⁵⁴

Cumulated subject imports increased during the period of investigation, with much of the increase occurring in the latter portion of the period.¹⁵⁵ The quantity of cumulated subject imports rose from 97.8 million gallons in 2014 to 267.6 million gallons in 2015, and then to 550.7 million gallons in 2016, an increase of 463.3 percent.¹⁵⁶ Cumulated subject imports were also higher in interim 2017 at 170.7 million gallons than in interim 2016, when they totaled 148.7 million gallons.¹⁵⁷

The volume of subject imports rose at a much faster rate than apparent U.S. consumption,¹⁵⁸ and subject imports therefore experienced significant gains in market share which came at the expense of the domestic industry.¹⁵⁹ Cumulated subject import market share rose from 7.0 percent in 2014 to 17.7 percent in 2015 and 25.0 percent in 2016, and was higher in interim 2017, when it was 20.2 percent, than in interim 2016, when it was 17.0 percent.¹⁶⁰ The domestic industry’s market share declined by a comparable amount from 2014 to 2016, when it fell 18.2 percentage points; its market share was 0.7 percentage points lower in interim 2017 than in interim 2016.¹⁶¹

¹⁴⁹ CR at V-8, PR at V-5.

¹⁵⁰ See CR/PR at Figs V-2, V-4-V-7.

¹⁵¹ See CR/PR at Fig. V-2.

¹⁵² CR at V-1-V-2, PR at V-; CR/PR at Fig V-1.

¹⁵³ CR/PR at VI-1.

¹⁵⁴ 19 U.S.C. § 1677(7)(C)(i).

¹⁵⁵ CR/PR at Table IV-2, Fig. IV-1.

¹⁵⁶ CR/PR at Tables IV-2 and C-1.

¹⁵⁷ CR/PR at Table IV-2.

¹⁵⁸ Apparent U.S. consumption increased by 58.0 percent from 2014 to 2016. CR/PR at Table C-1.

¹⁵⁹ See CR/PR at Table IV-12.

¹⁶⁰ CR/PR at Table IV-12.

¹⁶¹ The domestic industry’s market share, as measured by quantity, was 86.2 percent in 2014, 76.7 percent in 2015, 67.9 percent in 2016, 76.6 percent in interim 2016, and 75.9 percent in interim 2017. CR/PR at Table IV-12.

We are not persuaded by respondents' arguments that the increase in the volume of subject imports was not significant because the domestic industry was essentially operating at full capacity and could not supply more product.¹⁶² The record indicates that the domestic industry operated at only a moderate level of capacity utilization during the period; its utilization fell from 75.1 percent in 2014 to 73.5 percent in 2015 and then increased to 77.7 percent in 2016.¹⁶³ Most purchasers did not report significant supply constraints and reported that "availability" was comparable for the domestic product and subject imports from Argentina, and was superior for domestic product compared to subject imports from Indonesia.¹⁶⁴ While one of the largest importers argued that the domestic industry did not have product available for sale in 2016, the record does not support this contention.¹⁶⁵ Thus,

¹⁶² See Argentine Respondents' Prehearing Brief at 14-15; Argentine Respondents' Posthearing Brief at 4-5. Argentine Respondents also suggested that lack of feedstock limited the ability of the domestic producers to increase output. See Argentine Respondents' Posthearing Brief at 4. The record does not demonstrate that this was a factor in the market. Price trends of soybean oil, the largest feedstock for biodiesel production, do not suggest a shortage of this feedstock occurred during the POI. See CR/PR at Fig. V-1.

Argentine Respondents also argue that the fact that the EPA mandate exceeded apparent U.S. consumption during 2014 suggests that the domestic industry was actually unable to increase its output. Argentine Respondents' Final Comments at 3-4; Argentine Respondents' Prehearing Brief at 15-17. We disagree with this assessment. First, as discussed, renewable diesel, as well as biodiesel, can satisfy the biomass based diesel mandate, so it is not surprising that apparent U.S. consumption of biodiesel may fall short of the mandate in a particular year. Second, RIN compliance spans two years, so the mandate would not necessarily be satisfied by an obligated party or the market as whole in any particular year. CR at I-21, VI-2 n.4, PR at I-17, VI-2 n.4. Finally, the BTC was not in effect during 2014 and then the credit was retroactively made available so this may have led to reduced demand during most of the year. In any event, the fact that the industry increased its capacity utilization during 2016 to a level higher than 2014, CR/PR at Table III-5, suggests that it was not operating at full capacity in 2014, as argued by the Argentine Respondents.

¹⁶³ CR/PR at Table III-5. The industry's utilization rate of 68.2 percent in interim 2017 was also lower than its utilization rate of 71.9 percent in interim 2016. *Id.* The U.S. Energy Information Administration's Monthly Biodiesel Production Report shows even more modest utilization rates for the domestic industry. See CR/PR at Table III-4.

¹⁶⁴ Twenty-two of 37 purchasers reported no supply constraints. CR at II-12, PR at II-8. Those that did report constraints often reported costly transportation or logistics. See CR at II-13, PR at II-8. However, purchasers also indicated that U.S. transportation costs are similar for domestic product and the subject imports. See CR at V-3, PR at V-2 (2 to 10 percent for domestic product and 1 to 8 percent for subject imports). Moreover, at least half of reporting purchasers rated the domestic product as comparable to imports from each subject country with respect to reliability of supply and U.S. transportation costs. See CR/PR at Table II-10. Additionally, more purchasers reported that domestic product (as opposed to the imports from either subject country) was superior rather than inferior with respect to reliability. *Id.*

¹⁶⁵ See Tr. at 148-50 (Dawson). See also Argentine Respondents' Posthearing Brief at Exhibit 2 & Attachments A-C (Dawson Declaration and phone and text messages). The documentation provided by Argentine Respondents shows that, at most, domestic producers were unable at certain times to provide immediate delivery of biodiesel. By contrast, the lead times for Biosphere's purchases of (Continued...)

we disagree with respondents' contentions that the domestic industry was at full capacity, or that there were significant domestic supply constraints.¹⁶⁶

We likewise disagree with the contention that the influx of subject imports during the POI was the result of high U.S. transportation costs or a geographical mismatch between the location of domestic production and domestic consumption. While there is significant production of biodiesel in the Midwest, there is also substantial production in other areas, including Texas, the Northeast, the Southeast, and the West Coast.¹⁶⁷ Even in 2016 with the large influx of subject imports, almost 60 percent of U.S. shipments were shipped to areas outside the Midwest, indicating that the domestic industry was able to serve these areas.¹⁶⁸ The record also does not indicate that an inadequate infrastructure hindered distribution of U.S. biodiesel during the POI.¹⁶⁹ Moreover, subject imports are frequently shipped inland to purchasers, reducing any purported advantage of lower-cost ocean transport.¹⁷⁰

(...Continued)

subject imports are longer than those contemplated for its purchases from domestic producers. Biosphere indicated that "on average, the time between contract and shipment is around 4 to 6 months, but can be as long as 9 months." Argentine Respondents' Posthearing Brief, Exhibit 2, Dawson Declaration at 4.

The documentation provided by the Argentine Respondents also does not support the contention that "{i}n 2016, virtually all of the major U.S. suppliers were completely sold out and could not give us any additional volume." Dawson Declaration at 1. For instance, domestic producer ***. *Id.* at Attachment C. ***. Similarly, the documentation supplied with respect to for ***. *Id.* at Attachment C.

We also note that petitioner has provided declarations from domestic producers ***. Petitioner's Posthearing Brief at Exhibits A-E. For instance, in July 2016, ***. *Id.* at Exhibit A. ***. *Id.* at Exhibit B. ***. *Id.* at Exhibit D. ***. *Id.* at Exhibit E. Consequently, the record does not show that the domestic industry, which had a capacity utilization rate of 77.7 percent in 2016, could not have produced and shipped materially more biodiesel.

¹⁶⁶ We also find the Argentine Respondents' argument that EPA rules effectively require certain volumes of subject imports to be unconvincing. See Argentine Respondents' Prehearing Brief at 13-14 (citing *Renewable Fuel Standard Program: Standards for 2014, 2015, and 2016 and Biomass-Based Diesel Volume for 2017*, 81 Fed. Reg. 89746, 89789 (Dec. 14, 2015)). The EPA anticipated that, as its mandate increased, there would be increased imports of biodiesel in addition to domestically produced biodiesel, but it does not require a particular level of imports of biodiesel. Argentine Respondents also acknowledge that the EPA expects increased imports of renewable diesel, in addition to biodiesel imports, to fulfill the mandate. See 81 Fed. Reg. at 897890.

¹⁶⁷ See CR/PR at Fig. III-1. See also Petitioner's Prehearing Brief, Exhibit 5 at 22 "Biodiesel Distribution in the U.S. and Implications for RFS2 Volume Mandates," Bates White Economic Consulting (July 11, 2016).

¹⁶⁸ CR/PR at Table II-2. Further, 23.6 percent of the domestic industry's shipments were to the Central Southwest, where shipments of subject imports were concentrated. *Id.* Thus, subject imports were not shipped to areas unserved by the domestic industry.

¹⁶⁹ The Bates White Economic Consulting study states that "most of the major areas of diesel consumption in the U.S. already have a well-established biodiesel distribution infrastructure today that has accommodated rapid increases in biodiesel supply in recent years and can accommodate significant further increases in biodiesel supply and demand." *Id.* Petitioner's Prehearing Brief, Exhibit 5 at 20 (Continued...)

Based on the foregoing, we find that the cumulated volume of subject imports, and the increase in that volume, is significant in absolute terms and relative to consumption in the United States.

D. Price Effects of the Subject Imports

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

- (I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and
- (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.¹⁷¹

As explained in Section V.B.4., the record indicates that there is a moderate-to-high degree of substitutability between domestically produced biodiesel and biodiesel imported from Argentina and Indonesia, and that price is an important factor in purchasing decisions.

The Commission collected quarterly pricing data on four pricing products.¹⁷² Twenty-three U.S. producers and 11 importers provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.¹⁷³ Pricing data reported by these firms accounted for all or nearly all of domestic producers' commercial shipments of biodiesel and of U.S. commercial shipments of imports of biodiesel from Argentina and Indonesia in 2016.¹⁷⁴

(...Continued)

"Biodiesel Distribution in the U.S. and Implications for RFS2 Volume Mandates," Bates White Economic Consulting (July 11, 2016).

¹⁷⁰ Whether biodiesel is imported or domestically produced, infrastructure is required to transport biodiesel to end users—two-thirds of biodiesel is used for transportation fuel, mainly by truckers. CR at II-14, PR at II-9. Approximately half of the subject imports from Argentina were shipped over 100 miles to purchasers. CR at II-5, PR at II-3. Likewise, over half of the shipments of the domestic like product were shipped over 100 miles, though almost all subject imports from Indonesia were shipped fewer than 100 miles to purchasers. *Id.* The record also indicates that Biosphere imported and shipped biodiesel across the country to its 450 affiliated truck stops. Biosphere reports that *** percent of its trucked shipments are over 100 miles. CR at II-6 n.14, PR at II-4 n.14. Accordingly, the record indicates that neither the location of the domestic industry's production facilities nor the distribution infrastructure limited the ability of the domestic industry to serve the U.S. market.

¹⁷¹ 19 U.S.C. § 1677(7)(C)(ii).

¹⁷² The pricing products were: Product 1— B100 (pure biodiesel), including RIN value when sold as 1.5 RINs per gallon; Product 2— B100 (pure biodiesel), sold without RINs; Product 3— B99 (biodiesel blend containing 99.0%-99.9% biodiesel), including RIN value when sold as 1.5 RINs per gallon; and Product 4— B99 (biodiesel blend containing 99.0% - 99.9% biodiesel), sold without RINs. CR at V-13, PR at V-8.

¹⁷³ CR at V-14, PR at V-9.

¹⁷⁴ CR at V-14, PR at V-9.

Subject imports undersold the domestic product in 58 percent of the price comparisons and 60 percent of the time based on the quantity of sales. Specifically, subject imports undersold the domestic like product in 49 of 84 quarterly price comparisons (involving *** gallons of subject imports) at underselling margins that ranged from *** percent to *** percent.¹⁷⁵ Subject imports oversold the domestic industry's price in the 35 other comparisons (involving *** gallons of subject imports) at overselling margins that ranged from *** percent to *** percent.¹⁷⁶

Purchasers' responses to the lost sales lost revenue survey also confirm that the domestic industry lost sales to the subject imports due to this underselling.¹⁷⁷ Nine of the 14 purchasers that indicated they had purchased subject merchandise instead of domestic product reported that the lower prices of the subject imports accounted for their purchasing subject imports rather than the domestic product.¹⁷⁸ The 207.9 million gallons of subject imports acknowledged to have been purchased instead of domestic product because of lower prices were equivalent to 21.7 percent of the total quantity of subject imports purchased and imported by responding purchasers during 2014-16.¹⁷⁹

Based on the pervasive underselling of the domestic like product by cumulated subject imports, the degree of substitutability of the domestic like product and the subject imports, and the importance of price in purchasing decisions, we find that there has been significant underselling of the domestic like product by cumulated subject imports from Argentina and Indonesia.¹⁸⁰

We have also considered changes in prices of the domestic like product and subject imports over the POI. The pricing data for the domestic like product generally show decreasing

¹⁷⁵ CR/PR at Table V-11. As discussed above, a D6 RIN attaches to the subject imports from Indonesia rather than the more valuable D4 RIN attached to domestically produced biodiesel. Petitioner and the Indonesian Respondents agreed that the pricing data should be adjusted to take this difference into account. Accordingly, pricing data for subject imports from Indonesia for pricing products 1 and 3 were adjusted by subtracting the value of the D6 RIN and adding the value of the D4 RIN to account for the different RIN values. See CR at V-15, PR at V-9-V-10.

¹⁷⁶ CR/PR at Table V-11.

¹⁷⁷ CR/PR at Table V-9.

¹⁷⁸ CR at V-30, PR at V-16. Ten purchasers also reported that U.S. producers had reduced prices in order to compete with lower-priced imports from subject countries. CR at V-31, PR at V-16.

¹⁷⁹ Derived from CR/PR at Table V-13a and purchasers' questionnaire responses.

¹⁸⁰ We also observe that the direct imports costs incurred by ***, a firm that that directly imported large quantities of subject imports were lower than prices of domestically produced biodiesel during numerous quarters. See CR/PR at Table V-9. Argentine Respondents contend that the values are not comparable because the contracts for purchase of the subject imports and domestic product occurred at different times—often months apart. Argentine Respondents' Posthearing Brief at 10-11. Petitioner argues Biosphere's data are valid price comparisons at the same level of trade. Petitioner's Final Comments at 12-13. Biosphere declined to provide an estimate of the additional costs of directly importing the subject imports, and we therefore are unable to make direct comparisons of Biosphere's purchase cost data with the domestic producers' biodiesel prices. We note, however, that Biosphere's data are consistent with our conclusion that the underselling during the POI was significant.

prices in 2014 and 2015, followed by increasing prices in 2016 and interim 2017.¹⁸¹ Prices for the domestic product declined overall during the POI. Between the first quarter of 2014 and the second quarter of 2017, the prices for the four domestically produced pricing products declined by 8.1 to *** percent.¹⁸² Prices for the subject imports declined by amounts greater than the price declines of the domestic product for three of the four pricing products.¹⁸³

While prices for domestically produced products were increasing during the latter portion of the POI, they were not increasing as quickly as costs. In 2016, prices rose for soybean oil, the primary feedstock for biodiesel production.¹⁸⁴ Raw materials costs, on a per-unit basis increased from 2015 to 2016, and were higher in interim 2017 than interim 2016.¹⁸⁵ Other conditions of competition in the marketplace indicated that the industry should have been able to increase prices: apparent U.S. consumption was 45.7 percent higher during 2016 than 2015, and remained strong in interim 2017, when demand was restrained somewhat by the expiration of the BTC.¹⁸⁶

Nevertheless, despite these demand conditions, the ratio of both raw materials costs and COGS to net sales deteriorated after 2015: the ratio of raw materials costs to sales increased from 76.6 percent in 2015 to 79.3 percent in 2016, and was higher in interim 2017, when it was 90.3 percent, than in interim 2016, when it was 82.2 percent.¹⁸⁷ The ratio of COGS to net sales, increased from 87.6 percent in 2015 to 89.5 percent in 2016, and was higher in interim 2017, when it was 102.3 percent, than in interim 2016, when it was 94.1 percent.¹⁸⁸ Given the strong demand conditions, we find that the increasing volume of subject imports were a significant cause of the industry's inability in 2016 and interim 2017 to raise prices commensurately with costs.¹⁸⁹ Consequently, we find that subject imports prevented price

¹⁸¹ CR/PR at Tables V-5-V-8 and Figs. V-4-V-7.

¹⁸² CR/PR at Table V-10.

¹⁸³ See CR/PR at Table V-10.

¹⁸⁴ CR/PR at Figure V-1.

¹⁸⁵ CR/PR at Table VI-1.

¹⁸⁶ See CR/PR at Table C-1.

¹⁸⁷ CR/PR at Table VI-1.

¹⁸⁸ CR/PR at Table VI-1. We recognize that the domestic industry's COGS to net sales ratio declined overall during the three-year period from 90.8 percent in 2014 to 89.5 percent in 2016. CR/PR at Table VI-1. However, given the large increase in apparent U.S. consumption that occurred during 2016 relative to 2015, we would have expected the domestic industry to have been able to obtain prices during 2016 that would have at least enable it to recover its increased raw material costs. It was not able to do so despite demand surging and the BTC being in effect during all of 2016.

¹⁸⁹ We recognize that the unavailability of the BTC in 2017 resulted in lower net sales revenue in interim 2017, and therefore contributed to interim 2017 net sales values being lower than that for interim 2016 on both an aggregate and per unit basis. The record indicates that the BTC, when in place, reduced biodiesel prices because some portion of the credit is shared with purchasers through lower prices. CR at VI-3, PR at VI-2-VI-3. Consequently, when the BTC was no longer available, the domestic industry should have obtained higher prices to compensate for the loss of the BTC, particularly given that consumption of the product to a large extent is governed by EPA mandate rather than commercial market forces. Commercial unit sales values did increase in interim 2017 relative to interim 2016, but the increase was not large enough to make up for the loss of the BTC. See CR at Table VI-1. Given the (Continued...)

increases for the domestic like product that would have otherwise have occurred to a significant degree.

We consequently find that the subject imports had significant price effects. They significantly undersold the domestic like product and this underselling led to a significant shift in market share away from the domestic industry and toward subject imports throughout the POI.¹⁹⁰ They also prevented the domestic industry from increasing prices commensurately with costs in 2016 and interim 2017.

E. Impact of the Subject Imports

Section 771(7)(C)(iii) of the Tariff Act provides that in examining the impact of subject imports, the Commission “shall evaluate all relevant economic factors which have a bearing on the state of the industry.”¹⁹¹ These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, gross profits, net profits, operating profits, cash flow, return on investment, return on capital, ability to raise capital, ability to service debts, research and development, and factors affecting domestic prices. No single factor is dispositive and all relevant factors are considered “within the context of the business cycle and conditions of competition that are distinctive to the affected industry.”¹⁹²

The domestic industry’s performance indicators were generally lackluster over the POI despite a large increase in apparent U.S. consumption. By underselling the domestic product, subject imports captured market share from the domestic industry. As a result, the industry’s market share declined steadily, and the industry’s production and sales grew more slowly than did apparent U.S. consumption.¹⁹³ The industry also suffered declining profit margins in 2016

(...Continued)

conditions of competition, increasing sales of low-priced subject imports were a significant cause of the domestic industry’s inability to obtain larger price increases than it did in interim 2017. This is corroborated by testimony from Paul Soanes, the President and CEO of RBF, that subject imports, which continued to increase despite reduced demand, placed a ceiling on prices through the first half of 2017, Tr. at 114-15 (Soanes), but after preliminary duties were imposed in August 2017, the domestic industry was able to increase prices to cover its costs. *Id.*; Tr. at 46 (Rehagen). See also Tr. at 66 (Phillips).

¹⁹⁰ As noted above, the domestic industry’s market share declined by 18 percentage points during 2014-2016. CR at Table IV-12. It was also lower in interim 2017 than interim 2016. *Id.*

¹⁹¹ 19 U.S.C. § 1677(7)(C)(iii); see also SAA at 851 and 885 (“In material injury determinations, 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 also may demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports.”).

¹⁹² 19 U.S.C. § 1677(7)(C)(iii). This provision was amended by the Trade Preferences Extension Act of 2015, Pub. L. 114-27.

¹⁹³ As measured by quantity, the market share of the domestic industry declined from 86.2 percent in 2014 to 76.7 percent in 2015 and 67.9 percent in 2016. CR/PR at Table IV-12. Its share was 76.6 percent in interim 2016 and 75.9 percent in interim 2017. *Id.*

and interim 2017 when it was unable to increase prices for its product commensurately with its increases in costs.

Measures of the industry's output generally increased, but did so to a degree significantly below the growth of apparent U.S. consumption. Increases in the industry's production, U.S. shipments, and total sales were not commensurate with the 58 percent increase in apparent U.S. consumption from 2014 to 2016.¹⁹⁴ The domestic industry added to its capacity during the POI.¹⁹⁵ The industry's capacity utilization rate showed only modest improvement from 2014 to 2016.¹⁹⁶ The domestic industry's inventories increased from 2014 to 2016.¹⁹⁷

The domestic industry's production-related workers, wages paid, and total hours worked increased over the POI, but the average hours worked per worker declined.¹⁹⁸ The industry's productivity increased overall from 2014 to 2016.¹⁹⁹

The industry's financial performance declined during the latter portion of the period of investigation.²⁰⁰ Tracking trends in production and shipments, sales revenues increased from

¹⁹⁴ Production totaled 1.0 billion gallons in 2014, 1.1 billion gallons in 2015, and 1.4 billion gallons in 2016. CR/PR at Table III-5. Production was 636.3 million gallons in interim 2016 and 609.3 million gallons in interim 2017. *Id.* The industry's U.S. shipments were 1.0 billion gallons in 2014, 1.0 billion gallons in 2015 and 1.4 billion gallons in 2016. CR/PR at Table III-8. U.S. shipments were 619.8 million gallons in interim 2016 and 581.7 million gallons in interim 2017. *Id.* Total net sales were 1.1 billion gallons in 2014, 1.1 billion gallons in 2015 and 1.4 billion gallons in 2016. CR/PR at Table VI-1. Total net sales were 641.5 million gallons in interim 2016 and 601.8 million gallons in interim 2017. *Id.*

¹⁹⁵ The domestic industry increased its capacity from 1.4 billion gallons in 2014 to 1.8 billion gallons in 2016. Its capacity totaled 885.0 million gallons in interim 2016 and 893.4 million gallons in interim 2017. CR/PR at Table III-5.

¹⁹⁶ Capacity utilization fell from 75.1 percent in 2014 to 73.5 percent in 2015, and then increased to 77.7 percent in 2016. CR/PR at Table III-5. Its utilization rate was 71.9 percent in interim 2016 and 68.2 percent in interim 2017. *Id.*

¹⁹⁷ U.S. producers' end-of-period inventories were 31.1 million gallons in 2014, 51.9 million gallons in 2015, and 39.4 million gallons in 2016. CR/PR at Table III-11. Their end-of-period inventories were 54.8 million gallons in interim 2016 and 54.6 million gallons in interim 2017. *Id.*

¹⁹⁸ The industry's number of production-related workers increased from 960 in 2014 to 1,045 in 2015 and 1,215 in 2016. CR/PR at Table III-13. Workers totaled 1,128 in interim 2016 and 1,277 in interim 2017. Hours worked increased from 2.1 million in 2014 to 2.2 million in 2015 and 2.6 million in 2016. *Id.* Hours worked totaled 1.2 million in interim 2016 and 1.3 million in interim 2017. *Id.* The wages the industry paid to its workers increased from \$60.4 million in 2014 to \$66.5 million in 2015, and \$74.8 million in 2016. *Id.* Wages paid were \$35.4 million in interim 2016 and \$41.6 million interim 2017. *Id.* Average hours worked per worker decreased from 2,173 in 2014 to 2,112 in 2015 and then rose to 2,125 in 2016. *Id.* They were 1,048 in interim 2016 and 1,042 in interim 2017. *Id.*

¹⁹⁹ The industry's productivity measured in gallons per hour decreased from 499.4 in 2014 to 485.3 in 2015, and then increased to 536.4 in 2016. CR/PR at Table III-13. Its productivity was 538. gallons per hour in interim 2016 and 458.1 gallons per hour in interim 2017. *Id.*

²⁰⁰ We have treated revenue from the BTC and independent RINs as ordinary sales revenue and the revenue is therefore included in total net sales. State tax credits, municipal tax credits, and other incentives are considered "other income." See CR at VI-4-VI-5, PR at VI-2-VI-3; CR/PR at Table VI-1. See (Continued...)

2014 to 2016, and were lower in interim 2017 than interim 2016.²⁰¹ As previously discussed, the industry's ratio of COGS to net sales was high and increased during the latter portion of the POI.²⁰² While the industry reported increasing absolute gross profits, operating income, and net income over the three full years of the POI, the increases in operating income and net income were modest relative to the increase in apparent U.S. consumption during this period.²⁰³ Additionally, increasing revenues from the BTC enhanced the domestic industry's profitability during this period and exceeded operating income during three full years of the POI before the BTC lapsed at the end of 2016.²⁰⁴ Even before the lapse of the BTC, the domestic industry experienced adverse effects from the subject imports. The industry's ratio of operating income declined from 2015 to 2016, while the domestic industry's prices were suppressed by the increasing volume of low-priced subject imports.²⁰⁵ When the BTC was not in effect in interim 2017, the industry reported gross, operating and net losses as the industry's prices were not at a level that would permit the industry to recover its costs.²⁰⁶ Multiple domestic producers also reported negative effects from the subject imports that impacted their

(...Continued)

also CR at VI-4 n.10, PR at VI-3 n.10 (noting that 14 of 24 firms stated that they classified BTC revenue as sales revenue while 9 of 18 firms responded that revenue from sales of independent RINs is considered sales revenue). The 14 that classified BTC as sales revenue accounted for more than 62 percent of the domestic industry's commercial sales. We also note that the Indonesian Respondents urged the Commission to treat revenue from the BTC as ordinary revenue arising from a component of sales, rather than as a "below the line" item as it did in the preliminary phase of the investigations. See Indonesian Respondents' Comments on Draft Questionnaires (Sept. 5, 2016) at 2-4.

²⁰¹ The domestic industry's total sales revenues fell from \$3.9 billion in 2014 to \$3.3 billion in 2015 and then increased to \$4.3 billion in 2016. CR/PR at Table VI-1. Total sales revenues were \$1.8 billion in interim 2016 and \$1.6 billion in interim 2017. *Id.*

²⁰² The domestic industry's COGS as a ratio to total net sales decreased from 90.8 percent in 2014 to 87.6 percent in 2015, but then increased to 89.5 percent in 2016. CR/PR at Table VI-1. The ratio was 94.1 percent in interim 2016 and 102.3 percent in interim 2017. *Id.*

²⁰³ The domestic industry's gross profits increased from \$356.5 million in 2014 to \$412.1 million in 2015 and \$456.4 million in 2016. Operating income increased from \$209.1 million in 2014 to \$254.6 million in 2015 and \$271.8 million in 2016. Net income fell from \$215.7 million in 2014 to \$192.9 million in 2015 and then increased to \$233.8 million in 2016. CR/PR at Table VI-1.

²⁰⁴ Revenues from the BTC increased from \$333.5 million in 2014 to \$426.0 million in 2015 and \$898.2 million in 2016. CR/PR at Table VI-1. BTC revenues totaled \$403.4 million in interim 2016 but were only \$*** in interim 2017. *Id.*

²⁰⁵ The domestic industry's operating income margin increased from 5.4 percent in 2014 to 7.6 percent in 2015, and then fell to 6.3 percent in 2016. CR/PR at Table VI-1.

²⁰⁶ See CR/PR at Table VI-1. The industry's gross profit was \$108.1 million in interim 2016, but it reported a gross loss of \$38.1 million in interim 2017. The industry reported operating income of \$28.3 million in interim 2016 and an operating loss of \$126.0 million in interim 2017. It reported net income of \$9.6 million in interim 2016 and a net loss of \$117.4 million in interim 2017. CR/PR at Table VI-1. The industry's operating income ratio was 1.5 percent in interim 2016 and negative 7.7 percent in interim 2017. *Id.*

ability to invest in expansion projects, reduced their capital investments, or led to the denial or rejection of investment proposals.²⁰⁷

In sum, increasing and significant volumes of low-priced subject imports that were substitutable with the domestic like product entered the U.S. market. Subject import market share also increased throughout the period of investigation as subject imports pervasively undersold the domestic like product and took market share from the domestic industry. The reduced domestic industry market share in turn led to lower production, shipments, and sales than would have otherwise would have occurred given the strong growth in apparent U.S. consumption.

Because the domestic industry, despite having the ability to increase its production and shipments, was unable to increase its shipments commensurately with growing demand, it lost revenues that it otherwise would have obtained. The domestic industry also suffered reduced revenues during the latter portion of the POI due to the price suppression caused by the subject imports. Thus, as a result of the significant volume of low-priced subject imports, the domestic industry's output and revenues were lower than they would have been otherwise.²⁰⁸ The lost revenues were reflected in declining operating margins after 2015, and reduced gross profits, operating income, and net income during interim 2017.²⁰⁹

We have considered whether there are other factors that may have had an impact on the domestic industry during the POI to ensure that we are not attributing injury from such other factors to subject imports. As discussed above, apparent U.S. consumption increased

²⁰⁷ See CR/PR at Table VI-8. Negative effects were reported by large domestic producers such as ***. *Id.* The industry's capital expenditures declined from \$116.2 million in 2014 to \$*** in 2015 and \$89.6 million in 2016. CR/PR at Table VI-5. Capital expenditures were \$56.9 million in interim 2016 and 30.7 million in interim 2017. The industry's research and development expenses decreased from \$*** in 2014 to \$*** in 2015 and \$*** in 2016. *Id.* Research and development expenses were \$*** in interim 2016 and \$*** in interim 2017. *Id.*

²⁰⁸ Indonesian Respondents questioned changes in domestic producer ***. Indonesian Respondents' Prehearing Brief at 44. Commission staff ***. See CR/PR at VI-1 n.1.

²⁰⁹ We have considered respondents' argument that subject imports did not cause material injury to the domestic industry because the industry increased its output and many of the industry's financial indicators improved over much of the POI. Indonesian Respondents' Prehearing Brief at 41-44; Argentine Respondents' Prehearing Brief at 38-41. We have found that, given increased demand during the POI, the domestic industry could have materially increased its output if not for the presence of increasing volumes of subject imports. We also find that although the industry did not report losses until the BTC was no longer in place in interim 2017, the industry's material loss of output during the POI and its reduced prices due to significant price suppression late in the POI resulted in reduced profits and margins for the domestic industry. Further, we do not find the industry's reported increasing operating income to be controlling in light of the statutory instruction that "{t}he Commission may not determine that there is no material injury or threat of material injury to an industry in the United States merely because that industry is profitable or because the performance of that industry has recently improved." 19 U.S.C. § 1677(7)(J).

during most of the POI.²¹⁰ Although apparent U.S. consumption was lower during interim 2017 due to the expiration of the BTC, the loss of market share that occurred both during the interim period and the earlier portions of the POI cannot be explained by the relatively modest reduction in demand that occurred during interim 2017.²¹¹

While nonsubject imports maintained a nontrivial presence in the U.S. market, their market share, unlike that of the subject imports, increased very modestly over the three full years of the POI and was lower in interim 2017 than interim 2016.²¹² Moreover, imports of biodiesel from Canada, by far the largest source of nonsubject imports, were priced higher than the subject imports in the majority of comparisons.²¹³ Thus, other factors cannot explain the loss in market share, output, and revenues that we have attributed to the cumulated subject imports.

VI. Conclusion

For the reasons stated above, we determine that an industry in the United States is materially injured by reason of subject imports of biodiesel that are subsidized by the governments of Argentina and Indonesia.

²¹⁰ Apparent U.S. consumption of biodiesel increased from 1.4 billion gallons in 2014 to 1.5 billion gallons in 2015 and 2.2 billion gallons in 2016. CR/PR at Table IV-11. Apparent U.S. consumption was 875.7 million gallons in interim 2016 and 844.1 million gallons in interim 2017. *Id.*

²¹¹ CR/PR at Table C-1 (3.6 percent reduction in apparent U.S. consumption in interim 2017 relative to interim 2016).

²¹² As measured by quantity, nonsubject import market share was 6.8 percent in 2014, 5.6 percent in 2015, and 7.1 percent in 2016. CR/PR at Table IV-12. Their share was 6.4 percent in interim 2016 and 3.9 percent in interim 2017. *Id.*

²¹³ See CR/PR at Table E-5. *** accounted for the majority of the nonsubject imports from Canada. CR/PR at Table IV-1.

PART I: INTRODUCTION

BACKGROUND

These investigations result from petitions filed with the U.S. Department of Commerce (“Commerce”) and the U.S. International Trade Commission (“USITC” or “Commission”) by the National Biodiesel Board Fair Trade Coalition, Washington DC, on March 23, 2017, alleging that an industry in the United States is materially injured and threatened with material injury by reason of subsidized and less-than-fair-value (“LTFV”) imports of biodiesel¹ from Argentina and Indonesia. The following tabulation provides information relating to the background of these investigations.²

Effective date	Action
March 23, 2017	Petition filed with Commerce and the Commission; institution of the Commission’s investigations (82 FR 15541, March 29, 2017)
April 12, 2017	Commerce’s notice of initiation of antidumping investigations (82 FR 18428, April 19, 2017) and countervailing duty investigations (82 FR 18423, April 19, 2017)
May 8, 2017	Commission’s preliminary determinations (82 FR 22155, May 12, 2017)
May 26, 2017	Postponement of Commerce’s preliminary countervailing duty determinations (82 FR 25773, June 5, 2017)
August 15, 2017	Postponement of Commerce’s preliminary antidumping duty determinations (82 FR 38670, August 15, 2017)
August 28, 2017	Commerce’s preliminary countervailing duty determinations (Indonesia: 82 FR 40746; Argentina: 82 FR 40748); scheduling of final phase of the Commission’s investigations (82 FR 43999, September 20, 2017)
October 31, 2017	Commerce’s preliminary antidumping duty determinations (Argentina: 82 FR 50391; Indonesia: 82 FR 50379)
November 9, 2017	Commission’s hearing
November 16, 2017	Commerce’s final countervailing duty determinations (Argentina: 82 FR 53477; Indonesia: 82 FR 53471)
December 5, 2017	Commission’s vote (countervailing duty)
December 21, 2017	Commission’s views (countervailing duty)

¹ See the section entitled “The Subject Merchandise” in *Part I* of this report for a complete description of the merchandise subject in this proceeding.

² Pertinent *Federal Register* notices are referenced in appendix A, and may be found at the Commission’s website (www.usitc.gov). Appendix B contains a list of witnesses appearing at the Commission’s hearing.

STATUTORY CRITERIA AND ORGANIZATION OF THE REPORT

Statutory criteria

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

shall consider (I) the volume of imports of the subject merchandise, (II) the effect of imports of that merchandise on prices in the United States for domestic like products, and (III) the impact of imports of such merchandise on domestic producers of domestic like products, but only in the context of production operations within the United States; and. . . may consider such other economic factors as are relevant to the determination regarding whether there is material injury by reason of imports.

Section 771(7)(C) of the Act (19 U.S.C. § 1677(7)(C)) further provides that—³

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

³ Amended by PL 114-27 (as signed, June 29, 2015), Trade Preferences Extension Act of 2015.

In addition, Section 771(7)(J) of the Act (19 U.S.C. § 1677(7)(J)) provides that—⁴

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

Organization of report

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

MARKET SUMMARY

Biodiesel is used as a partial or full substitute for petroleum-based diesel (“diesel”). The leading U.S. producers of biodiesel include Archer Daniels Midland Company (“ADM”), Ag Processing Inc., Cargill Inc., RBF Port Neches LLC (“RB Fuels”), and Renewable Energy Group, Inc. (“REG”), while leading producers of biodiesel outside the United States include LDC Argentina SA and T6 Industrial SA of Argentina and PT Wilmar Bioenergi Indonesia and PT Musim Mas of Indonesia. The leading U.S. importers of biodiesel from Argentina are ***, while the leading importers of biodiesel from Indonesia are ***. Leading importers of biodiesel from nonsubject countries (primarily Canada) are ***. U.S. purchasers of biodiesel are firms that generally blend for end-use or trade; leading purchasers include ***.

Apparent U.S. consumption of biodiesel totaled approximately 2.2 billion gallons (\$5.7 billion) in 2016. Currently, at least 25 firms are known to produce biodiesel in the United States. U.S. producers’ U.S. shipments of biodiesel totaled approximately 1.5 billion gallons (\$3.6 billion) in 2016, and accounted for 67.9 percent of apparent U.S. consumption by quantity and 62.9 percent by value. U.S. imports from subject sources totaled 550.7 million gallons (\$1.6 billion) in 2016 and accounted for 25.0 percent of apparent U.S. consumption by quantity and 28.4 percent by value. U.S. imports from nonsubject sources totaled 155.5 million gallons (\$496.3 million) in 2016 and accounted for 7.1 percent of apparent U.S. consumption by quantity and 8.7 percent by value.

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

SUMMARY DATA AND DATA SOURCES

A summary of data collected in these investigations is presented in appendix C, table C-1. Except as noted, U.S. industry data are based on questionnaire responses of 25 firms that accounted for at least 90 percent of U.S. production of biodiesel during 2016.^{5 6} U.S. imports are based on official Commerce statistics and questionnaire responses received from 14 companies, representing a large majority of U.S. imports from Argentina and from Indonesia in 2016 under HTS statistical reporting numbers: 3826.00.1000 and 3826.00.3000.

Useable responses to the Commission's foreign producers' or exporters' questionnaire were received from 10 firms in Argentina, whose exports to the United States accounted for approximately 87 percent of U.S. imports of biodiesel from Argentina during 2016.⁷ According to questionnaire responses, the estimated combined production of biodiesel in Argentina of the 8 responding producers was approximately 42.7 percent of overall production of biodiesel in Argentina in 2016. Useable responses to the Commission's foreign producers' or exporters' questionnaire were received from four firms in Indonesia, whose exports to the United States accounted for all U.S. imports of biodiesel from Indonesia during 2016. According to estimates provided by these four producers in Indonesia, their combined production of biodiesel in Indonesia accounted for approximately *** percent of overall production of biodiesel in Indonesia in 2016.⁸

PREVIOUS AND RELATED INVESTIGATIONS

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

NATURE AND EXTENT OF SUBSIDIES AND SALES AT LTFV

Subsidies

On November 16, 2017, Commerce published a notice in the *Federal Register* of its final determination of countervailable subsidies for producers and exporters of product from Argentina

⁵ The coverage estimate is based on total 2016 production of biodiesel in the United States of 1,566 million gallons reported by EIA. U.S. Energy Information Administration, Monthly Biodiesel Production Report, December 2016 found at https://www.eia.gov/biofuels/biodiesel/production/archive/2016/2016_12/biodiesel.php.

⁶ *** provided an incomplete questionnaire response.

⁷ Based on ***.

⁸ Wilmar and Musim Mas account for 100 percent of the EPA grandfathered volume that is qualified to produce biodiesel eligible to generate D6 RINs upon importation into the U.S market under the RFS program.

and Indonesia.⁹ Tables I-1 and I-2 present Commerce’s findings of subsidization of biodiesel in Argentina and Indonesia, respectively.

Table I-1

Biodiesel: Commerce’s preliminary and final subsidy determinations with respect to imports from Argentina

Entity	Preliminary countervailable subsidy margin (percent)	Final countervailable subsidy margin (percent)
LDC Argentina S.A.	50.29	72.28
Vicentin S.A.I.C.	64.17	71.45
All others	57.01	71.87

Source: 82 FR 40748, August 28, 2017 and 82 FR 53477, November 16, 2017.

Table I-2

Biodiesel: Commerce’s preliminary and final subsidy determinations with respect to imports from Indonesia

Entity	Preliminary countervailable subsidy margin (percent)	Final countervailable subsidy margin (percent)
PT Musim Mas	68.28	64.73
Wilmar Trading PTE Ltd.	41.06	34.45
All others	44.92	38.95

Source: 82 FR 40746, August 28, 2017 and 82 FR 53471, November 16, 2017.

Sales at LTFV

On October 31, 2017, Commerce published a notice in the Federal Register of its preliminary determination of sales at LTFV with respect to imports from Argentina and Indonesia.¹⁰ Tables I-3 and I-4 present Commerce’s preliminary dumping margins with respect to imports of product from Argentina and Indonesia.

Table I-3

Biodiesel: Commerce’s preliminary weighted-average LTFV margins with respect to imports from Argentina

Entity	Estimated weighted-average dumping margin (percent)	Cash deposit rate (adjusted for subsidy offset(s)) (percent)
LDC Argentina S.A.	54.36	54.36
Vicentin S.A.I.C.	70.05	69.91
All others	63.00	62.92

Source: 82 FR 50391, October 31, 2017.

⁹ *Biodiesel From the Republic of Argentina: Final Affirmative Countervailing Duty Determination*, 82 FR 53477, November 16, 2017. *Biodiesel From the Republic of Indonesia: Final Affirmative Countervailing Duty Determination*, 82 FR 53471, November 16, 2017.

¹⁰ *Biodiesel From Argentina: Preliminary Affirmative Determination of Sales at Less Than Fair Value, Preliminary Affirmative Determination of Critical Circumstances, in Part*, 82 FR 50391, October 31, 2017. *Biodiesel From Indonesia: Preliminary Affirmative Determination of Sales at Less Than Fair Value*, 82 FR 50379, October 31, 2017.

**Table I-4
Biodiesel: Commerce’s preliminary weighted-average LTFV margins with respect to imports from Indonesia**

Entity	Estimated weighted-average dumping margin (percent)
PT Musim Mas	50.71
Wilmar Trading PTE Ltd.	50.71
All others	50.71

Source: 82 FR 50379, October 31, 2017.

THE SUBJECT MERCHANDISE

Commerce’s scope

Commerce has defined the scope of this investigation as follows:

Biodiesel, which is a fuel comprised of mono-alkyl esters of long chain fatty acids derived from vegetable oils or animal fats, including biologically-based waste oils or greases, and other biologically based oil or fat sources. This investigation covers biodiesel in pure form (B100) as well as fuel mixtures containing at least 99 percent biodiesel by volume (B99). For fuel mixtures containing less than 99 percent biodiesel by volume, only the biodiesel component of the mixture is covered by the scope of this investigation.

Biodiesel is generally produced to American Society for Testing and Materials International (ASTM) D6751 specifications, but it can also be made to other specifications. Biodiesel commonly has one of the following Chemical Abstracts Service (CAS) numbers, generally depending upon the feedstock used: 67784-80-9 (soybean oil methyl esters); 91051-34-2 (palm oil methyl esters); 91051-32-0 (palm kernel oil methyl esters); 73891-99-3 (rapeseed oil methyl esters); 61788-61-2 (tallow methyl esters); 68990-52-3 (vegetable oil methyl esters); 129828-16-6 (canola oil methyl esters); 67762-26-9 (unsaturated alkylcarboxylic acid methyl ester); or 68937-84-8 (fatty acids, C12–C18, methyl ester).¹¹

Tariff treatment

Based upon the scope set forth by Commerce, information available to the Commission indicates that B100 biodiesel subject to these investigations is currently provided for in subheading 3826.00.10 of the Harmonized Tariff Schedule of the United States (HTSUS), while B99

¹¹ *Biodiesel From the Republic of Argentina: Final Affirmative Countervailing Duty Determination*, 82 FR 53477, November 16, 2017.

biodiesel is currently provided for in HTSUS subheading 3826.00.30.¹² Rates of duty for these provisions are 4.6 percent and 6.5 percent ad valorem, respectively, and apply to products of both respondent countries. Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

THE PRODUCT

Manufacturing processes

Biodiesel¹³ is a fuel made from many types of vegetable oils, animal fats, and used cooking oils. It is produced by reacting the triglycerides found in these oils and fats with methanol and an alkaline catalyst in a process called transesterification.¹⁴ The resulting products are biodiesel (in the form of fatty acid methyl esters (“FAMEs”)) and glycerol (more commonly known in the United States as glycerin) (figure I-1).¹⁵

¹² Although subheading 3826.00.10 is designated as covering eligible goods for purposes of the Generalized System of Preferences, Indonesia is excluded from duty-free entry for that rate line, and Argentina is excluded from the program as of the date of this report.

¹³ Biodiesel is defined by the U.S. Environmental Protection Agency and ASTM International as a fuel comprised of mono-alkyl esters of long-chain fatty acids derived from vegetable oils or animal fats. U.S. Energy Information Agency, “EIA-22M: Monthly Biodiesel Production Survey Instructions,” https://www.eia.gov/survey/form/eia_22m/instructions.pdf; petition, exhibit GEN-12.

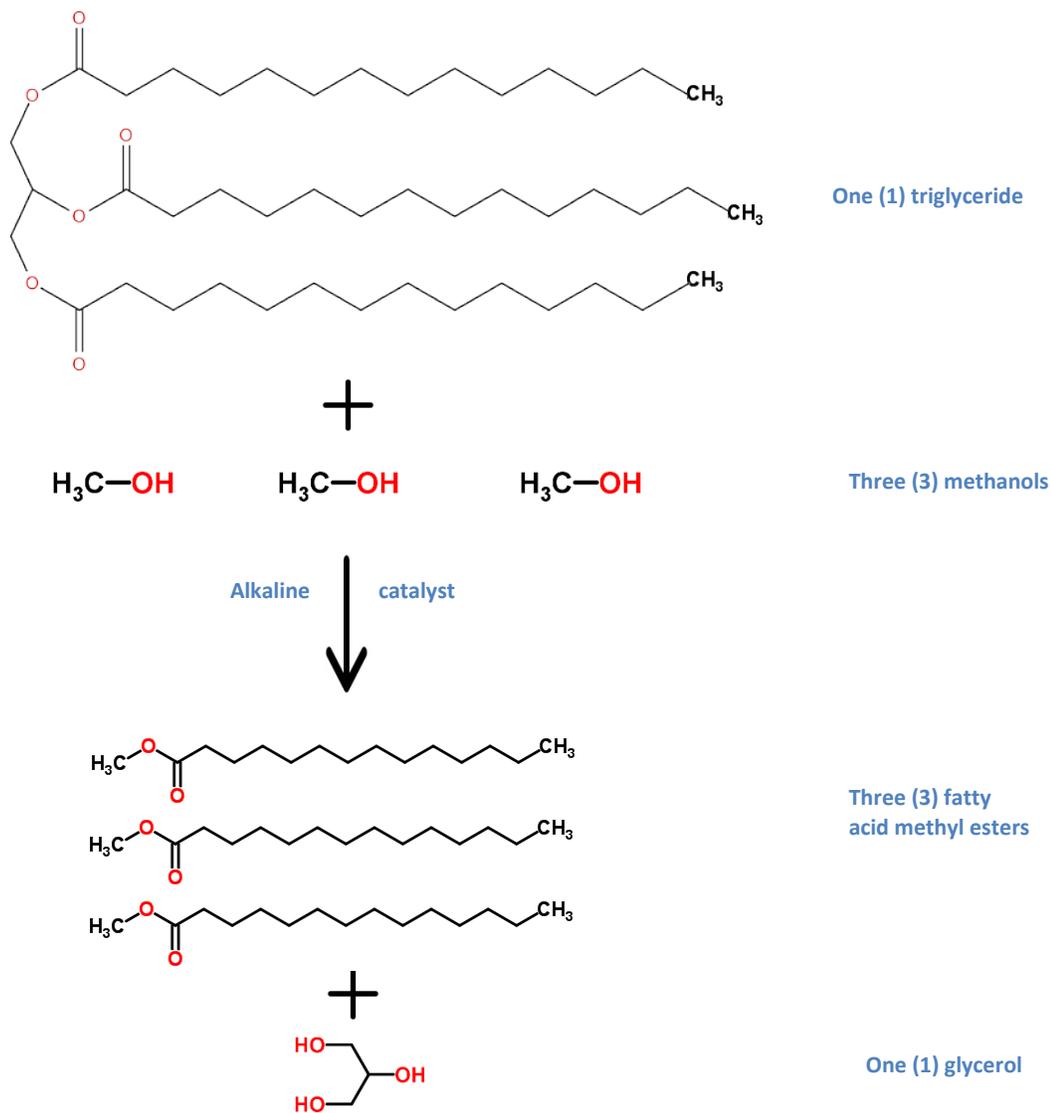
¹⁴ Transesterification using acid catalysts instead of alkaline (base) catalysts, although beneficial in terms of the lower-quality inputs that can be tolerated, is a slower process that requires specialty equipment to prevent corrosion. ***.

¹⁵ Glycerol, with a chemical formulation of $C_3H_8O_3$ and a CAS registry number of 56-81-5, is the primary by-product/co-product (***) percent by weight) of the biodiesel production process and is mixed with a number of nonglycerol contaminants as of the moment when the chemical reaction making biodiesel ends. ***. This name is used throughout the HTS and commercially worldwide except in the United States.

The term “glycerin” is used without distinction in the U.S. industry to refer to the many grades of glycerol mixtures available, from crude glycerin (80 percent and less glycerol) to technical-grade glycerin (95–96 percent) to USP-grade glycerin (99.5 percent and 99.7 percent are most common). USP-grade glycerin has the most flexibility in terms of sales and use because it meets any lower-grade requirements. ***.

Biodiesel producers are the largest source of glycerin supply in the world and sell crude glycerin to processors or purify it themselves for sale. Glycerin is used in personal and oral care products, food and beverages, tobacco, pharmaceuticals, and chemical production. Relatedly, when biodiesel production is high, prices for crude and refined glycerin can drop. ***.

Figure I-1
Biodiesel: Transesterification process

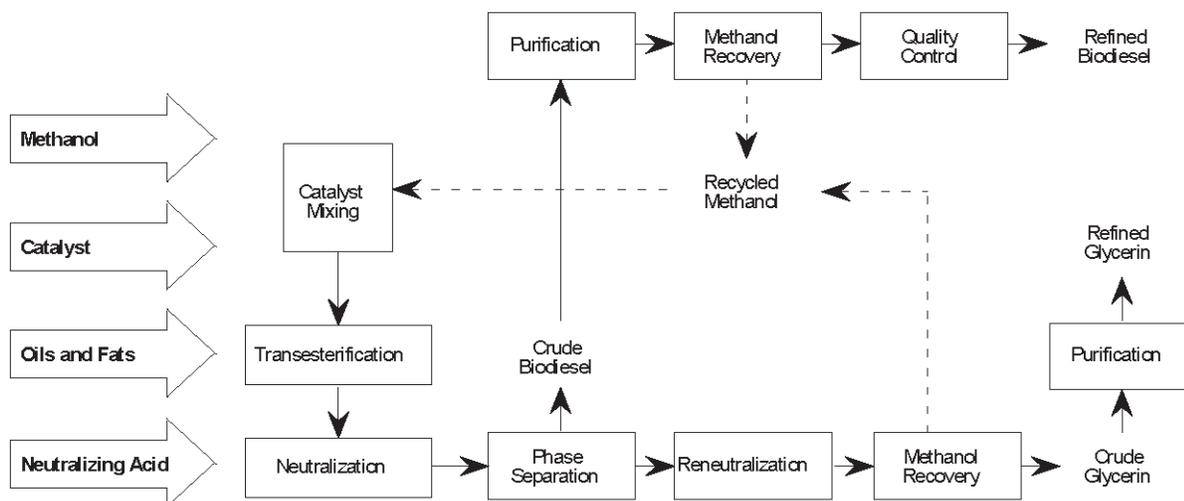


Note: This process example is specific for the triglyceride input trimyristin (carbon chain length of 14), producing the FAME methyl myristate (carbon chain length of 14). Use of other triglyceride inputs will produce other FAMES corresponding to the length of the input carbon chain.

Source: ChemSpider, "Glycerol," March 28, 2017, <http://www.chemspider.com/Chemical-Structure.733.html>;
 ChemSpider, "Methanol," March 28, 2017, <http://www.chemspider.com/Chemical-Structure.864.html>;
 ChemSpider, "Methyl myristate," March 28, 2017, <http://www.chemspider.com/Chemical-Structure.29024.html>;
 National Institute of Standards and Technology, "1,2,3-propanetriyl tri(tetradecanoate)," 2012, http://wt-pro.nist.gov/wt-pro/index.html?cmp=1.2.3-propanetriyl_tri~tetradecanoate~.

A neutralization step takes place, and once the less-dense FAMES and more-dense glycerin phases are formed, the glycerin is removed, and additional catalyst and methanol are added to the FAME phase to continue the transesterification process until no more biodiesel can be produced from the inputs.¹⁶ The biodiesel is then purified (figure I-2).

**Figure I-2
Biodiesel: Production process**



Source: ***.

Information on the record in these investigations indicates that Argentine and Indonesian biodiesel producers use the transesterification process for their biodiesel production without notable chemical differences from U.S. biodiesel producers' production process.¹⁷

Oils and fats inputs

Availability and affordability are the two primary factors in choosing the oils and fats feedstocks for biodiesel production; feedstock represents an estimated *** percent of the production cost for biodiesel.¹⁸ Locally grown oil seed crops provide the main source of feedstock. Soybeans are the dominant crop in the United States¹⁹ and Argentina²⁰ because growing

¹⁶ ***.

¹⁷ Luis Panichelli, Arnaud Dauriat, and Edgard Gnansounou, "Life Cycle Assessment of Soybean-Based Biodiesel in Argentina for Export," *International Journal of Life Cycle Assessment* 14, no. 2 (2008): 144–159; Soni Sisbudi Harsono, "Biodiesel Production From Palm Oil Technology," *Research Journal of Agricultural Science* 43, no. 4 (2011): 80–85.

¹⁸ ***. Petitioner stated that feedstock cost represented up to 90 percent. Hearing transcript, p. 54 (Stone).

¹⁹ In 2016, almost 70 percent of U.S. biodiesel was produced with soybean oil. U.S. Energy Information Administration, "Table 3. U.S. Inputs to Biodiesel Production," *Monthly Biodiesel Production Report*,

(continued...)

conditions are favorable and soybeans can be used as a nitrogen-replacing rotational crop. Palm oil production dominates in Asia, particularly in Malaysia and Indonesia,²¹ and is favorable due to the high oil yield per acre.²² The use of animal fats in biodiesel production has increased in the United States, as has the use of used cooking oil, which reportedly only requires a simple cleaning process before transesterification begins.²³ Multifeedstock production facilities are equipped to process more than one type of oil or fat into biodiesel without significant changes in operating procedures.²⁴

Use of a particular oil or fat input produces biodiesel with characteristics that vary slightly according to which input is used. For example, biodiesel made from palm oil becomes “cloudy” and less free-flowing at higher temperatures than biodiesel made from soybean oil.²⁵ These differences can cause problems with use of biodiesel blends at low temperatures, depending on the proportion of biodiesel in the fuel. By comparison, soybean oil biodiesel oxidizes more quickly than palm oil biodiesel; when that happens, the biodiesel would not meet the ASTM International standard anymore.²⁶ Regardless of the type of input, all biodiesel that meets the ASTM International standard (discussed below) can be used in all applications allowing for biodiesel use.

(...continued)

<https://www.eia.gov/biofuels/biodiesel/production/table3.pdf> (accessed April 23, 2017). Respondents stated that the percentage of U.S. biodiesel produced with soybean oil was 46 percent. Conference transcript, p. 34 (Doyle).

²⁰ “Practically all biodiesel produced in Argentina is made from soybean oil.” Ken Joseph, “Argentina: Biofuels Annual, 2016,” *GAIN Report*, July 7, 2016, https://gain.fas.usda.gov/Recent%20GAIN%20Publications/Biofuels%20Annual_Buenos%20Aires_Argentina_7-21-2016.pdf.

²¹ Palm oil is the “most commonly available” feedstock for biodiesel in Indonesia. No alternative is available in usable volumes and competitive prices. Thom Wright and Arif Rahmanulloh, “Indonesia: Biofuels Annual 2016,” *GAIN Report*, no. ID 1619, July 28, 2016, https://gain.fas.usda.gov/Recent%20GAIN%20Publications/Biofuels%20Annual_Jakarta_Indonesia_7-28-2016.pdf.

²² Yields of biodiesel per acre are typically lower for soybeans than for rapeseed (used in Europe) and palm oil. Palm oil is used mostly in food production, but use for biodiesel production has increased. ***.

²³ ***.

²⁴ ***; conference transcript, p. 186 (Soanes).

²⁵ Jesse Jin Yoon, “What’s the Difference Between Biodiesel and Renewable (Green) Diesel,” Advanced Biofuels USA, n.d., http://advancedbiofuelsusa.info/wp-content/uploads/2011/03/11-0307-Biodiesel-vs-Renewable_Final-3_JY-formatting-FINAL.pdf. The cloud point is the temperature at which small solid crystals are first seen as the fuel temperature drops. National Biodiesel Board, “Cold Flow Backgrounder,” n.d., http://biodiesel.org/docs/default-source/ffs-performace_usage/cold-flow-backgrounder.pdf.

²⁶ ***; conference transcript, pp. 87–88 (Whitney). Oxidation in biodiesel can result in the formation of various acids or polymers, which can cause fuel system deposits and lead to filter clogging and fuel system malfunctions. Petition, exhibit GEN-12.

CAS registry numbers

There are at least 53 CAS registry numbers assigned to varieties of biodiesel distinguished by input, the length of the carbon chains, and other chemical characteristics.²⁷ The tabulation below is ordered by input and by increasing carbon chain length.

Name	CAS number	Name	CAS number
Fatty acids, animal, unsaturated, methyl esters	85480-42-8	Fatty acids, C5-20, methyl esters	94733-11-6
Fatty acids, butter, methyl esters	85536-26-1	Fatty acids, C6-10, methyl esters	68937-83-7
Fatty acids, canola oil, methyl esters	129828-16-6	Fatty acids, C6-12, methyl esters	67762-39-4
Fatty acids, castor oil, methyl esters	68390-63-6	Fatty acids, C8-10, methyl esters	85566-26-3
Fatty acids, castor oil, hydrogenated, methyl esters	68938-13-6	Fatty acids, C8-18 and C18-unsaturated, methyl esters	67762-37-2
Fatty acids, coco, hydrogenated, methyl esters	85631-62-5	Fatty acids, C8-18, methyl esters	91031-65-1
Fatty acids, coco, methyl esters	61788-59-8	Fatty acids, C8-C18, methyl ester	68937-84-8
Fatty acids, essential, methyl esters	91051-06-8	Fatty acids, C10-16, methyl esters	67762-40-7
Fatty acids, fish oil, methyl esters	68605-02-7	Fatty acids, C11-17, methyl esters	85586-20-5
Fatty acids, Iris germanica, methyl esters	95009-32-8	Fatty acids, C12-16, methyl esters	85566-27-4
Fatty acids, Iris pallida, methyl esters	95009-33-9	Fatty acids, C12-20, methyl esters	91031-66-2
Fatty acids, lanolin, methyl esters	85005-41-0	Fatty acids, C14-18 and C16-18-unsaturated, methyl esters	67762-26-9
Fatty acids, linseed oil, methyl esters	91051-16-0	Fatty acids, C14-18 and C16-22-unsaturated, methyl esters	85049-38-3
Fatty acids, mustard oil, methyl esters	84238-16-4	Fatty acids, C14-18 and C18-unsaturated, branched and linear, methyl esters	85186-80-7
Fatty acids, olive oil, methyl esters	93572-01-1	Fatty acids, C14-18, methyl esters	91031-67-3
Fatty acids, palm oil, methyl esters	91051-34-2	Fatty acids, C14-18-branched, methyl esters	91002-21-0
Fatty acids, peanut oil, methyl esters	93572-08-8	Fatty acids, C16 and C18-unsaturated, methyl esters	68647-50-7

Tabulation continued on next page.

²⁷ See, inter alia, "REACH & Biodiesel," UK REACH Competent Authority Information Leaflet no. 15, July 2016, <http://www.hse.gov.uk/reach/resources/biodiesel.pdf>. ***.

Name	CAS number	Name	CAS number
Fatty acids, rape oil, hydrogenated, methyl esters	91697-62-0	Fatty acids, C16-18 and C16-18-unsaturated, methyl esters	102047-28-9
Fatty acids, rape oil, methyl esters	85586-25-0	Fatty acids, C16-18 and C18-unsaturated, methyl esters	67762-38-3
Fatty acids, safflower oil, methyl esters	68605-14-1	Fatty acids, C16-18, methyl esters	85586-21-6
Fatty acids, soya, methyl esters	68919-53-9	Fatty acids, C16-20 and C16-18-unsaturated, methyl esters	68937-80-4
Fatty acids, sperm oil, methyl esters	68440-46-0	Fatty acids, C16-24 and C16-24-unsaturated, methyl esters	93571-83-6
Fatty acids, sunflower oil, methyl esters	68919-54-0	Fatty acids, C18 and C18-unsaturated, methyl esters	68937-81-5
Fatty acids, tall oil, methyl esters	74499-22-2	Fatty acids, C18-24 and C16-24-unsaturated, methyl esters	85408-67-9
Fatty acids, palm kernel oil, methyl esters	91051-32-0		
Fatty acids, tallow, methyl esters	61788-61-2		
Fatty acids, vegetable oil, methyl esters	68990-52-3		
Rapeseed oil methyl esters	73891-99-3		
Soybean oil methyl esters	67784-80-9		

Quality standards

Any biodiesel that meets the ASTM International standard for biodiesel (D6751, Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels) can be sold for biodiesel use purposes.²⁸ There are four grades of biodiesel within this ASTM International standard. Petitioners stated that the differences between the grades, which are differentiated by sulfur and unreacted glyceride levels, are “meaningless” or “generally minor.”²⁹ Similarly, ASTM International has developed standards for diesel blends that contain between 0 and 5 percent biodiesel³⁰ and blends that contain between 6 and 20 percent biodiesel.³¹ In addition, the National

²⁸ Petition, exhibit GEN-12.

²⁹ Petition, pp. 95–96. The four grades are Grade No. 1-B S15, Grade No. 1-B S500, Grade No. 2-B S15, and Grade No. 2-B S500, where the S value represents the level of sulfur parts per million, the 2-B grades are for general purpose biodiesel, and the 1-B grades are for special purpose biodiesel with sensitivity considerations for partially reacted glycerides. Petition, exhibit GEN-12.

³⁰ Petition, exhibit GEN-13 (D975, Standard Specification for Diesel Fuel Oils, paras. 7.3.1.2 and 7.3.1.4). Under this standard, diesel blends that contain up to 5 percent biodiesel are considered no different from diesel that contains no biodiesel. Erin Voegelé, “ASTM Publishes Biodiesel Standards,” Biodiesel Magazine,

(continued...)

Biodiesel Board, a member of the ad hoc coalition that is the petitioner in these investigations, created a committee in 2000 “{t}o help assure that biodiesel fuel is produced to and maintained” at the ASTM D6751 standard.³²

Description and applications

Biodiesel is used as a partial or full substitute for diesel. It has many molecular formulas, and therefore slightly varying characteristics, and CAS registry numbers because of the assorted vegetable oils and animal fats that can be used as an input.³³

Transportation

Biodiesel is primarily used as a substitute for diesel in the transportation sector. This use involves biodiesel in its unadulterated form (B100) or blended with diesel, with the most frequent proportions of such blends being 2 percent (B2), 5 percent (B5), 10 percent (B10), and 20 percent (B20) biodiesel. Blending can take place at any point in the distribution system as the act of blending is most frequently neither mechanically complex nor expensive.³⁴ Biodiesel can be blended with diesel in any proportion without separation, meaning that it can be used in existing

(...continued)

November 13, 2008, <http://www.biodieselmagazine.com/articles/2947/astm-publishes-biodiesel-standards>. Labeling of diesel blends to indicate the presence of biodiesel is not required under this standard. Alternative Fuels Data Center, U.S. Department of Energy, “Biodiesel Blends,” n.d., http://www.afdc.energy.gov/fuels/biodiesel_blends.html (accessed April 21, 2017).

³¹ Petition, exhibit GEN-14 (D7467, Standard Specification for Diesel Fuel Oil, Biodiesel Blend (B6 to B20), para. 1.1).

³² BQ-9000, the National Biodiesel Accreditation Program, is a voluntary program for the accreditation of producers and marketers of biodiesel that includes storage, sampling, testing, blending, shipping, distribution, and fuel management practices. It is available to any biodiesel manufacturer, marketer, or distributor of biodiesel and biodiesel blends in the United States and Canada. National Biodiesel Accreditation Commission, <http://bq-9000.org/> (accessed April 21, 2017); Erin Voegelé, “BQ-9000: Moving Forward,” *Biodiesel Magazine*, October 25, 2010, <http://www.biodieselmagazine.com/articles/4502/bq-9000-moving-forward>.

³³ The variety of inputs leads to several conversion factors being used when converting kilograms of biodiesel (the unit of measurement in international trade) into gallons (the unit of measurement in the United States). These conversion factors, as described in the questionnaire responses, can also vary by manufacturing facility because of differences in the processes used. Conference transcript, pp. 135–137 (Cummings, Whitney).

³⁴ Conference transcript, pp. 79 (Doyle), 212 (Getlan).

diesel applications without major modifications to the machinery.³⁵ Any vehicle that uses diesel can use biodiesel at a blend level of B5 or lower.³⁶

There are advantages to using biodiesel compared to diesel only. Biodiesel has a very low sulfur content and contains oxygen molecules (diesel has no oxygen), lowering its pollution potential.³⁷ It has a high lubrication capacity, which can offset the lubrication problems encountered with low-sulfur diesel use, which is increasingly being mandated.³⁸

There are also disadvantages to replacing diesel with biodiesel. Biodiesel has a lower energy content compared to diesel, which lowers fuel efficiency and power, and has lower cold-flow properties, which can cause problems when used in cold temperatures with respect to blends with higher concentrations of biodiesel.³⁹

Heating

Biodiesel is also used as a heating fuel (fuel oil), primarily in the northeastern United States.⁴⁰ Biodiesel use in conventional heating oil reduces carbon and sulfur environmental concerns and maintenance costs because of biodiesel's lower sulfur level.⁴¹ In addition, ASTM International approved a new standard in 2014 that allows the use of heating oil with a biodiesel content of 6–20 percent, an increase from the 5 percent level established in 2008.⁴²

³⁵ The use of diesel blended with biodiesel does not require any modification to engines or heating burners, taking into consideration the proportion of biodiesel used because of temperature and other factors. Because of biodiesel's greater solvent properties compared to diesel, however, the use of unadulterated biodiesel requires modification of fuel hoses, pipes, and seals. ***.

³⁶ U.S. Energy Information Agency, "Use of Biodiesel," August 29, 2016, https://www.eia.gov/Energyexplained/index.cfm?page=biofuel_biodiesel_use.

³⁷ ***. Nitrogen oxide emissions may be higher than with diesel use. U.S. Energy Information Administration, "Biodiesel and the Environment," November 8, 2016, https://www.eia.gov/Energyexplained/index.cfm?page=biofuel_biodiesel_environment.

³⁸ U.S. Energy Information Agency, "Use of Biodiesel," August 29, 2016, https://www.eia.gov/Energyexplained/index.cfm?page=biofuel_biodiesel_use.

³⁹ U.S. Environmental Protection Agency, "Technical Highlights: Biodiesel," EPA-420-F-10-009, February 2010, <http://nepis.epa.gov/Exe/ZyPDF.cgi?Dockkey=P1006V0I.pdf>.

⁴⁰ In 2015, residential consumers of heating oil in the northeastern United States represented 84 percent of heating oil sales. U.S. Energy Information Agency, "Heating Oil Explained: Use of Heating Oil," March 30, 2017, https://www.eia.gov/Energyexplained/index.cfm?page=heating_oil_use. By 2018, Connecticut, New Jersey, New York, Maine, Massachusetts, and Vermont will have switched to an ultra-low-sulfur heating oil standard for residential and commercial sectors. ***.

Biodiesel is also used for stationary electricity generation in diesel generators.

⁴¹ ***.

⁴² ASTM International, "Standard Specification for Fuel Oils," D396-16e1, October 1, 2016.

Category of biofuels

Biodiesel is one of several fuels that fall under the broad category of biofuels,⁴³ and only certain other fuels made from renewable resources can be related to biodiesel on a production or use basis.

Renewable diesel

Renewable diesel is produced from the same oils and fats as biodiesel (there are non-process-related preferences for animal fats in the U.S. market for renewable diesel)⁴⁴ but through a different chemical process that results in renewable diesel being almost chemically identical to diesel.⁴⁵ As a result, renewable diesel can be blended at any proportion with diesel without a performance decline and is compatible with diesel machinery.⁴⁶ Reportedly, renewable diesel has a higher production cost than biodiesel.⁴⁷ U.S. production of renewable diesel has increased significantly since 2010 and is a major component in the California biofuel market for diesel.⁴⁸ Respondents stated that there have been “significant increases in renewable diesel investments.”⁴⁹ The U.S. Department of Agriculture has highlighted similar regulatory treatments of biodiesel and renewable diesel.⁵⁰ They both qualify for the two major renewable fuel programs in the United States: the national Renewable Fuel Standard (RFS) and California’s Low Carbon Fuel Standard (LCFS) (discussed below).⁵¹

⁴³ A biofuel is a fuel composed of or produced from biological raw materials, as opposed to a fossil fuel, which is a fuel formed in the earth from plant or animal remains.

⁴⁴ Conference transcript, pp. 137–138 (McCullough, Whitney).

⁴⁵ ***. Imports of renewable diesel are classifiable in HTS chapter 27 with petroleum-based diesel.

⁴⁶ Jesse Jin Yoon, “What’s the Difference Between Biodiesel and Renewable (Green) Diesel,” Advanced Biofuels USA, n.d., http://advancedbiofuelsusa.info/wp-content/uploads/2011/03/11-0307-Biodiesel-vs-Renewable_Final-3_-JJY-formatting-FINAL.pdf.

⁴⁷ ***.

⁴⁸ Conference transcript, pp. 138–139 (Whitney).

⁴⁹ Hearing transcript, p. 262 (Dawson).

⁵⁰ Ernest Carter, “U.S. Biodiesel/Renewable Diesel Market,” November 2016, https://www.usda.gov/oce/energy/files/US_Biodiesel_RD_MarketJul2016.pdf (presentation).

⁵¹ Sean Hill, “U.S. Biodiesel and Renewable Diesel Imports Increase 61% in 2015,” April 11, 2016, <https://www.eia.gov/todayinenergy/detail.php?id=25752>.

Other biofuels

A number of other biofuels cannot be blended with diesel. Bioethanol, the largest biofuel by use in the U.S. market, is produced by a biological process (fermentation) from renewable resources such as corn and agricultural and forestry residues. It is used as an additive to gasoline.⁵² Other examples of biofuels in various stages of commercial development include “bio-oil,”⁵³ crude oil from algae,⁵⁴ and woody biomass jet fuel.⁵⁵

Government regulation and tax policy

According to the U.S. Department of Energy, the strongest drivers of the increase in U.S. demand for biodiesel (and renewable diesel) since 2012 have been (1) increasing targets under the RFS and the market-tradeable credits generated by biodiesel production and importation and (2) the blender’s tax credit.⁵⁶ These credits and tax incentives are reportedly important contributors to the U.S. biodiesel industry’s profitability.⁵⁷

Renewable Fuels Standard (“RFS”)

The RFS program, created by the U.S. Environmental Protection Agency (“EPA”) under the authority of the Energy Policy Act of 2005, established the first renewable fuel mandate in the United States. In 2007, Congress expanded and modified the RFS program to include diesel, provide for annual increases in the renewable fuel blend requirement from 9 billion gallons in 2008 to 36 billion gallons by 2022, and label biodiesel from most available domestic feedstocks as an advanced biofuel.⁵⁸ This modified RFS program became the basis for the current RFS2 program, which became effective mid-2010 and mandated much larger annual volumes and established

⁵² Ku Syahidah Ku Ismail, “Chapter 2: Biological Process for Ethanol Production,” n.d., http://portal.unimap.edu.my/portal/page/portal30/Lecturer%20Notes/KEJURUTERAAN_BIOPROSES/Semester%20%20Sidang%20Akademik%20201520161/Bioprocess%20Engineering%20Program/Forth%20Year/ERT%20429%20Energy%20from%20Bioresources/ERT%20429%20Ch%202.pptx.

⁵³ Rosalie Marion Bliss, “Bringing Up Better Biofuel,” May 5, 2016, <https://www.usda.gov/media/blog/2016/05/5/bringing-better-biofuel>.

⁵⁴ U.S. Department of Agriculture, “Fact Sheet: USDA Invests in Clean Energy Economy, Supporting U.S. Producers and Seeking to Double Number of Higher Blend Renewable Fuel Pumps Available to Consumers,” release no. 0157.15, May 29, 2015, <https://www.usda.gov/media/press-releases/2015/05/29/fact-sheet-usda-invests-clean-energy-economy-supporting-us>.

⁵⁵ Steve Csonka, “Sustainable Alternative Jet Fuel Development and Commercialization,” February 2017, p. 14, https://www.usda.gov/oce/forum/2017_Speeches/Steve_Csonka.pdf.

⁵⁶ Sean Hill, “U.S. Biodiesel and Renewable Diesel Imports Increase 61% in 2015,” April 11, 2016, <https://www.eia.gov/todayinenergy/detail.php?id=25752>.

⁵⁷ ***.

⁵⁸ ***.

separate requirements for different classes of biofuels, such as cellulosic.⁵⁹ Biodiesel producers must undergo a process to become registered under the RFS2 program.⁶⁰

The EPA regulates compliance with the RFS using renewable identification numbers (“RINs”), a tradable credit system under which “obligated parties”⁶¹ submit to EPA RINs that equal the number of gallons in their annual renewable volume obligation (“RVO”).⁶² RIN validity and obligation compliance can span two years. RINs may be used by the party that generates them to satisfy its RVO or traded and sold so that other obligated parties may use them to satisfy their RVO. The EPA Moderated Transaction System (“EMTS”) is used to register RIN transactions.⁶³

Each gallon of biodiesel produced in or imported into the United States generates about 1.5 RINs. There are different classes of RINs depending on the feedstock, for example, D4 for soybean oil feedstock and D6 for palm oil feedstock, and each RIN class has a different market value.⁶⁴ Figure I-3 provides a representation of the RIN classes and the characteristics of certain RINs to satisfy the compliance obligation in place of other RINs.⁶⁵

⁵⁹ Kelsi Bracmort, “The Renewable Fuel Standard (RFS): In Brief,” *CRS Report*, no. R43325, December 14, 2016.

⁶⁰ ***.

⁶¹ An obligated party is any refiner that produces gasoline or diesel within the 48 contiguous states or Hawaii or any importer that imports gasoline or diesel into the 48 contiguous states or Hawaii. 40 CFR § 80.1406 (a)(1).

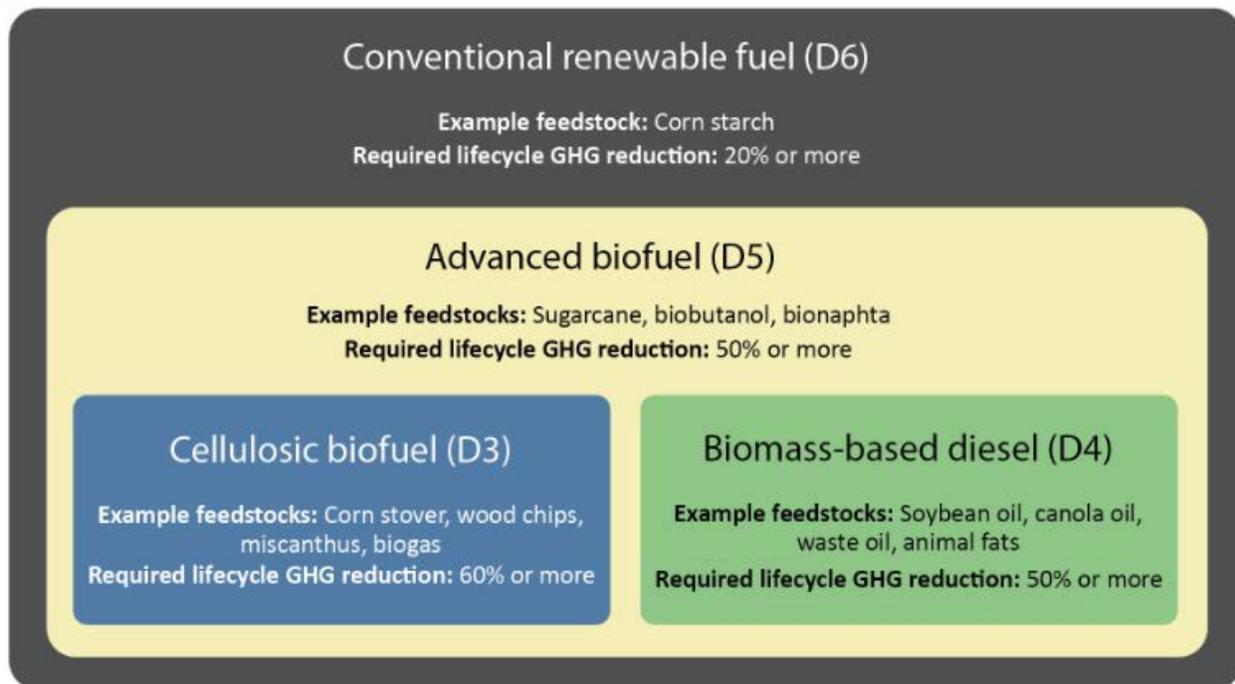
⁶² The RVO is the obligated party’s total gasoline and diesel sales multiplied by the annual renewable fuel percentage standards announced by EPA in a rulemaking scheduled each year. Kelsi Bracmort, “The Renewable Fuel Standard (RFS): In Brief,” *CRS Report*, no. R43325, December 14, 2016.

⁶³ Kelsi Bracmort, “The Renewable Fuel Standard (RFS): In Brief,” *CRS Report*, no. R43325, December 14, 2016.

⁶⁴ Hearing transcript, pp. 218–219 (Sim, Cummings, Dunphy). The RIN class for a renewable fuel is based on the EPA’s analysis of the renewable fuel pathway and the amount of greenhouse gas reduction for the fuel. Hearing transcript, p. 219 (Dunphy).

⁶⁵ As defined in the Energy Independence and Security Act (EISA) of 2007, the lifecycle greenhouse gas (GHG) reduction compares the GHG emissions over the entire lifecycle of the biofuel to the emissions of the equivalent amount of gasoline or diesel. See 121 STAT. 1492, <https://www.gpo.gov/fdsys/pkg/PLAW-110publ140/pdf/PLAW-110publ140.pdf>.

Figure I-3
Biodiesel: RIN trading system

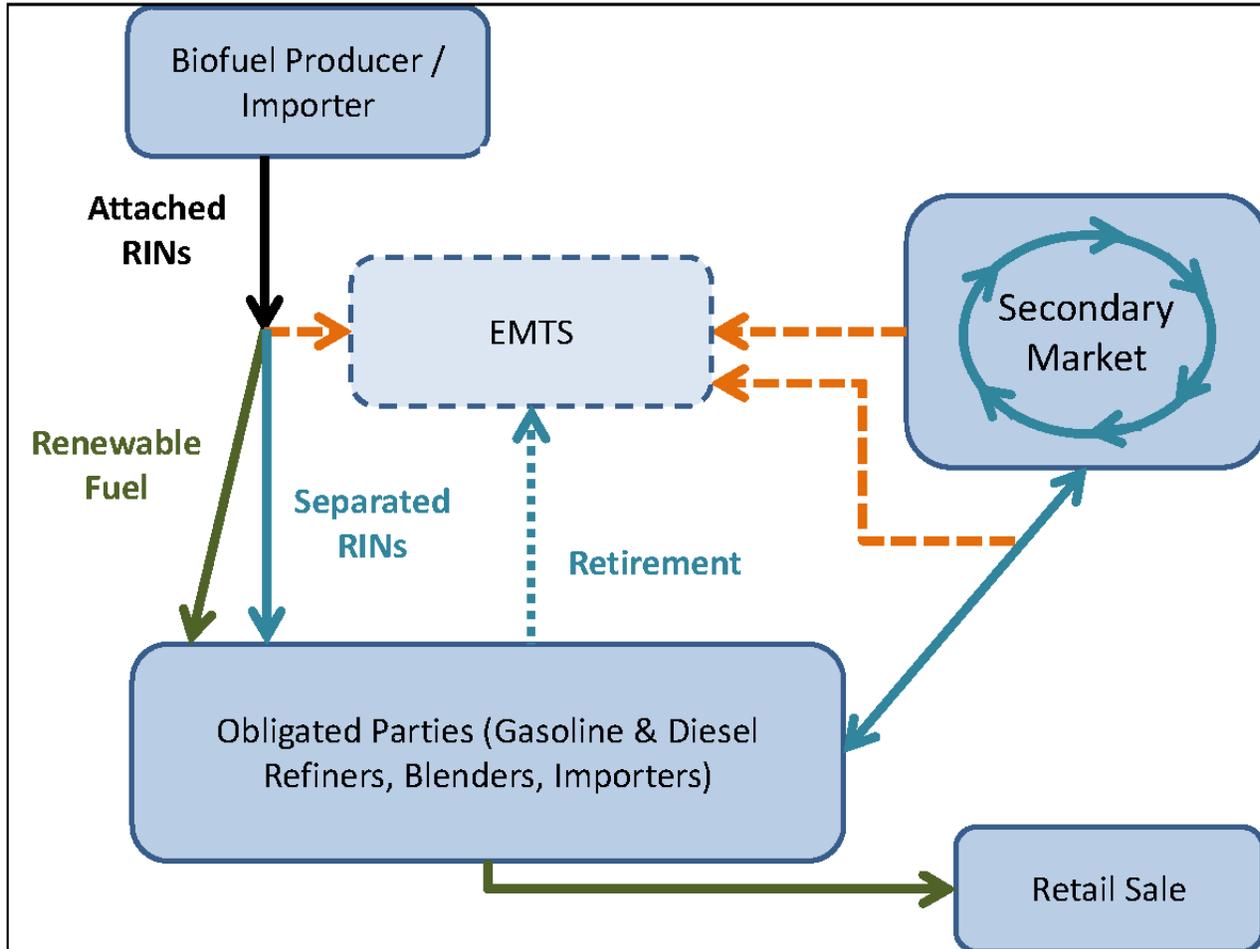


Source: U.S. Environmental Protection Agency, “Renewable Fuel Standard Program: Renewable Fuel Annual Standards,” <https://www.epa.gov/renewable-fuel-standard-program/renewable-fuel-annual-standards> (accessed April 28, 2017).

RINs are attached to each eligible gallon of biodiesel and transferred to obligated parties with the biodiesel when it is purchased or the RIN can be separated and sold in the open market.⁶⁶ Figure I-4 represents a simplified form of the RIN market.

⁶⁶ ***.

Figure I-4
Biodiesel: RIN trading system



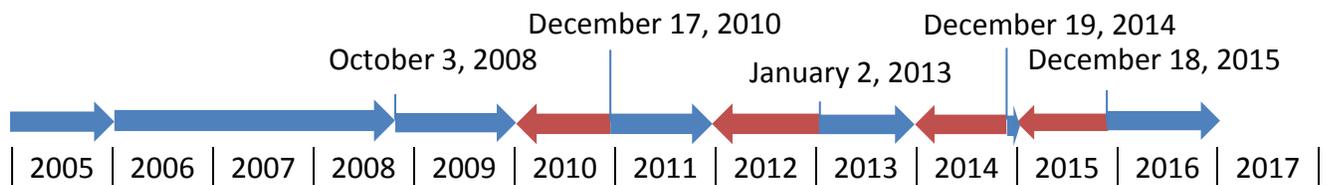
Note.—Black lines indicate RINs attached to actual biofuel gallons. Solid blue lines indicate separated RINs that may be traded among all market participants. Dashed blue line indicates end-of-year submission of RINs by obligated parties to EPA to meet RFS mandates. Green lines indicate actual biofuel gallons separated from RINs. Orange lines indicate that all RIN transactions must be cleared through EMTS.

Source: Brent D. Yacobucci, "Analysis of Renewable Identification Numbers (RINs) in the Renewable Fuel Standard (RFS)," *CRS Report for Congress*, R42824, July 22, 2013, p. 5.

Blender's tax credit ("BTC")

Federal biodiesel tax incentives began in 2005 and, as shown in figure I-5, have been renewed prospectively or retroactively a number of times, most recently expiring as of the end of 2016.⁶⁷ Their goal is to facilitate the price competitiveness of biodiesel with diesel. There are three parts to the credit, but mostly it is the blender's tax credit (\$1.00 per gallon credit for each biodiesel gallon that is blended with diesel) that is claimed.⁶⁸

Figure I-5
Timeline for the federal blenders' tax credit



Note.--Red arrows indicate where the credit was extended retroactively.

Source: Alternative Fuels Data Center, U.S. Department of Energy, "Key Federal Legislation," January 3, 2017, https://www.afdc.energy.gov/laws/key_legislation.

⁶⁷ The blender's tax credit was established in 2004, extended in 2005, amended in 2008, and extended again in 2010. Alternative Fuels Data Center, U.S. Department of Energy, "Key Federal Legislation," January 3, 2017, http://www.afdc.energy.gov/laws/key_legislation.

The 2010 extension applied retroactively to 2010 and prospectively to 2011. Brent D. Yacobucci, "Biofuels Incentives: A Summary of Federal Programs," *CRS Report for Congress*, R40110, January 11, 2012.

An early 2013 extension applied retroactively to 2012 and prospectively to 2013. TransportPolicy.net, "US: Fuels: Biofuel Tax Credits," September 30, 2013, <http://transportpolicy.net/index.php?title=US: Fuels: Biofuel tax credits>.

A late 2014 extension applied to 2014 only. Ron Kotrba, "Obama Signs Tax Act Reinstating Biodiesel Credit Through 2014," *Biodiesel Magazine*, December 22, 2014.

A 2015 extension applied retroactively to 2015 and prospectively to 2016. Erin Voegelé, "Obama Signs Spending Bill, Tax Extenders Legislation," *Biodiesel Magazine*, December 23, 2015.

The petitioners are "cautiously optimistic" that the tax credit will be reinstated and respondents state that "it is anticipated by many that the biodiesel tax credit will be renewed." Hearing transcript, pp. 36 (Porter), 87 (Stone).

The American Renewable Fuel and Job Creation Act of 2017, introduced by Senators Chuck Grassley and Maria Cantwell with 14 other sponsors on April 26, 2017, would convert the blender's tax credit into a U.S. producer's credit. For the text of the bill, see https://www.grassley.senate.gov/sites/default/files/MCG17256_0.pdf.

⁶⁸ The other two parts are a \$1.00 per gallon credit for each gallon of B100 that is used as fuel and a \$0.10 per gallon credit for plants with production capacity of less than 60 million gallons per year for biodiesel made from first-use vegetable oils and animal fats. ***. Renewable diesel also qualifies for the blender's tax credit.

State programs

According to the U.S. Department of Energy, there are reportedly more than 300 state laws, regulations, and “funding opportunities” related to biodiesel production and use.⁶⁹ Examples include mandates for minimum biodiesel blending, tax credits, and sales tax exemptions.⁷⁰ Because of the size of the California market, one of the programs having the most effect within the state and nationally is California’s low-carbon fuel standard (“LCFS”) program. According to the California state government, “the LCFS is designed to decrease the carbon intensity of California’s transportation fuel pool and provide an increasing range of low-carbon and renewable alternatives,” with “a reduction of at least 10 percent in the carbon intensity of California’s transportation fuels by 2020.”⁷¹ The program takes into account a fuel’s full life cycle, encompassing tailpipe and all associated emissions from production, distribution, and use of transport fuels within the state. Consequently, animal fats are a preferred input in biodiesel production for use in California.⁷²

DOMESTIC LIKE PRODUCT ISSUES

No issues with respect to domestic like product have been raised in these investigations.⁷³ The Commission, for the purposes of its preliminary determinations, defined a single like product corresponding to the scope of the investigations.⁷⁴

⁶⁹ U.S. Department of Energy, “Alternative Fuels Data Center,” n.d., http://www.afdc.energy.gov/laws/matrix?sort_by=tech (accessed April 24, 2017).

⁷⁰ ***.

⁷¹ California Environmental Protection Agency Air Resources Board, “Low Carbon Fuel Standard,” April 13, 2017, <https://www.arb.ca.gov/fuels/lcfs/lcfs.htm>.

⁷² Animal fats, as well as waste oils, have lower carbon-intensity “scores” than palm oil or soybean oil, and that score “translates actually into a certain number of credits, which have a market value that we transact, sort of like RINs, except a little bit more opaque and a little bit more magical.” Conference transcript, pp. 138–139 (Whitney).

⁷³ Respondents did not dispute the proposed like product definition in the preliminary phase investigations and did not address the issue of domestic like product in these final phase investigations. Conference transcript, p 78 (Porter and Janzen).

⁷⁴ *Biodiesel from Argentina and Indonesia, Investigation Nos. 701-TA-571-572 and 731-TA-1347-1348 (Preliminary)*, USITC Pub 4690, May 2017, p. 7.

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

U.S. MARKET CHARACTERISTICS

Biodiesel is a renewable fuel alternative to petrodiesel that can be made from a wide variety of animal and vegetable oils, including used cooking oil, soybean oil, canola oil, and tallow. It is primarily used in blends with petrodiesel as transportation fuel or heating oil.¹ Some plants in the United States are co-located, or vertically integrated, producing the feedstock supply, oil, and then biodiesel.² The biodiesel market is heavily influenced by U.S. government subsidies and mandates on the use of biodiesel.³ Biodiesel is produced to the ASTM International standard for biodiesel (ASTM D6751).

Apparent U.S. consumption of biodiesel increased during January 2014-December 2016, with most of the increase occurring from 2015 to 2016. Overall, apparent U.S. consumption in 2016 was 58 percent higher than in 2014. Apparent U.S. consumption was lower in the first half of 2017 compared to the first half of 2016.

Government mandates and incentives

As described in *Part I*, an important condition in the U.S. biodiesel market is the prevalence of government mandates and incentives, both at the federal and state levels. The federal Renewable Fuel Standard (RFS) program projects volumes available in the U.S. market in a given year, including the supply of imports. These mandates create a volume floor that obligated parties (biodiesel producers and importers) must meet through their renewable volume obligation (RVO). According to petitioners, the RFS mandate was intended to substantially increase domestic renewable fuel production, reduce dependence on petroleum, stimulate U.S. economic activity, and reduce harmful emissions.⁴ The EPA created a system of Renewable Identification Numbers (RINs) that are attached to each gallon of biodiesel which obligated parties can trade to meet their obligations. There are different categories of RINs that depend on the feedstock used to produce the biodiesel, including D4 (for most biodiesel) and D6 (for palm oil feedstock).⁵ Because obligated parties require RINs to meet their RFS obligations, and because RINs are generated when biodiesel is produced or imported, the RINs market helps drive demand for biodiesel.⁶

¹ Hearing transcript, p. 41 (Rehagen).

² Conference transcript, p. 222 (Stone).

³ Conference transcript, pp. 15-16 (McCullough).

⁴ Petitioners' postconference brief, p. 9.

⁵ The D4 and D6 classifications are based on the ability to meet greenhouse gas reduction targets; biodiesel production must achieve at least a 50 percent reduction in greenhouse gases to qualify for the D4 classification. Hearing transcript, p. 219 (Dunphy). D6 is the qualifying code for ethanol but also applies to imported Indonesian palm oil biodiesel.

⁶ Petitioners' postconference brief, p. 12.

The federal government and some states have also implemented tax incentives for the production and use of biodiesel, further increasing demand. However, these incentives are implemented for limited timeframes and require renewal, which creates uncertainty and lower demand when these programs have lapsed. The federal blender's tax credit (BTC) lapsed twice during 2014-16, and has not been renewed in 2017. Price negotiations during lapsed years are still impacted by the possibility of retroactive application.⁷

U.S. PURCHASERS

The Commission received 39 usable questionnaire responses from firms that bought biodiesel during January 2014-June 2017.⁸ Eighteen responding purchasers are distributors, 19 are blenders, 13 are retailers, 9 are petrodiesel producers, and 8 are other (including marketer, commodities trader, and producer).⁹ Responding U.S. purchasers were headquartered throughout the United States including 18 firms in the Northeast. The largest responding purchasers of biodiesel (in order of 2016 purchases plus imports) are ***. One of the largest purchasers, BioSphere, purchases domestic and imported biodiesel which it sells to its affiliate Musket for distribution to Love's Truck Stops.¹⁰

CHANNELS OF DISTRIBUTION

As shown in table II-1, U.S. producers' commercial shipments were mainly to petrodiesel producers and distributors/independent blenders while importers' commercial shipments were mainly to distributors/independent blenders.¹¹

GEOGRAPHIC DISTRIBUTION

U.S. producers reported selling biodiesel to all regions in the contiguous United States during 2016 (table II-2). U.S. producers' largest market was the Midwest, followed by the Central Southwest. Importers of biodiesel from Argentina sold the largest share to the Northeast, followed by the Central Southwest and Southeast. Most imports of Indonesian biodiesel were sold in the Central Southwest followed by the Southeast. Importers reported almost no sales of subject imports in the Midwest, the largest market for domestic producers.

⁷ Respondent Cargill's postconference brief, p. 5.

⁸ Of the 39 responding purchasers, 34 purchased domestic biodiesel, 16 purchased imports of biodiesel from Argentina, 7 purchased imports of biodiesel from Indonesia, and 16 purchased imports of biodiesel from other sources.

⁹ Many purchasers indicated more than one role.

¹⁰ Hearing transcript, p. 145 (Dawson).

¹¹ Petitioners noted a distinction between obligated parties and discretionary blenders, such as truck stops, stating that the discretionary blenders will only blend biodiesel with petrodiesel if the biodiesel price is low enough. Hearing transcript, p. 78 (Getlan).

Table II-1

Biodiesel: U.S. producers' and importers' U.S. commercial shipments, by sources and channels of distribution, 2014-16, January-June 2016 and January-June 2017

Item	Calendar year			January to June	
	2014	2015	2016	2016	2017
Share of commercial U.S. shipments (percent)					
U.S. producers:					
to Petrodiesel producers	34.4	31.7	29.5	33.7	28.7
to Distributors / blenders	46.9	47.1	48.1	45.4	45.1
to Retail locations	16.0	18.8	17.3	17.0	20.6
to Other firms	2.6	2.3	5.0	3.9	5.7
U.S. importers: Argentina:					
to Petrodiesel producers	***	***	***	***	***
to Distributors / blenders	***	***	***	***	***
to Retail locations	***	***	***	***	***
to Other firms	***	***	***	***	***
U.S. importers: Indonesia:					
to Petrodiesel producers	***	***	***	***	***
to Distributors / blenders	***	***	***	***	***
to Retail locations	***	***	***	***	***
to Other firms	***	***	***	***	***
U.S. importers: Subject sources:					
to Petrodiesel producers	***	***	***	***	***
to Distributors / blenders	***	***	***	***	***
to Retail locations	***	***	***	***	***
to Other firms	***	***	***	***	***
U.S. importers: Nonsubject sources:					
to Petrodiesel producers	***	***	***	***	***
to Distributors / blenders	***	***	***	***	***
to Retail locations	***	***	***	***	***
to Other firms	***	***	***	***	***

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

Most biodiesel is distributed in the United States by truck, although about 30 percent is distributed by rail.¹² For U.S. producers, 26 percent of commercial shipments were within 100 miles of their production facility, 63 percent were between 101 and 1,000 miles, and 12 percent were over 1,000 miles. For importers of Argentine product, 51 percent of commercial shipments were within 100 miles of their U.S. point of shipment, 47 percent between 101 and 1,000 miles, and two percent over 1,000 miles. Commercial shipments of imports of Indonesian product were nearly all (***) percent within 100 miles of their U.S. point of shipment, *** percent between 101 and 1,000 miles, and *** percent over 1,000 miles.

¹² "Biodiesel Distribution in the U.S. and Implications for RFS2 Volume Mandates," July 11, 2016, p. 6, petitioners' prehearing brief, exh. 5.

Table II-2

Biodiesel: Geographic market areas in the United States served by U.S. producers and importers, by share of commercial sales, 2016

Region	U.S. producers	Subject U.S. importers		
		Argentina	Indonesia	Subject sources
Northeast	8.1	***	***	***
Midwest	40.8	***	***	***
Southeast	9.3	***	***	***
Central Southwest	23.6	***	***	***
Mountains	7.5	***	***	***
Pacific Coast	10.7	***	***	***
Other ¹	---	***	***	***
Total	100.0	100.0	100.0	100.0

¹ All other U.S. markets, including AK, HI, PR, and VI.

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

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

Petitioners stated that large retail fuel chains distribute biodiesel by rail and truck throughout the country and that Biosphere/Love's blends biodiesel with petrodiesel at its retail locations.¹³ BioSphere stated that its imports and purchases of biodiesel are generally shipped to retail locations within a relatively short distance of the port of entry or domestic producer's location.¹⁴ Respondent CARBIO stated that most new U.S. demand for biodiesel is in coastal areas while domestic production is in the Midwest.¹⁵

SUPPLY AND DEMAND CONSIDERATIONS

U.S. supply

Domestic production

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

¹³ Petitioners' prehearing brief, p. 34.

¹⁴ BioSphere stated that for its truck shipments, it aims to ship ***. Respondent CARBIO's posthearing brief, exh. 2, p. 3.

¹⁵ Respondent CARBIO's prehearing brief, pp. 17-18.

products. RFS mandates and the blender's tax credit influenced domestic production.¹⁶ Nearly all U.S. production of biodiesel qualifies for D4 RINs (see table III-7).

Industry capacity¹⁷

Domestic capacity utilization increased irregularly from 75.1 percent in 2014 to 77.7 percent in 2016, as both capacity and production increased over the period. This relatively moderate level of capacity utilization suggests that U.S. producers may have some ability to increase production of biodiesel in response to an increase in prices.

Alternative markets

U.S. producers' exports, as a percentage of total shipments, declined irregularly from 3.3 percent in 2014 to 2.3 percent in 2016, indicating that U.S. producers have very limited ability to shift shipments between the U.S. market and other markets in response to price changes. Three U.S. producers (***) exported biodiesel to Canada and one (***) exported to ***.

Inventory levels

U.S. producers' inventories, as a ratio to total shipments, increased from 2.9 percent in 2014 to 4.9 percent in 2015 and then declined to 2.8 percent in 2016. These inventory levels suggest that U.S. producers may have a limited ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

U.S. producers stated that they could not switch production from biodiesel to other products.

Subject imports from Argentina¹⁸

Based on available information, Argentine biodiesel producers have the ability to respond to changes in demand with moderate changes in the quantity of biodiesel shipments to the U.S. market. The main contributing factor to this degree of responsiveness of supply is the availability of unused capacity and the ability to shift shipments from alternate markets. Factors mitigating responsiveness of supply include limited availability of inventories and limited ability

¹⁶ Indonesian respondents' postconference brief, p. 8.

¹⁷ Data in this section is based on U.S. producers' questionnaire responses. Part III also presents capacity and production data from the U.S. Energy Information Administration.

¹⁸ For data on the number of responding foreign firms and their share of U.S. imports from Argentina, please refer to Part I, "Summary Data and Data Sources."

to shift production to or from alternate products. In order to produce qualifying biodiesel under the RFS mandate, Argentine producers must source their soybeans from EPA-certified land, further restricting their ability to respond to changes in demand.¹⁹ Qualifying Argentine biodiesel is in the D4 category.

Industry capacity

Argentine capacity utilization fluctuated from 2014-16, declining from *** percent in 2014 to *** percent in 2015 before rebounding to *** percent in 2016. This relatively moderate level of capacity utilization suggests that Argentine producers may have some ability to increase production of biodiesel in response to an increase in prices.

Alternative markets

Argentine shipments to markets other than the United States, as a percentage of total shipments, decreased substantially from 2014 to 2016. The share of shipments to the Argentine domestic market decreased irregularly from *** percent in 2014 to *** percent in 2016.

Shipments to export markets other than the United States declined from *** percent in 2014 to *** percent in 2016, as exports to the United States increased from *** percent to *** percent over the period. Argentine exports in 2016 indicate that producers may have the ability to shift shipments from other markets to the U.S. market in response to price changes.

Inventory levels

Argentine producers' inventories increased from *** percent of total shipments in 2014 to *** percent in 2015 and then decreased to *** percent in 2016. These inventory levels suggest that Argentine producers may have limited ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

All responding Argentine producers stated that they could not switch production from biodiesel to other products.

Subject imports from Indonesia²⁰

Based on available information, producers of biodiesel from Indonesia have the ability to respond to changes in demand with moderate changes in the quantity of shipments of

¹⁹ See Part VII.

²⁰ For data on the number of responding foreign firms and their share of U.S. imports from Indonesia, please refer to Part I, "Summary Data and Data Sources."

biodiesel to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity and inventories and the ability to shift shipments from alternate markets. A factor mitigating responsiveness of supply is limited ability to shift production to or from alternate products. In addition, there are only two Indonesian producers (Wilmar and Musim Mas) that were “grandfathered” by the EPA into the RFS program and are qualified to produce biodiesel at a capped capacity. The grandfathered annual volume cap for Wilmar is 149 million gallons and that for Musim Mas is *** gallons.²¹ Grandfathered palm oil biodiesel qualifies for the D6 RIN, but not the D4 RIN.

Industry capacity

Indonesian grandfathered capacity utilization declined from *** percent in 2014 to *** percent in 2015 and then increased to *** percent in 2016. Indonesian grandfathered production capacity has remained constant at *** gallons. This relatively *** level of capacity utilization suggests that Indonesian producers may have substantial ability to increase production of biodiesel in response to an increase in prices.

Alternative markets

Indonesian shipments, as a percentage of total shipments, increased to its home market and decreased to other markets. Shipments to the Indonesian home market rose from *** percent in 2014 to *** percent in 2016, and shipments to export markets other than the United States declined from *** percent to *** percent over the same period. Indonesian shipments to markets other than the United States indicate that producers may have some ability to shift shipments between domestic or other markets and the U.S. market in response to price changes.

Inventory levels

Responding Indonesian firms’ inventories declined irregularly from 2014 to 2016. Relative to total shipments, inventory levels increased from *** percent in 2014 to *** percent in 2015 before falling to *** percent in 2016. These inventory levels suggest that responding foreign firms may have some ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

Responding Indonesian firms reported that no other products can be produced on the same equipment used to produce biodiesel.

²¹ Conference transcript, p. 47 (Cummings) and foreign producers’ questionnaire responses.

Nonsubject imports

Nonsubject imports accounted for 22 percent of total U.S. imports in 2016. Canada was the largest source of nonsubject imports during January 2014-June 2017, accounting for 69 percent of nonsubject imports in 2016. Canola was the predominant feedstock for biodiesel imported from nonsubject countries.²²

Supply constraints

Most firms (23 U.S. producers, 9 importers, and 22 purchasers) reported no supply constraints since January 1, 2014. Two U.S. producers, 5 importers, and 15 purchasers reported that they experienced supply constraints. Among U.S. producers, *** reported that low prices impacted domestic production and *** reported that soybean supplies are occasionally tight. Among importers, *** stated that it regularly declined new orders because of volatile pricing, *** reported supply shortfalls in 2016 because of reduced availability of palm feedstock,²³ and *** stated that a lack of logistics and “poor economics” make it difficult to receive supply on the Atlantic Coast. Importer *** stated that it has had occasional issues with timely deliveries and with suppliers not meeting quality or quantity requirements. Importer *** reported that in the fourth quarter of 2016, it had to pay import fees or bring in volumes from distant domestic sources to supply its *** location.

Although 22 purchasers reported no supply constraints, 15 purchasers reported constraints including limited production from a domestic producer, the exit of domestic producer White Mountain Biodiesel, market uncertainty due to the lapse in the BTC, lack of supply in the Northeast and coastal markets, and suppliers’ failure to meet timely shipment commitments. Purchasers’ explanations of supply constraints are shown in the tabulation below.

* * * * *

Fifteen of 36 purchasers indicated that palm biodiesel cannot be used in certain parts of the country or at certain times of the year because of its higher carbon intensity and/or higher cloud point. Sixteen of 36 purchasers indicated that state or local regulations promote the use of biodiesel made from one feedstock over another; most of these firms noted that California and Oregon promotes the use of low carbon intensity feedstocks.

New suppliers

Seventeen purchasers indicated that new suppliers have entered the market since 2014, including ADM, Adkin Energy, American Biodiesel Energy, Atlantic Biodiesel, BioSphere, Bridgeport Biodiesel, Duonix Beatrice, Flint Hills, Kolmar, Lake Erie Biofuels, and RBF. *** stated

²² Biodiesel from canola feedstock qualifies for the D4 RIN.

²³ ***.

that once Argentine imports were approved by the EPA under RFS, it observed a number of new suppliers.²⁴ *** stated that traders such as BioSphere, Vitol, Noble, Targray, and Shell have imported biodiesel.

U.S. demand

The overall demand for biodiesel is likely to experience small changes in response to changes in price until the RFS and other mandates are met, and then large changes in demand above those levels. The main contributing factors to demand are government mandates and tax incentives, and the high degree of substitutability between petrodiesel and diesel after mandates are met.

End uses and cost share

U.S. demand for biodiesel depends on the demand for U.S.-produced downstream products. Biodiesel is used in the same applications as other types of diesel, but accounts for less than 4 percent of the total diesel consumed in the United States each year. About two-thirds of biodiesel consumption is for transportation fuel, mainly by truckers.²⁵ Heating oil is also a major use for biodiesel, particularly in the Northeast.²⁶ Biodiesel is typically used in blends rather than as pure biodiesel. As noted in Part I, common blend percentages are 2 percent, 10 percent, and 20 percent biodiesel.

Business cycles and other conditions of competition

Most responding firms indicated that the biodiesel market is subject to business cycles and certain other specified conditions of competition including the federal RFS and federal tax credit, as well as state tax credits and mandates (table II-3). Many firms indicated that since 2014, there have been changes in the RFS, state mandates, and federal and state tax credits, but fewer firms indicated that there had been changes in business cycles or other conditions of competition.

Firms generally described the biodiesel market as seasonal, with lower demand in the colder winter months and higher demand in the summer. *** stated that demand for biodiesel is highest from April to September and lowest in January and February. Firms stated that lower demand in winter reflects lower biodiesel blend percentages because of issues with gelling in cold weather, as well as lower demand for transportation fuel because of fewer road miles traveled by commercial and personal vehicles.

²⁴ As noted in *Part VII*, CARBIO's current certification scheme was approved by the EPA in January 2015.

²⁵ Hearing transcript, p. 52 (Stone).

²⁶ Smaller volumes of biodiesel are used in machinery and equipment for mining and agriculture. Hearing transcript, p. 53 (Stone).

Table II-3

Biodiesel: Number of firms reporting the existence of, and changes in, business cycles and other conditions of competition

Item	Market subject to condition			Any changes since 2014?		
	Producer	Importer	Purchaser	Producer	Importer	Purchaser
Business cycles	20	12	30	7	4	6
Renewable fuel standard (RFS)	19	9	25	14	12	25
State mandate	13	9	27	12	9	22
Federal tax credit	24	14	29	20	12	29
State tax credit	13	12	22	9	10	16
Other distinct conditions	10	8	8	6	6	6

Note.--Twenty-four U.S. producers, 14 importers, and 35 purchasers responded to this question.

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

U.S. producer *** stated that demand changes predominantly from heating oil in the winter to transportation fuel in the summer. Respondent Noble stated that data shows that monthly biodiesel consumption falls in the winter months to about half of its peak summer level.²⁷

The RFS is a key factor in the demand for biodiesel, as it sets a minimum consumption level for biomass based diesel (which includes biodiesel and renewable diesel) in each year as shown in the following tabulation.^{28 29}

Year	Billion gallons
2014	1.63
2015	1.73
2016	1.90
2017	2.00
2018	2.10
2019	2.10 (proposed)

According to respondent Noble, in 2016, D4 RIN generation exceeded the biodiesel mandate by 33 percent.³⁰

²⁷ Respondent Noble's prehearing brief, p. 7.

²⁸ Respondent CARBIO's prehearing brief, p. 6 and Respondent Noble's prehearing brief, p. 10. The EPA is required to issue its final rule for 2018 RVOs by November 30, 2017. On September 26, 2017, EPA published its "Notice of Data Availability" with potential reductions for 2018 and 2019 citing the expiration of the BTC and Commerce preliminary CVD ruling as reasons, but EPA Administrator Pruitt has since indicated that it expects EPA to set final 2018 RVOs at or above proposed levels. "Final 2018-19 RFS rule sent to White House OMB for review," *Biodiesel Magazine*, November 2, 2017.

²⁹ Renewable diesel reportedly accounted for about *** percent of the mandate level in 2016. Petitioners' posthearing brief, p. I-7.

³⁰ Respondent Noble's prehearing brief, pp. 10-11.

*** stated that the RFS establishes a baseline of demand for biodiesel, and that the RFS is the single most important factor in the biodiesel market. *** stated that biodiesel prices and demand are driven mainly by RFS mandates. According to ***, the EPA has been said to be considering a cut to the RFS in 2018, which would likely “cripple” the biodiesel industry. Purchaser *** stated that the RFS mandate has increased demand for biodiesel but that participation from foreign producers has increased at a higher rate than overall demand. Purchaser *** stated that RFS mandates are modified annually, sometimes retroactively, and that this can create significant uncertainty in the market.

Another federal policy affecting demand is the BTC, a \$1 per gallon credit when biodiesel is blended below B100 with 0.1 percent diesel to get B99.9 or lower. The BTC has expired and been renewed periodically over the period of investigation; it lapsed in 2014 and 2015, but was applied retroactively when reinstated at the end of each of those years. It expired again on December 31, 2016, and it is uncertain whether it will be reinstated and retroactively applied.³¹

Firms stated that biodiesel demand has been higher when the BTC has been in effect and that the frequent lapse and retroactive renewal of the BTC has impacted demand.³²

Importer *** stated that there was a surge in U.S. production and imports in late 2016 to take advantage of the BTC before it expired in December, which was followed by a decrease in production and imports in early 2017. Purchaser *** stated that the relative demand for B99 versus B100 fluctuates depending on the status of the BTC.

Importer *** stated that in some years, U.S. producers would sell below their production cost and agree to split any future retroactive BTCs evenly with the customer. It further stated that companies are still selling biodiesel despite the lapse of the BTC and agreeing to split the BTC 50/50 with their customers if it is renewed. It also stated that its *** biodiesel is not currently competitive without the BTC.

State and local tax credits and mandates also increase demand for biodiesel. States that offer tax credits for biodiesel include California, Illinois, Iowa, and Texas, and thus demand tends to be higher in these states. In addition, states and localities, including Louisiana, Massachusetts, Minnesota, New Mexico, New York City, Oregon, Pennsylvania, Rhode Island, and Washington, mandate a minimum level of biodiesel to be used in petroleum diesel.³³

³¹ Two bills to reinstate the tax credit have been introduced but are reportedly unlikely to pass. One bill would reclassify the BTC from a blender’s credit to a domestic producer’s credit. The other bill would reinstate the blender credit but would gradually phase it out over 5 years. “Viewpoint: US biodiesel may get policy help by year-end,” <http://www.argusmedia.com/news/article/?id=1516738>, August 15, 2017.

³² *** stated that demand in 2016 when the credit was in place all year was significantly better than demand in 2014 or 2015 when the BTC had lapsed and was only applied retroactively. U.S. producer *** stated that when BTC expires, extra production in the fourth quarter of the year exacerbates the slowdown of demand in the following quarter.

³³ Some states have lower or no minimum blend percentages in winter. For example, Minnesota specifies a minimum of 5 percent biodiesel in January-March and October-December, and a minimum of 10 percent in other months (which will increase to 20 percent in May 2018). Respondent Noble’s prehearing brief, p. 8.

California's Low Carbon Fuel Standard (LCFS) and Oregon's Clean Fuel Program have increased demand for biodiesel in those states.³⁴ Importer *** stated that biodiesel made from palm oil is excluded from certain state and local programs, such as those in California, Oregon, and New York City.³⁵ Purchaser *** stated that it would not blend in certain locations without the mandate.³⁶

Other distinct conditions of competition noted by firms were the cost of petroleum fuels and soybean oil/waste oil; pricing of RINs; the price spread of D6 and D4 biodiesels; EPA allowance of imported biodiesel to meet federal mandates which allows foreign producers to take advantage of the RIN and BTC; use of biodiesel to meet the standards of the Paris climate accords; and lower prices for domestic biodiesel in New England because of imported Argentine biodiesel.

Firms also noted the following other changes in conditions of competition since 2014: falling diesel prices, increased imports, growth in overall demand, increased incentives have lowered blending costs, periods of large supply, increased competition for inputs/access to feedstock, industry consolidation, more EPA-approved Argentine and Indonesian feedstock available to foreign producers, and the reinstatement of the BTC in 2016 attracted a significant volume of imports.³⁷

Demand trends

Nearly all responding firms reported that U.S. demand for biodiesel has increased since January 1, 2014 (table II-4), and most attributed the growth in demand to government mandates and incentives, including the RFS and California's LCFS. Most firms did not have information regarding demand outside of the United States, but among those that provided answers, most stated that demand increased, with *** citing domestic biofuel mandates in Argentina, Brazil, Indonesia, and Malaysia.

Regional demand

Firms were asked whether demand for different types of biodiesel, such as biodiesel made from soybean oil versus that made from palm oil, varies by U.S. region (table II-5).

³⁴ Under California's LCFS program, biodiesel producers can generate tradeable credits. Respondent Noble's prehearing brief, p. 13.

³⁵ One firm stated that New York City has implemented its own mandate and incentive packages, which has increased biodiesel demand not only within the city itself but across the state and the entire Northeast. Another firm stated that biodiesel is also blended with heating oil to create bioheat and that New York City has a bioheat mandate which increases demand in winter months, partially offsetting normal seasonal effects in the Northeast.

³⁶ *** noted the substantial growth in California's LCFS program over last 3 years but stated that there have been some legal and political challenges to that program.

³⁷ U.S. producer *** stated that in January 2015, the EPA granted Argentine imported biodiesel products a pathway into the U.S. market.

Table II-4
Biodiesel: Firms' responses regarding U.S. demand and demand outside the United States since January 1, 2014

Item	Number of firms reporting			
	Increase	No change	Decrease	Fluctuate
Demand inside the United States:				
U.S. producers	21	1	3	---
Importers	13	---	---	1
Purchasers	28	1	1	2
Demand outside the United States:				
U.S. producers	8	3	---	4
Importers	9	---	---	1
Purchasers	8	2	---	2
Demand for purchasers' final products:				
Purchasers	18	3	4	6

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

Table II-5
Biodiesel: Number of firms reporting that demand differs in specified region

Item	U.S. producers		Importers		Purchasers	
	No	Yes	No	Yes	No	Yes
Northeast	3	12	3	9	6	18
Midwest	2	14	4	8	6	12
Southeast	8	7	8	5	12	9
Central Southwest	11	3	8	5	14	6
Mountains	2	9	4	7	6	10
Pacific Coast	2	16	4	8	5	13
Other	2	1	3	1	4	2

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

Firms most often noted variations in the Northeast, Midwest, Mountains, and the Pacific Coast. In general, regional differences were because of different climates, as lower cloud-point biodiesel is required in cold weather.³⁸

Indonesian respondents stated that New York City, California, Oregon, and Minnesota effectively limit the use of palm biodiesel. They state that California's LCFS program ranks palm biodiesel below petrodiesel, that Oregon bars the participation of PME in its programs, and that Minnesota and New York City exclude the use of PME biodiesel to meet mandates. They estimate that these state and local restrictions block the use of Indonesian biodiesel in about 13 percent of the total U.S. biodiesel market. Additionally, two firms (***) stated that lower carbon fuels (from UCO, animal fat or corn oil) are in higher demand in states with a low carbon fuel standard such as California and Oregon.

Most firms (21 of 25 U.S. producers, 11 of 13 importers, and 30 of 34 purchasers) indicated that regional demand differences varied by season. Firms noted that heating seasons

³⁸ Data for U.S. production and imports by cloud point are presented in *Part IV*.

differ and that there are limits to blending biodiesel in cold weather.³⁹ Firms stated that palm can be used in the South and in warmer weather in other regions, whereas canola and soy biodiesel is used in the Northeast, as well as in the Southeast and Central Southwest in colder seasons. Responding firms mentioned issues with blending high cloud-point palm biodiesel in Midwest in winter and that soy biodiesel is preferred over palm biodiesel in colder months because of its lower cloud point, and that there is relatively higher demand for canola biodiesel in winter because of its cold properties. One firm stated that in the Upper Midwest region, B20 blend is used in summer and B5 in winter. U.S. producer *** stated that its only sales to the South are in winter.

According to ***, canola oil based biodiesel has a cloud point of 14-32 degrees Fahrenheit, soy biodiesel typically has a cloud point of 32-36 degrees, and palm biodiesel typically has a cloud point of 55-64 degrees. It further stated that many customers have seasonal cloud point restrictions. For example, Kinder Morgan cannot store palm biodiesel at its terminal, the nation's largest, because of the company's winter maximum of 36 degrees and summer maximum of 46 degrees. *** also stated that major buyers such as Pilot and Biosphere/Musket/Loves restrict using higher cloud-point biodiesels made from palm and animal fat from October to March. Lastly, it stated that customers can buy and store higher cloud-point biodiesel during that period, but it must be discounted to pay for storing it for many months. Petitioners note that domestically produced biodiesel produced from certain feedstocks such as tallow and lard have cloud points similar to palm-based biodiesel.⁴⁰

Substitute products

Most U.S. producers (17 of 23) and importers (8 of 13), and half of responding purchasers (19 of 38) reported that there were substitutes for biodiesel. Identified substitutes for biodiesel were other types of diesel, including petrodiesel/ultra-low sulfur diesel ("ULSD") and renewable diesel, ethanol, heating oil, and natural gas. Many firms stated that prices of the substitutes are positively correlated with prices of biodiesel. Firms stated that biodiesel is priced in relation to petrodiesel, and generally sells at a discount to petrodiesel. Firms stated that renewable diesel is more expensive than biodiesel, but has the same uses and is eligible for the same programs and mandates. U.S. producer *** stated that biodiesel is a much larger market than renewable diesel so sets the price and renewable diesel follows. Importer *** stated that lower petrodiesel prices make biodiesel less competitive.

SUBSTITUTABILITY ISSUES

The degree of substitution between domestic and imported biodiesel depends upon such factors as relative prices, quality (e.g., grade standards, defect rates, etc.), and conditions

³⁹ One firm stated that it does not blend if temperatures are below zero degrees. Another firm stated that demand for biodiesel made from recycled oils is lower in winter because of their higher cloud point.

⁴⁰ Petitioners' prehearing brief, pp. 29-30.

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 moderate-to-high degree of substitutability between domestically produced biodiesel and biodiesel imported from subject sources, depending in part on geographical location.

Lead times

Biodiesel is primarily sold from inventory. U.S. producers reported that 60 percent of their commercial shipments were from inventories; with 13 of 18 responding U.S. producers reporting lead times ranging from 1 to 15 days, and five firms reporting 30-62 days. The remaining 40 percent of their commercial shipments were produced-to-order, with half of responding U.S. producers reporting lead times of up to 7 days and half reporting lead times ranging from 15 to 45 days. Importers of Argentine biodiesel reported that all of their commercial shipments were from U.S. inventories, with four firms reporting lead times of 7, 30, 88, and 120 days, respectively. Two importers of biodiesel from Indonesia reported that all of their sales were from U.S. inventories; one of these firms reported lead times of 30 days and the other reported 88 days. One importer of biodiesel from Indonesia reported that 95 percent of its sales were produced-to-order, with lead times averaging 90 days.

Knowledge of country sources

All 39 responding purchasers indicated they had marketing/pricing knowledge of domestic biodiesel, 20 of Argentine biodiesel, 18 of Indonesian biodiesel, and 18 of biodiesel from nonsubject countries.⁴¹

As shown in table II-6, a plurality of purchasers reported that they and their customers never make purchasing decisions based on the producer or country of origin. The purchasers that reported that they always make decisions based on the manufacturer cited product quality, RIN validity, qualified producers, and producer’s reputation as reasons. *** stated that it purchases from firms that meet Massachusetts’s Alternative Portfolio Standards which produce thermal energy credits that reduce the final cost of the product.

Table II-6
Biodiesel: Purchasing decisions based on producer and country of origin

Purchaser/Customer Decision	Always	Usually	Sometimes	Never
Purchaser makes decision based on producer	9	6	5	18
Purchaser’s customers make decision based on producer	2	3	8	19
Purchaser makes decision based on country	4	2	7	25
Purchaser’s customers make decision based on country	2	0	6	23

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

⁴¹ Multiple firms listed Canada and the EU. One or two firms listed Australia, China, Korea, Singapore, and South America.

Factors affecting purchasing decisions

The most often cited top three factors firms consider in their purchasing decisions for biodiesel were price (38 firms), quality (28 firms), and availability (22 firms) as shown in table II-7. Price was the most frequently cited first-most important factor (cited by 16 firms), followed by quality (14 firms); quality was the most frequently reported second-most important factor (12 firms); and price was the most frequently reported third-most important factor (15 firms).

The majority of purchasers (24 of 38) reported that they usually purchase the lowest-priced product, five reported always, 7 reported sometimes, and 2 reported never. When asked if they purchased biodiesel from one source although a comparable product was available at a lower price from another source, 15 purchasers reported reasons including quality, availability, location, logistics costs, supplier performance, and preference for multiple suppliers.

Table II-7
Biodiesel: Ranking of factors used in purchasing decisions as reported by U.S. purchasers, by factor

Factor	First	Second	Third	Total
Price	16	7	15	38
Quality	14	12	2	28
Availability	2	10	10	22
Traditional supplier	1	0	3	4
Delivery	0	2	2	4
Terms (contract or payment)	0	3	1	4
Other ¹	5	4	5	14

¹ Other factors include EPA compliance status, feedstock, location, and integrity for first factor; RIN validity and location for second factor; and location, creditworthiness, reliability, and willingness to negotiate B99 tax credit 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 23 factors in their purchasing decisions (table II-8). The factors rated as very important by more than half of responding purchasers were quality meets industry standards and availability (35 each); price (34); reliability of supply (33); product consistency (30); regulatory requirements and RIN value (29 each); delivery time, discounts offered, and EPA certification (28 each); RIN classification (26); U.S. transportation costs (23); and delivery terms and federal tax incentives (22 each). A majority or plurality of firms indicated that packaging and product range were not important.

Supplier certification

Almost three-quarters of responding purchasers (28 of 38) require their suppliers to become certified or qualified to sell biodiesel to their firm. Most purchasers reported that the time to qualify a new supplier was 45 days or fewer. Eight of 38 purchasers reported that a

domestic or foreign supplier had failed in its attempt to qualify biodiesel, or had lost its approved status since 2014. Five purchasers (***) listed firms located in the United States.⁴² *** listed a large number of sources (including the United States, Canada, Indonesia, and nonsubject countries) that were disqualified due to “weak financials,” EPA status, product quality, and/or low volume.

Three firms listed Canadian suppliers. At the staff conference, BioSphere stated that one of the petitioners provided it with off spec product that “caused the largest quality incident in the history of our biodiesel program.”

Table II-8
Biodiesel: Importance of purchase factors, as reported by U.S. purchasers, by factor

Factor	Number of firms reporting		
	Very important	Somewhat important	Not important
Availability	35	2	1
Delivery terms	22	12	4
Delivery time	28	8	2
Discounts offered	28	8	2
EPA certification	28	7	3
Extension of credit	15	12	11
Feedstock	14	18	7
Federal tax incentives	22	12	4
Minimum quantity requirements	11	17	10
Packaging	1	10	27
Price	34	3	---
Product consistency	30	5	3
Product range	8	11	17
Quality Assurance Program (“QAP”)	13	18	7
Quality meets industry standards	35	3	---
Quality exceeds industry standards	16	18	4
Regulatory requirements	29	4	4
Reliability of supply	33	4	1
RIN classification (e.g. D4, D6)	26	5	7
RIN value	29	4	5
State tax incentives	13	14	11
Technical support/service	9	16	13
U.S. transportation costs	23	7	8

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

⁴² ***.

Changes in purchasing patterns

Purchasers were asked about changes in their purchasing patterns from different sources since 2014 (table II-9). Reasons reported for increased purchases of domestic product were increased sales/stores/terminals/blending, and increases in demand for biodiesel because of the RFS mandate. Reasons for decreased domestic purchases were decreased business, price, quality, and high U.S. transportation costs from domestic plants. *** stated that Argentina's ability to produce RFS2 qualifying biodiesel created a large, cheaper biodiesel market. *** also reported increased imports of Argentine biodiesel as a result of the approval of CARBIO's RFS recordkeeping plan.⁴³ It stated that the market for Indonesian biodiesel fluctuates with the availability of the BTC and the ability to meet cloud-point requirements. Regarding biodiesel from other countries, it stated that imports from Korea are attractive since they are able to meet specifications in California. *** stated that its purchases of imports from Argentina and Indonesia have fluctuated depending on the best value at the time.

The majority of purchasers (22 of 38) reported that they had changed suppliers since January 1, 2014. Many of these firms reported adding suppliers; reasons included additional source of supply, expanded operations, new sources of production, availability, geographic location, pricing, and quality. *** stated that it dropped one domestic supplier for "questionable business practices" and has avoided other domestic suppliers for quality issues. *** stated that the market for biodiesel is a commodity market and that suppliers are constantly being added or dropped.

Table II-9
Biodiesel: Changes in purchase patterns from U.S., subject, and nonsubject countries

Source of purchases	Did not purchase	Decreased	Increased	Constant	Fluctuated
United States	1	6	18	6	6
Argentina	18	---	12	1	3
Indonesia	25	3	4	---	2
Canada	15	1	8	4	4
All other sources	16	1	6	2	5

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

Importance of purchasing domestic product

Most purchasers reported no domestic requirements for their purchases of biodiesel. One purchaser (***) reported that domestic product was required by law (for 100 percent of its purchases) and two firms (***) reported it was required by their customers (for 20 to 25 percent of their purchases). Five purchasers reported other preferences for domestic product. These purchasers include ***, which stated that its inland terminals are best served by rail; ***, which stated they purchase domestic product as a result of company policy; and *** which

⁴³ As noted in *Part VII*, CARBIO's current certification scheme was approved by the EPA in January 2015.

stated that its internal vetting process requires purchases of domestic product when possible but that foreign-sourced product may be purchased when buying from a fungible tank where product from multiple sources is blended. *** stated that 3 percent of its purchases required domestic product, explaining that its exports needed to be domestic to get the \$1 per gallon tax credit.

Comparisons of domestic products, subject imports, and nonsubject imports

Purchasers were asked a number of questions comparing biodiesel produced in the United States, subject countries, and nonsubject countries. First, purchasers were asked for a country-by-country comparison on the same 23 factors (table II-10) for which they were asked to rate the importance.

A majority of purchasers reported that domestic biodiesel was comparable to subject imported biodiesel from Argentina on 22 of 23 factors, and was comparable to Indonesian biodiesel on 18 of 23 factors. Domestic product was rated as higher-priced than Argentine product by half of purchasers (11 of 22) and as higher-priced than Indonesian product by almost half of responding purchasers (7 of 15). In addition, a small majority or plurality of purchasers rated the domestic product as superior to Indonesian product with respect to availability, RIN classification, and RIN value, and 8 of 15 purchasers indicated that the domestic product was inferior to Indonesian product in terms of discounts. In comparisons to nonsubject biodiesel, a majority of firms rated domestic and Canadian biodiesel as comparable on all 23 factors, and most firms rated domestic biodiesel and imported product from other nonsubject countries as comparable on all factors except availability and delivery time.

Comparison of U.S.-produced and imported biodiesel

In order to determine whether U.S.-produced biodiesel can generally be used in the same applications as imports from Argentina and Indonesia, U.S. producers, importers, and purchasers were asked whether the products can always, frequently, sometimes, or never be used interchangeably. As shown in table II-11, a majority or plurality of U.S. producers indicated that biodiesel from all sources (except nonsubject other than Canada) is always interchangeable. Importers and purchasers reported more mixed responses. Nearly all importers and purchasers indicated that domestic and Argentine biodiesel was always or frequently interchangeable. With respect to imports from Indonesia, 8 of 12 importers stated that they were sometimes interchangeable with domestic product, and 9 of 12 stated that they were sometimes interchangeable with Argentine product. Among purchasers, 10 stated that domestic and Indonesian product were sometimes interchangeable, 7 stated that they frequently were interchangeable, and 5 stated that they were always interchangeable.

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

Factor	Number of firms reporting								
	United States vs. Argentina			United States vs. Indonesia			Argentina vs. Indonesia		
	S	C	I	S	C	I	S	C	I
Availability	7	14	4	9	6	2	4	11	---
Delivery terms	4	17	2	5	9	1	4	10	---
Delivery time	6	14	3	7	8	1	5	10	---
Discounts offered	1	13	7	1	6	8	1	8	5
EPA certification	3	19	1	4	11	1	3	11	---
Extension of credit	2	17	1	2	12	---	1	10	1
Feedstock	2	20	1	7	7	2	8	7	---
Federal tax incentives	4	18	---	3	12	---	2	12	---
Minimum quantity requirements	5	14	2	4	9	2	2	12	---
Packaging	3	17	---	3	10	1	1	12	---
Price ¹	1	10	11	2	6	7	1	9	4
Product consistency	2	19	2	5	10	1	4	10	---
Product range	5	13	1	6	8	1	2	10	---
Quality Assurance Program ("QAP")	5	15	2	6	9	---	1	13	---
Quality meets industry standards	2	19	---	4	9	1	1	12	---
Quality exceeds industry standards	2	15	3	4	9	1	---	12	---
Regulatory requirements	4	16	1	4	11	---	1	13	---
Reliability of supply	6	14	2	6	8	1	4	10	---
RIN classification (e.g. D4, D6)	5	17	---	9	5	1	10	3	---
RIN value	9	13	1	10	6	---	7	7	---
State tax incentives	4	15	1	3	11	---	---	12	---
Technical support/service	3	15	2	2	10	1	---	12	---
U.S. transportation costs ¹	5	12	6	4	7	3	---	10	---

Table continued on next page.

Table II-10--Continued
Biodiesel: Purchasers' comparisons between U.S.-produced and imported product

Factor	Number of firms reporting								
	United States vs. Canada			Argentina vs. Canada			Indonesia vs. Canada		
	S	C	I	S	C	I	S	C	I
Availability	8	12	---	---	9	4	---	7	5
Delivery terms	1	19	---	1	10	2	---	8	4
Delivery time	5	13	2	1	8	4	---	5	7
Discounts offered	1	17	2	4	7	2	5	6	1
EPA certification	---	19	---	1	10	1	---	10	2
Extension of credit	1	19	---	1	9	2	---	10	1
Feedstock	4	14	2	1	10	2	---	5	7
Federal tax incentives	3	16	---	---	11	1	---	10	1
Minimum quantity requirements	1	16	---	1	9	1	---	8	2
Packaging	1	15	1	1	8	2	---	7	3
Price ¹	1	18	1	4	9	---	4	7	1
Product consistency	1	17	1	1	10	1	---	9	2
Product range	2	12	2	1	8	1	---	6	3
Quality Assurance Program ("QAP")	---	18	1	---	9	3	---	10	1
Quality meets industry standards	1	19	---	---	11	1	---	10	1
Quality exceeds industry standards	2	14	1	---	9	2	---	8	2
Regulatory requirements	2	17	---	---	11	1	---	10	1
Reliability of supply	2	16	2	1	10	2	---	8	4
RIN classification (e.g. D4, D6)	2	18	---	---	12	1	---	3	9
RIN value	2	18	---	1	9	3	---	4	8
State tax incentives	2	15	1	---	10	1	---	8	1
Technical support/service	2	15	1	---	9	2	---	8	1
U.S. transportation costs ¹	2	12	3	---	8	1	---	4	3

Table continued on next page.

Table II-10--Continued
Biodiesel: Purchasers' comparisons between U.S.-produced and imported product

Factor	Number of firms reporting								
	United States vs. All other sources			Argentina vs. All other sources			Indonesia vs. All other sources		
	S	C	I	S	C	I	S	C	I
Availability	4	2	1	4	4	---	1	5	---
Delivery terms	2	4	1	2	6	---	1	5	---
Delivery time	4	3	---	3	5	---	1	2	3
Discounts offered	---	6	1	3	5	---	2	4	---
EPA certification	---	7	---	---	8	---	---	6	---
Extension of credit	1	6	---	---	8	---	---	6	---
Feedstock	1	6	---	1	7	---	---	5	1
Federal tax incentives	1	6	---	---	7	---	---	6	---
Minimum quantity requirements	2	5	---	---	6	1	---	5	1
Packaging	1	6	---	---	6	1	---	6	---
Price ¹	---	7	---	3	5	---	2	4	---
Product consistency	---	6	1	1	7	---	---	6	---
Product range	2	5	---	---	7	---	---	6	---
Quality Assurance Program ("QAP")	2	5	---	---	8	---	---	6	---
Quality meets industry standards	---	7	---	---	8	---	---	6	---
Quality exceeds industry standards	---	7	---	---	8	---	---	6	---
Regulatory requirements	---	7	---	---	7	1	---	6	---
Reliability of supply	2	4	1	1	7	---	---	6	---
RIN classification (e.g. D4, D6)	---	7	---	---	7	1	---	3	3
RIN value	3	4	---	---	7	1	---	3	3
State tax incentives	---	7	---	---	7	---	---	6	---
Technical support/service	---	7	---	---	8	---	---	6	---
U.S. transportation costs ¹	2	5	---	---	7	---	---	6	---

¹ A rating of superior means that price/U.S. transportation cost 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.

Table II-11
Biodiesel: Interchangeability between biodiesel 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. Argentina	18	4	1	---	5	6	1	---	12	12	1	---
United States vs. Indonesia	11	8	3	---	3	1	8	---	5	7	10	---
Argentina vs. Indonesia	9	6	3	---	3	---	9	---	3	3	7	1
United States vs. Canada	18	3	1	---	6	5	2	---	11	13	1	---
United States vs. Other	7	7	3	---	4	3	4	---	5	7	1	1
Argentina vs. Canada	12	3	1	---	5	4	3	---	4	7	1	---
Argentina vs. Other	8	5	2	---	3	3	5	---	3	4	2	---
Indonesia vs. Canada	8	6	2	---	3	1	7	1	3	4	4	1
Indonesia vs. Other	7	6	2	---	3	2	5	1	3	3	2	1
Canada vs. Other	9	4	2	---	3	3	5	---	3	4	2	---

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

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

Many importers and purchasers reported that that palm oil biodiesel from Indonesia has limited interchangeability with soy based biodiesel from other sources because its high cloud point makes it less suitable for cold weather use. Firms also noted that Indonesian biodiesel can only generate conventional biofuel (D6) RINs under the RFS as opposed to biomass-based diesel (D4) RINs, which are generally more valuable. *** stated that domestic biodiesel also has better cold-weather characteristics than biodiesel from Argentina because it contains fewer monoglycerides (0.4 percent compared to 0.6 percent), and thus reduces clogging of fuel filters. On the other hand, importer *** stated that a majority of domestic biodiesel is soybean oil-based and is completely interchangeable with Argentine biodiesel. *** stated that Korean biodiesel more easily meets California’s color specification for biodiesel than does imports from other sources. Purchaser *** stated that product specifications among producers and production facilities can vary greatly, limiting interchangeability.

As can be seen in table II-12, nearly all responding purchasers reported that domestic biodiesel and imported biodiesel from Argentina and Canada always or usually meets minimum quality specifications. Seven of 15 responding purchasers reported that Indonesian biodiesel sometimes or never meets minimum quality specifications.

Table II-12
Biodiesel: Ability to meet minimum quality specifications, by source¹

Source	Always	Usually	Sometimes	Rarely or never
United States	10	20	2	---
Argentina	6	13	2	---
Indonesia	1	7	6	1
Canada	5	16	1	---
Other	1	3	2	---

¹ Purchasers were asked how often domestically produced or imported biodiesel 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 or purchases of biodiesel from the United States, subject, or nonsubject countries. As seen in table II-13, the majority of responding firms reported that differences other than price between country sources were generally sometimes or not significant factors. Factors identified by importers and purchasers that are significant in sales of biodiesel are quality, specifications, RINs acceptance, freight rates and transportation network, logistics, EPA compliance status, seasonal restrictions, and availability.

Table II-13
Biodiesel: Significance of differences other than price between biodiesel 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. Argentina	1	1	9	11	3	1	4	4	7	3	7	6
United States vs. Indonesia	---	---	13	8	3	1	5	3	6	3	8	4
Argentina vs. Indonesia	---	---	12	4	2	2	5	3	1	4	5	3
United States vs. Canada	1	1	7	12	3	1	2	7	7	3	3	10
United States vs. Other	---	1	10	4	3	2	3	3	3	3	4	4
Argentina vs. Canada	---	1	7	7	3	1	4	4	2	2	3	4
Argentina vs. Other	---	1	8	3	2	3	3	3	1	4	2	2
Indonesia vs. Canada	---	---	9	5	3	1	5	3	2	3	3	3
Indonesia vs. Other	---	---	8	4	4	---	3	4	3	2	---	4
Canada vs. Other	---	1	7	4	2	3	3	3	1	4	2	2

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

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

ELASTICITY ESTIMATES

U.S. supply elasticity

The domestic supply elasticity⁴⁴ for biodiesel measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price of biodiesel. 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 biodiesel. Analysis of these factors above indicates that the U.S. industry has the ability to somewhat increase or decrease shipments to the U.S. market; an estimate in the range of 2 to 4 is suggested.

U.S. demand elasticity

The U.S. demand elasticity for biodiesel measures the sensitivity of the overall quantity demanded to a change in the U.S. market price of biodiesel. This estimate depends on factors discussed above such as the existence, availability, and commercial viability of substitute products, as well as the component share of the biodiesel in the production of any downstream products. Based on the available information, the aggregate demand for biodiesel is likely to be inelastic up to the mandated volume and then elastic above the mandate. Respondent CARBIO stated that the demand is highly inelastic since consumption quantities are set by government mandate.⁴⁵

Substitution elasticity

The elasticity of substitution depends upon the extent of product differentiation between the domestic and imported products.⁴⁶ 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 biodiesel and imported biodiesel is likely to be in the range of 3 to 6.

⁴⁴ A supply function is not defined in the case of a non-competitive market.

⁴⁵ Respondent CARBIO's prehearing brief, exh. 2.

⁴⁶ 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: U.S. PRODUCERS' PRODUCTION, SHIPMENTS, AND EMPLOYMENT

The Commission analyzes a number of factors in making injury determinations (see 19 U.S.C. §§ 1677(7)(B) and 1677(7)(C)). Information on the subsidies and dumping margins was presented in *Part I* of this report and information on the volume and pricing of imports of the subject merchandise is presented in *Part IV* and *Part V*. Information on the other factors specified is presented in this section and/or *Part VI* and (except as noted) is based on the questionnaire responses of 25 firms.¹

U.S. PRODUCERS

The Commission issued a U.S. producer questionnaire to 48 firms based on information contained in the petition and available industry sources.² Twenty-five firms provided usable data on their productive operations. Figure III-1 presents the production locations of U.S. biodiesel producers.

Figure III-1
Biodiesel: U.S. producers' production locations, 2016

* * * * * * *

Table III-1 lists the responding U.S. producers of biodiesel, their production locations, positions on the petition, and shares of total production.

¹ For discussion of data coverage please refer to Part I, "Summary Data and Data Sources."

² These firms represent approximately 90 percent of total U.S. biodiesel capacity based on Biodiesel Magazine, plant list found at <http://www.biodieselmagazine.com/plants/listplants/USA/>.

**Table III-1
Biodiesel: U.S. producers of biodiesel, their positions on the petition, production locations, and shares of reported production, 2016**

Firm	Position on petition	Production location(s)	Share of production (percent)
ADM	Support	Velva, ND Deerfield, MO Mexico, MO	***
Ag Processing	Support	Algona, IA St Joseph, MO Sergeant Bluff, IA	***
Agron	***	Watsonville, CA	***
American GreenFuels	***	New Haven, CT	***
Cargill	***	Iowa Falls, IA Kansas City, Mo	***
Community Fuels	***	Stockton, CA	***
CRF	***	Cincinnati	***
Crimson	Support	Bakersfield, CA	***
FutureFuel	***	Batesville, AR	***
Hero BX	Support	Erie, PA Moundville, AL	***
High Plains	Support	Guymon, OK St Joseph, MO	***
Imperial Western	***	Coachella, CA	***
Incobrasa	***	Gilman, Illinois	***
Integrity	Support	Morristown, IN	***
Louis Dreyfus	***	Claypool, IN	***
Minnesota Soybean	Support	Brewster, MN	***
New Leaf	Support	San Diego, CA	***
Newport	Support	Newport, RI	***
RB Fuels	***	Port Neches, TX	***
REG	Support	Ralston, IA Mason City, IA Newton, IA Albert Lea, MN Danville, IL Seneca, IL	***
W2Fuel	***	Adrian, MI Crawfordsville, IA	***
Western Dubuque	Support	Farley, IA	***
Western Iowa	Support	Wall Lake, Iowa	***
White Mountain	Support	N. Haverhill, NH	***
World Energy	Support	Rome, GA Boston, MA Camp Hill, PA Natchez, MS Galena Park, TX	***
Total			***

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

Table III-2 presents information on U.S. producers' ownership and related and/or affiliated firms.

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

* * * * *

As indicated in table III-2, three U.S. producers (***) are related to foreign producers of the subject merchandise and three U.S. producers (***) are related to U.S. importers of the subject merchandise. In addition, as discussed in greater detail below, two U.S. producers (***) directly import the subject merchandise and three purchase the subject merchandise from U.S. importers.

Table III-3 presents U.S. producers’ reported changes in operations since January 1, 2014.

Table III-3
Biodiesel: U.S. producers’ reported changes in operations, since January 1, 2014

* * * * *

U.S. PRODUCTION, CAPACITY, AND CAPACITY UTILIZATION

Table III-4 presents U.S. producers’ capacity and production of biodiesel reported to U.S. Energy Information Administration (“EIA”).³ Figure III-2 which presents monthly U.S. biodiesel production reported to EIA, shows that U.S. producers’ production was consistently higher in each month in 2016 than in 2014 or 2015, and that the lowest production in each year is in the first quarter.

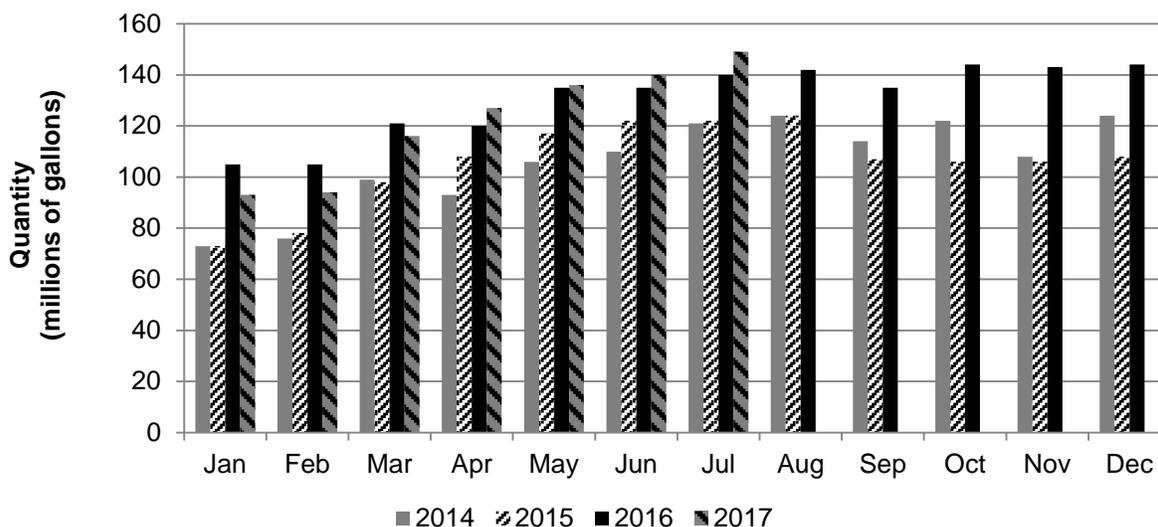
Table III-4
Biodiesel: U.S. producers’ production and capacity, 2014-16, January to June 2016, and January to June 2017

Item	Calendar year			January to June	
	2014	2015	2016	2016	2017
	Quantity (1,000 gallons)				
Capacity	2,093,000	2,142,500	2,276,167	1,128,917	1,158,333
Production	1,271,000	1,269,000	1,569,000	721,000	706,000
	Ratio (percent)				
Capacity utilization	60.7	59.2	68.9	63.9	60.9

Source: U.S. Energy Information Administration, Monthly Biodiesel Production Report, September 2017.

³ Respondents argue that the capacity reported by EIA is overstated as some of the capacity is not readily available because it includes production facilities that are not in operation, some of which have not been so in quite some time. Conference transcript, pp. 117-118 (McCullough), and respondent CARBIO’s postconference brief, p. 14. Petitioners contend that the EIA capacity data show unused or underutilized available capacity. Conference transcript, pp. 197-198 (Soanes) and hearing transcript, p 113 (Getlan).

Figure III-2
Biodiesel: U.S. producers' monthly U.S. production, January 2014 through July 2017



Source: U.S. Energy Information Administration, Monthly Biodiesel Production Report, 2016, and, update through for July 2017, released September 29, 2017, accessed October 2, 2017.

Table III-5 and figure III-3 present U.S. producers' production, nameplate capacity, average production capacity, and capacity utilization. Nameplate capacity increased 5.3 percent in 2015 and 20.8 percent in 2016, ending 27.2 percent higher than in 2014, and was 1.6 percent higher in interim 2017 than in interim 2016. Production capacity increased 5.0 percent in 2015 and 22.4 percent in 2016, ending 28.5 percent higher than in 2014 and was 0.9 percent higher in interim 2017 than in interim 2016.⁴

The vast majority of the reported increase in capacity was due to the acquisition of existing facilities. ***, which accounted for a large share of the increased nameplate and production capacity reported, purchased ***. *** accounted for the second largest increase in capacity (equivalent to *** percent of the total increase during 2014-16). *** purchased ***. *** purchased ***, and *** acquired a ***.⁵ Taking into account the capacity that was acquired but not reflected in U.S. producer questionnaire responses (i.e. questionnaire responses from the prior owners of the facilities acquired were not received), U.S. producers' nameplate capacity would have increased approximately *** gallons or *** percent between 2014 and 2016. In addition to the aforementioned acquisitions, twelve other U.S. producers reported increased capacity, largely in 2016.

⁴ Nameplate capacity is the level of production that an establishment could achieve based on the rated or intended full-load sustained (24/7, all year round) output of a facility. Petitioners noted that while actual production capacity for most firms is lower than nameplate capacity, for some firms, it is higher due to additional productivity gains since the time of the establishment or acquisition of the facility. Hearing transcript, pp. 121-122 (Levy).

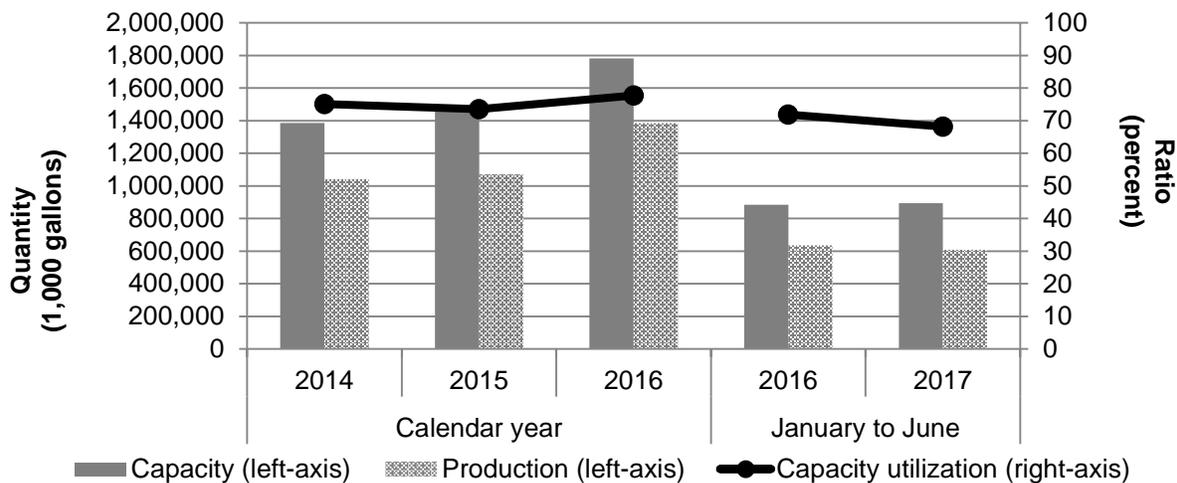
⁵ Responses to U.S. producers' questionnaire and email from ***, October 22, 2017.

**Table III-5
Biodiesel: U.S. producers' production, capacity, and capacity utilization, 2014-16, January to June 2016, and January to June 2017**

Item	Calendar year			January to June	
	2014	2015	2016	2016	2017
Nameplate capacity (1,000 gallons)					
REG	***	***	***	***	***
ADM	***	***	***	***	***
Ag Processing	***	***	***	***	***
Cargill	***	***	***	***	***
RB Fuels	***	***	***	***	***
Louis Dreyfus	***	***	***	***	***
CRF	***	***	***	***	***
FutureFuel	***	***	***	***	***
All other firms	***	***	***	***	***
Nameplate capacity	1,447,329	1,524,366	1,841,598	923,950	938,750
Average production capacity (1,000 gallons)					
REG	***	***	***	***	***
ADM	***	***	***	***	***
Ag Processing	***	***	***	***	***
Cargill	***	***	***	***	***
RB Fuels	***	***	***	***	***
Louis Dreyfus	***	***	***	***	***
CRF	***	***	***	***	***
FutureFuel	***	***	***	***	***
All other firms	***	***	***	***	***
Average production capacity	1,386,348	1,456,279	1,782,010	885,026	893,364
Production (1,000 gallons)					
REG	***	***	***	***	***
ADM	***	***	***	***	***
Ag Processing	***	***	***	***	***
Cargill	***	***	***	***	***
RB Fuels	***	***	***	***	***
Louis Dreyfus	***	***	***	***	***
CRF	***	***	***	***	***
FutureFuel	***	***	***	***	***
All other firms	***	***	***	***	***
Total production	1,041,720	1,071,007	1,384,998	636,354	609,286
Capacity utilization (percent)					
REG	***	***	***	***	***
ADM	***	***	***	***	***
Ag Processing	***	***	***	***	***
Cargill	***	***	***	***	***
RB Fuels	***	***	***	***	***
Louis Dreyfus	***	***	***	***	***
CRF	***	***	***	***	***
FutureFuel	***	***	***	***	***
All other firms	***	***	***	***	***
Average capacity utilization	75.1	73.5	77.7	71.9	68.2

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

Figure III-3
Biodiesel: U.S. producers' production, capacity, and capacity utilization, 2014-16, January to June 2016, and January to June 2017



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

Production increased 2.8 percent in 2015 and 29.3 percent in 2016, ending 33.0 percent higher than in 2014. *** accounted for the largest increase in production between 2014 and 2016 (equivalent to *** percent of the total increase). *** reported that the increased production reflects the growing demand during the period. Parties noted that demand increased in 2016 due to the higher EPA mandated volumes under the RFS program and the prospective reinstatement of the blender's tax credit.⁶ Production was higher in 2016 compared to 2014 for every responding U.S. producer, except ***.

Soybean oil was used to produce the majority of biodiesel (56.3 percent) during 2014-16, although the share declined over this period. All but eight U.S. producers used soybean oil for at least part of their biodiesel production during 2014-16. Five U.S. producers used soybean oil for all biodiesel production in each full year while other U.S. producers changed the share in each year, some shifting completely to other feedstock. Canola/rapeseed oil and other types of feedstock, such as corn oil, white/yellow grease, and animal fats, accounted for the second and third largest share of U.S. biodiesel production during the period for which data were collected. Only *** reported using palm oil and palm kernel oil in the production of biodiesel, albeit accounting for less than *** percent of the firm's biodiesel production in any one period.

U.S. producers' capacity utilization increased 2.6 percentage points between 2014 and 2016, declining 1.6 percentage points in 2015 and increasing 4.2 percentage points in 2016, and was 3.7 percentage points lower in interim 2017 than in interim 2016. All but four U.S. producers (***) had higher capacity utilization in 2016 compared to 2014. ***.⁷ ***.⁸ ***.

⁶ Conference transcript, p. 24 (Whitney) and p. 161 (Levy) and hearing transcript, p. 109 (Soanes).

⁷ Email from ***, November 6, 2017.

⁸ Email from ***, October 13, 2017.

U.S. production by feedstock

At least 50 percent of U.S. production used soybean in any one period (table III-6). Some U.S. producers reported shifting production among different feedstocks based on the economics of the different feedstocks.⁹

Table III-6
Biodiesel: U.S. producers' production by type of feedstock, 2014-16, January to June 2016, and January to June 2017

* * * * *

U.S. production by RIN type

As shown in table III-7, the vast majority of U.S. production of biodiesel over the period for which data were collected qualified for D4 RINs.¹⁰

Table III-7
Biodiesel: U.S. producers' production by RIN type, 2014-16, January to June 2016, and January to June 2017

* * * * *

Alternative products

No producer reported producing other products on the same equipment as biodiesel.¹¹

U.S. PRODUCERS' U.S. SHIPMENTS AND EXPORTS

Table III-8 presents U.S. producers' U.S. shipments, export shipments, and total shipments. U.S. producers' commercial U.S. shipments, by quantity, increased 2.9 percent in 2015 and 30.6 percent in 2016, ending 34.4 percent higher than in 2014, and were 6.3 percent lower in interim 2017 compared with interim 2016. U.S. producers' commercial U.S. shipments, by value, decreased 18.9 percent in 2015 and increased 12.8 percent in 2016, ending 8.5 percent lower than in 2014, and were 7.2 percent higher in interim 2017 compared with interim 2016. This resulted in the average unit value of U.S. producers' commercial U.S. shipments declining \$0.68 per gallon in 2015 and \$0.35 per gallon in 2016, ending \$1.03 lower than in 2014, but \$0.30 higher in interim 2017 than in interim 2016. While every reporting U.S. producer had lower average unit values for commercial U.S. shipments in 2015 compared to

⁹ Emails from ***, October 19, 2017, and ***, October 16, 2017.

¹⁰ Only *** produced biodiesel that did not qualify for RINs.

¹¹ Several U.S. producers reported producing glycerin, sterols, ester bottoms, and skimmed fatty acids, which are by-products of the biodiesel production process. Conference transcript, pp. 192-193 (Stone) and p. 224 (Stone).

2014, three U.S. producers had higher average unit values in 2016, and all but four U.S. producer's average unit value was higher in interim 2017 than in interim 2016. As noted in part VI, the value of biodiesel is affected by many factors including the local price of feedstock, the value of RINs, and the blenders' tax credit.

U.S. producers' total shipments, by quantity, increased 0.5 percent in 2015 and 33.8 percent in 2016, ending 34.5 percent higher than in 2014, but was 6.8 percent lower in interim 2017 than in interim 2016. All U.S. producers except *** had higher quantities of commercial U.S. shipments and total shipments in 2016 than in 2014. U.S. producers' total shipments, by value, decreased 18.2 percent in 2015 and increased 18.0 percent in 2016, ending 3.5 percent lower than in 2014 but was 12.9 percent higher in interim 2017 than in interim 2016. This resulted in the average unit value of U.S. producers' total shipments declining \$0.62 per gallon in 2015 and \$0.32 per gallon in 2016, ending \$0.94 lower than in 2014, but was \$0.47 per gallon higher in interim 2017 than in interim 2016.

Five U.S. producers internally consumed biodiesel during 2014-16, with the vast majority reported by ***. Four U.S. producers had transfers to related firms during 2014-16, with the majority reported by ***. Four firms had exports during 2014-16, mainly to ***, with the majority reported by ***.

Table III-8
Biodiesel: U.S. producers' U.S. shipments, exports shipments, and total shipments, 2014-16,
January to June 2016, and January to June 2017

Item	Calendar year			January to June	
	2014	2015	2016	2016	2017
	Quantity (1,000 gallons)				
Commercial U.S. shipments	981,696	1,010,410	1,319,635	586,807	549,966
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
U.S. shipments	1,025,044	1,047,034	1,391,900	619,805	581,738
Export shipments	34,713	18,462	33,399	19,681	14,444
Total shipments	1,059,757	1,065,496	1,425,299	639,486	596,182
	Value (1,000 dollars)				
Commercial U.S. shipments	3,161,668	2,562,828	2,891,715	1,243,771	1,333,393
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
Independent RIN sales	***	***	***	***	***
U.S. shipments	3,407,311	2,833,472	3,341,054	1,383,609	1,561,209
Export shipments	124,995	55,769	68,101	38,451	44,502
Total shipments	3,532,306	2,889,241	3,409,155	1,422,060	1,605,711
	Unit value (dollars per gallon)				
Commercial U.S. shipments	3.22	2.54	2.19	2.12	2.42
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
U.S. shipments	3.32	2.71	2.40	2.23	2.68
Export shipments	3.60	3.02	2.04	1.95	3.08
Total shipments	3.33	2.71	2.39	2.22	2.69
	Share of quantity (percent)				
Commercial U.S. shipments	92.6	94.8	92.6	91.8	92.2
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
U.S. shipments	96.7	98.3	97.7	96.9	97.6
Export shipments	3.3	1.7	2.3	3.1	2.4
Total shipments	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)				
Commercial U.S. shipments	89.5	88.7	84.8	87.5	83.0
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
Independent RIN sales	***	***	***	***	***
U.S. shipments	96.5	98.1	98.0	97.3	97.2
Export shipments	3.5	1.9	2.0	2.7	2.8
Total shipments	100.0	100.0	100.0	100.0	100.0

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

U.S. producer's commercial U.S. shipments by type

Table III-9 presents U.S. producers' commercial U.S. shipments by level of blending and RIN status. The majority of U.S. producers' commercial U.S. shipments are sold with RINs, although the share declined from *** percent in 2014, to *** percent in 2015, and to *** percent in 2016. The majority of U.S. producers' commercial U.S. shipments during 2014-16 were B99, increasing from *** percent in 2014, to *** percent in 2015 and *** percent in 2016.¹² The average unit value for each of the types of biodiesel declined between 2014 and 2016, although B100 sold with and without RINs declined to their lowest levels in 2015 and increased in 2016, albeit below the average unit values in 2014. Several producers noted that the existence (in 2016) or likelihood of reinstatement (in 2015) of the blender's tax credit affected the price of B99 relative to B100.¹³

Table III-9
Biodiesel: U.S. producers' commercial U.S. shipments, by type 2014-16 January to June 2016, and January to June 2017

* * * * *

U.S. producers' monthly U.S. shipments

Table III-10 and figure III-4 present U.S. producers' monthly U.S. shipments reported to EIA.

¹² U.S. producer Louis Dreyfus noted that when the blenders' tax credit exists, as it did during 2016, U.S. producers generally sold B99. Conference transcript, p. 39 (Doyle).

¹³ Conference transcript, pp. 39 and 80-81 (Doyle), and email from ***, April 17, 2017, email from ***, April 17, 2017, ***, April 17, 2017, and email from ***, April 17, 2017.

Table III-10

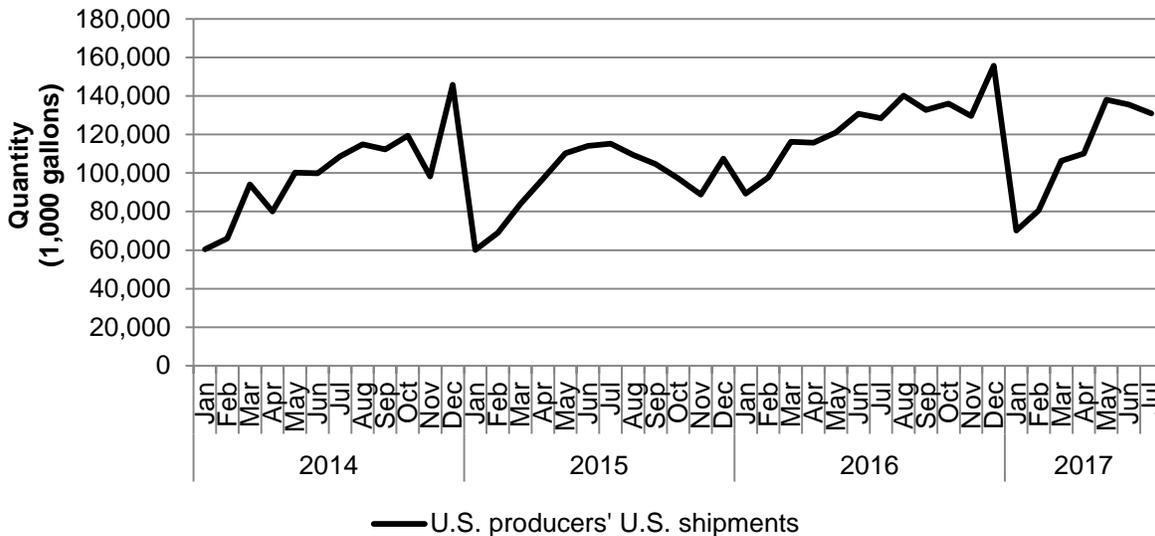
Biodiesel: U.S. producers' U.S. shipments by month, January 2014 through July 2017

Item	Calendar year			
	2014	2015	2016	2017
	Quantity (1,000 gallons)			
U.S. producers' U.S. shipments.--				
January	60,372	60,076	89,236	70,236
February	66,078	69,034	97,690	80,606
March	94,178	83,978	116,172	106,288
April	80,038	96,920	115,668	110,114
May	100,264	110,290	120,972	137,962
June	99,954	114,080	130,760	135,508
July	108,560	115,290	128,500	130,890
August	114,912	109,450	140,172	
September	112,288	104,600	132,700	
October	119,320	97,238	136,010	
November	98,270	88,808	129,616	
December	145,858	107,414	155,640	
Total	1,200,092	1,157,178	1,493,136	771,604

Source: U.S. Energy Information Administration, Monthly Biodiesel Production Report, September 2017.

Figure III-4

Biodiesel: U.S. producers' U.S. shipments by month, January 2014 through July 2017



Source: U.S. Energy Information Administration, Monthly Biodiesel Production Report, September 2017.

U.S. PRODUCERS' INVENTORIES

Table III-11 presents U.S. producers' end-of-period inventories and the ratio of these inventories to U.S. producers' production, U.S. shipments, and total shipments. U.S. producers' end-of-period inventories increased 66.9 percent in 2015 and then declined 24.2 percent in 2016, ending 26.6 percent higher than in 2014, and were 0.4 percent lower in interim 2017 compared with interim 2016. ***, which accounted for the largest change in quantity of inventories in any one year, reported that the increase in inventories in 2015 was ***.¹⁴

Table III-11

Biodiesel: U.S. producers' inventories, 2014-16, January to June 2016, and January to June 2017

Item	Calendar year			January to June	
	2014	2015	2016	2016	2017
	Quantity (1,000 gallons)				
U.S. producers' end-of-period inventories	31,096	51,901	39,357	54,824	54,594
	Ratio (percent)				
Ratio of inventories to.-- U.S. production	3.0	4.8	2.8	4.3	4.5
U.S. shipments	3.0	5.0	2.8	4.4	4.7
Total shipments	2.9	4.9	2.8	4.3	4.6

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

U.S. PRODUCERS' IMPORTS AND PURCHASES

U.S. producers' imports of biodiesel are presented in table III-12. Two producers (***) imported from subject sources and two (***) imported from nonsubject sources. Three producers (***) purchased imports from Argentina, two producers (***) purchased imports from Indonesia, and four producers purchased imports from nonsubject sources during January 2014-June 2017.

Table III-12

Biodiesel: U.S. producers' U.S. production and imports, 2014-16, January to June 2016, and January to June 2017

* * * * *

¹⁴ Email from ***, April 12, 2017.

U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

Table III-13 shows U.S. producers' employment-related data.¹⁵ The number of PRWs, total hours work, wages paid, and productivity increased between 2014 and 2016, while hours worked per PRW declined and hourly wages and unit labor costs were essentially unchanged. All U.S. producers except *** had a greater number of PRWs in 2016 than in 2014, with most reporting increases due to growth in production and/or demand.

Table III-13

Biodiesel: Average number of production and related workers, hours worked, wages paid to such employees, hourly wages, productivity, and unit labor costs, 2014-16, January to June 2016, and January to June 2017

Item	Calendar year			January to June	
	2014	2015	2016	2016	2017
Production and related workers (PRWs) (number)	960	1,045	1,215	1,128	1,277
Total hours worked (1,000 hours)	2,086	2,207	2,582	1,182	1,330
Hours worked per PRW (hours)	2,173	2,112	2,125	1,048	1,042
Wages paid (\$1,000)	60,435	66,504	74,803	35,424	41,562
Hourly wages (dollars per hour)	\$28.97	\$30.13	\$28.97	\$29.97	\$31.25
Productivity (gallons per hour)	499.4	485.3	536.4	538.4	458.1
Unit labor costs (dollars per gallon)	\$0.06	\$0.06	\$0.05	\$0.06	\$0.07

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

¹⁵ *** did not provide employment data for January-June 2016. This data, except number of PRWs, was estimated to be half of 2016.

PART IV: U.S. IMPORTS, APPARENT U.S. CONSUMPTION, AND MARKET SHARES

U.S. IMPORTERS

The Commission issued importer questionnaires to 18 firms believed to be importers of biodiesel, as well as to all known U.S. producers of biodiesel.^{1 2} Usable questionnaire responses were received from 14 companies, representing a large majority of U.S. imports from Argentina and Indonesia between January 2014 and June 2017.³ Nonsubject imports from Canada accounted for a moderate portion of U.S. imports of biodiesel. Table IV-1 lists all responding U.S. importers of biodiesel from Argentina and Indonesia and other sources, their locations, and their shares of U.S. imports, in 2016.

¹ The Commission issued questionnaires to those firms identified in the petition, along with firms that, based on a review of data provided by ***, may have accounted for more than one percent of total imports under HTS subheadings 3826.00.10 and 3826.00.30 during January 2014-December 2016. The Commission elected not to issue importers' questionnaires to the following firms identified in the petition: BNP Paribas RCC IN, GEFCO Argentina, Molinos de la Plata, Oleaginosa Moreno Hermanos S.A.C.I.F.I and A., Puma Energy Cariba, LLC, and Vicentin S.A.I.C. Commission staff believes these firms are not U.S. importers of subject merchandise because the *** record does not have any record of these companies reporting imports of subject merchandise either as the importer of record or as a consignee during January 2014-December 2016.

² Data for U.S. imports from Argentina, Indonesia, and all nonsubject sources (for all periods), unless otherwise noted, are based on official U.S. import statistics using HTS statistical reporting numbers under which in-scope merchandise is primarily classifiable (3826.00.1000 and 3826.00.3000). U.S. importers' monthly U.S. imports and U.S. commercial shipment data are based on Commission questionnaire responses.

³ ***. In addition, U.S. shipments for Biosphere, which is related to Musket Corp. and Loves Truck Stops and Country Stores and purchases fuel (including biodiesel) for these entities, was ***. Conference transcript, p. 23 (Whitney).

**Table IV-1
Biodiesel: U.S. importers by source, 2016**

Firm	Headquarters	Share of imports by source (percent)						
		Argentina	Indonesia	Subject sources	Canada	All other sources	Nonsubject sources	All import sources
ADM	Decatur, IL	***	***	***	***	***	***	***
BioSphere ¹	Houston, TX	***	***	***	***	***	***	***
Biox ²	Morristown, NJ	***	***	***	***	***	***	***
Cargill ³	Wayzata, MN	***	***	***	***	***	***	***
Kolmar ⁴	Bridgeport, CT	***	***	***	***	***	***	***
Louis Dreyfus ⁵	Claypool, IN	***	***	***	***	***	***	***
Noble ⁶	Stamford, CT	***	***	***	***	***	***	***
REG	Ames, IA	***	***	***	***	***	***	***
Shell Oil ⁷	Houston, TX	***	***	***	***	***	***	***
Targray ⁸	Massena, NY	***	***	***	***	***	***	***
Trafigura ⁹	Houston, TX	***	***	***	***	***	***	***
VicNRG ¹⁰	Southlake, TX	***	***	***	***	***	***	***
Vitol	Houston, TX	***	***	***	***	***	***	***
Wilmar ¹¹	Pearland, TX	***	***	***	***	***	***	***
Total		***	***	***	***	***	***	***

¹ BioSphere Fuels, LLC is owned by Musket Corporation and Loves Travel Stops and Country Stores. Conference transcript, p. 23 (Whitney).

² BIOX USA Limited is ***.

³ Cargill Inc. ***.

⁴ Kolmar Americas, Inc. is ***.

⁵ Louis Dreyfus Claypool Holdings LLC is ***.

⁶ Noble Americas Corp is ***.

⁷ Shell Oil Company is ***.

⁸ Targray Industries Inc. is ***.

⁹ Trafigura Trading LLC is ***.

¹⁰ VicNRG, LLC is ***.

¹¹ Wilmar Oleo North America is ***.

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

U.S. IMPORTS

Table IV-2 and figure IV-1 present data for U.S. imports of biodiesel from Argentina, Indonesia, and all other sources. In 2016, imports from Argentina accounted for 62.4 percent of total U.S. imports by quantity and 62.1 percent by value. Imports of biodiesel from Indonesia accounted for 15.6 percent by quantity and 14.4 percent by value. The largest nonsubject supplier is Canada, which accounted for 15.2 percent of total imports by quantity and 16.1 percent by value. Other nonsubject suppliers include Germany and Korea.

Table IV-2
Biodiesel: U.S. imports, by source, 2014-16, January to June 2016, and January to June 2017

Item	Calendar year			January to June	
	2014	2015	2016	2016	2017
Quantity (1,000 gallons)					
U.S. imports from.--					
Argentina	46,719	196,930	440,346	105,541	170,697
Indonesia	51,038	70,702	110,360	43,193	---
Subject sources	97,757	267,632	550,706	148,734	170,697
Canada	74,051	58,422	107,046	46,746	32,328
All other sources	19,948	25,941	48,443	9,696	332
Nonsubject sources	93,999	84,363	155,489	56,443	32,660
All import sources	191,756	351,995	706,194	205,177	203,357
Value (1,000 dollars)					
U.S. imports from.--					
Argentina	149,116	523,190	1,314,492	300,977	488,542
Indonesia	159,371	182,913	304,319	117,274	---
Subject sources	308,487	706,102	1,618,811	418,250	488,542
Canada	246,745	160,681	340,618	149,370	90,286
All other sources	80,659	71,677	155,726	24,852	1,647
Nonsubject sources	327,404	232,357	496,344	174,223	91,932
All import sources	635,890	938,460	2,115,155	592,473	580,475
Unit value (dollars per gallon)					
U.S. imports from.--					
Argentina	3.19	2.66	2.99	2.85	2.86
Indonesia	3.12	2.59	2.76	2.72	---
Subject sources	3.16	2.64	2.94	2.81	2.86
Canada	3.33	2.75	3.18	3.20	2.79
All other sources	4.04	2.76	3.21	2.56	4.96
Nonsubject sources	3.48	2.75	3.19	3.09	2.81
All import sources	3.32	2.67	3.00	2.89	2.85

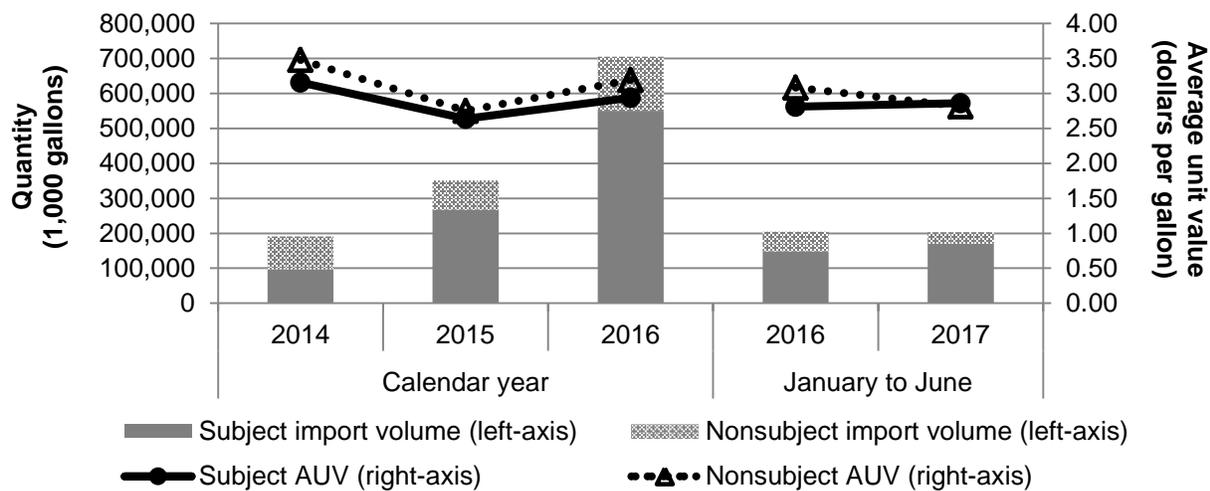
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Table IV-2--Continued
Biodiesel: U.S. imports by source, 2014-16, January to June 2016, and January to June 2017

Item	Calendar year			January to June	
	2014	2015	2016	2016	2017
	Share of quantity (percent)				
U.S. imports from.--					
Argentina	24.4	55.9	62.4	51.4	83.9
Indonesia	26.6	20.1	15.6	21.1	---
Subject sources	51.0	76.0	78.0	72.5	83.9
Canada	38.6	16.6	15.2	22.8	15.9
All other sources	10.4	7.4	6.9	4.7	0.2
Nonsubject sources	49.0	24.0	22.0	27.5	16.1
All import sources	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)				
U.S. imports from.--					
Argentina	23.4	55.7	62.1	50.8	84.2
Indonesia	25.1	19.5	14.4	19.8	---
Subject sources	48.5	75.2	76.5	70.6	84.2
Canada	38.8	17.1	16.1	25.2	15.6
All other sources	12.7	7.6	7.4	4.2	0.3
Nonsubject sources	51.5	24.8	23.5	29.4	15.8
All import sources	100.0	100.0	100.0	100.0	100.0
	Ratio to U.S. production				
U.S. imports from.--					
Argentina	4.5	18.4	31.8	16.6	28.0
Indonesia	4.9	6.6	8.0	6.8	---
Subject sources	9.4	25.0	39.8	23.4	28.0
Canada	7.1	5.5	7.7	7.3	5.3
All other sources	1.9	2.4	3.5	1.5	0.1
Nonsubject sources	9.0	7.9	11.2	8.9	5.4
All import sources	18.4	32.9	51.0	32.2	33.4

Source: Official import statistics using HTS statistical reporting numbers, 3826.00.1000 and 3826.00.3000, accessed October 3, 2017.

Figure IV-1
Biodiesel: U.S. import volumes and average unit values, 2014-16, January to June 2016, and
January to June 2017



Source: Official import statistics using HTS statistical reporting numbers, 3826.00.1000 and 3826.00.3000, accessed October 3, 2017.

From 2014 to 2016, the quantity of imports from Argentina increased from 46.7 million gallons to 440.3 million gallons, an increase of 842.5 percent. As U.S. imports from Argentina increased, so too did its share of all imports, rising from 24.4 percent in 2014 to 62.4 percent in 2016. The average unit value of imports from Argentina fluctuated from year to year, decreasing from \$3.19 per gallon in 2014 to \$2.66 per gallon in 2015 and then increasing to \$2.99 per gallon in 2016, an overall decrease of 6.3 percent.

The volume of imports from Indonesia increased from 51.0 million gallons in 2014 to 110.4 million gallons in 2016, an increase of 116.2 percent.⁴ Despite this increase, Indonesia’s share of imports decreased from 26.6 percent in 2014 to 15.6 percent in 2016. The decrease in import share is attributable to the volume of imports from Argentina increasing at a greater rate. The average unit value of imports from Indonesia decreased from \$3.12 per gallon in 2014 to \$2.59 per gallon in 2015 and then increased to \$2.76 per gallon in 2016, an overall decrease of 11.5 percent. The average unit value of imports from Indonesia was lower than that from Argentina for each year.⁵

The quantity of imports from Canada fluctuated year to year, decreasing from 74.1 million gallons in 2014 to 58.4 million gallons in 2015, and then increasing to 107.0 million

⁴ U.S. imports from Indonesia were zero in interim 2017. Indonesian respondents noted that combination of the value of D6 RINs, availability of the BTC, and biodiesel prices, which had allowed imports of biodiesel from Indonesia to compete, ended in 2017. Hearing transcript, pp. 264-265 (Janzen). Petitioners noted that the value of D6 RINs relative to D4 RINs fell in early 2017 due to a large short position. Hearing transcript, p. 100 (Soanes).

⁵ Parties note that the lower average unit value is partially due to the difference in RIN that the biodiesel from the different sources qualify for. Conference transcript, p. 209 (Levy) and hearing transcript, p. 120 (Levy) and p. 166 (Szamosszegi).

gallons in 2016, an overall increase of 44.6 percent. Canada's share of imports decreased from 38.6 percent in 2014 to 15.2 percent in 2016. Much of this decline in import share occurred from 2014 to 2015 when it fell by 21.7 percentage points. Following a similar trajectory as imports from subject countries, the average unit value of imports from Canada fluctuated from year to year. It decreased from \$3.33 per gallon in 2014 to \$2.75 per gallon in 2015 and then increased to \$3.18 per gallon in 2016. The average unit values of imports from Canada were higher than those from Indonesia and Argentina for each year.

CRITICAL CIRCUMSTANCES

On November 16, 2017, Commerce issued its final countervailing duty determination that critical circumstances no longer exist in the Argentina investigation with respect to Vicentin S.A.I.C. and LDC Argentina S.A.⁶

On October 31, 2017, Commerce issued its preliminary antidumping duty determination that "critical circumstances" exist with regard to imports from Argentina of biodiesel from LDC Argentina and all other producers and exporters and that critical circumstances do not exist for Vicentin S.A.I.C. ("Vicentin") and certain affiliated companies.⁷ In these investigations, if both Commerce and the Commission make affirmative final critical circumstances determinations, certain subject imports may be subject to antidumping duties retroactive by 90 days from October 31, 2017, the effective date of Commerce's preliminary affirmative AD determination. Table IV-3 presents these data.

⁶ *Biodiesel From the Republic of Argentina: Final Affirmative Countervailing Duty Determination*, 82 FR 53477, November 16, 2017

On August 28, 2017, Commerce issued its preliminary determination that "critical circumstances" exist with regard to imports from Argentina of biodiesel from LDC Argentina and Vicentin. In addition, Commerce found that critical circumstances do not exist with respect to all other exporters or producers not individually examined. 82 FR 40749, August 28, 2017, referenced in app. A. When petitioners file timely allegations of critical circumstances, Commerce examines whether there is a reasonable basis to believe or suspect that (1) either there is a history of dumping and material injury by reason of dumped imports in the United States or elsewhere of the subject merchandise, or the person by whom, or for whose account, the merchandise was imported knew or should have known that the exporter was selling the subject merchandise at LTFV and that there was likely to be material injury by reason of such sales; and (2) there have been massive imports of the subject merchandise over a relatively short period.

⁷ *Biodiesel From Argentina: Preliminary Affirmative Determination of Sales at Less Than Fair Value, Preliminary Affirmative Determination of Critical Circumstances, in Part*, 82 FR 50391, October 31, 2017.

Table IV-3

Biodiesel: U.S. importers' U.S. imports from Argentina subject to Commerce's preliminary AD critical circumstance determination, October 2016 through September 2017

* * * * *

Table IV-4 and figure IV-2 present monthly U.S. import data subject to Commerce's preliminary antidumping duty critical circumstance determination, namely U.S. imports from LDC and all other firms, but not from Vicentin.

Table IV-4

Biodiesel: U.S. imports from Argentine firms subject to Commerce's preliminary AD critical circumstances determination, January 2014 through August 2017

* * * * *

Figure IV-2

Biodiesel: U.S. imports from Argentine firms subject to Commerce's preliminary AD critical circumstances determination, January 2014 through August 2017

* * * * *

NEGLIGENCE

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.⁸ Negligible imports are generally defined in the Tariff Act of 1930, as amended, as imports from a country of merchandise corresponding to a domestic like product where such imports account for less than 3 percent of the volume of all such merchandise imported into the United States in the most recent 12-month period for which data are available that precedes the filing of the petition or the initiation of the investigation. However, if there are imports of such merchandise from a number of countries subject to investigations initiated on the same day that individually account for less than 3 percent of the total volume of the subject merchandise, and if the imports from those countries collectively account for more than 7 percent of the volume of all such merchandise imported into the United States during the applicable 12-month period, then imports from such countries are deemed not to be negligible.⁹ In the most recent 12-month period preceding the filling of the petitions, March 2016-February 2017, subject imports from Argentina accounted for 62.9 percent of total imports by quantity and subject imports from Indonesia accounted for 15.4 percent of total imports by quantity in the antidumping and countervailing duty investigations.

⁸ Sections 703(a)(1), 705(b)(1), 733(a)(1), and 735(b)(1) of the Act (19 U.S.C. §§ 1671b(a)(1), 1671d(b)(1), 1673b(a)(1), and 1673d(b)(1)).

⁹ Section 771 (24) of the Act (19 U.S.C § 1677(24)).

CUMULATION CONSIDERATIONS

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

Fungibility

U.S. imports by feedstock

Table IV-5 and figure IV-3 present U.S. production and imports by feedstock. While U.S. biodiesel was produced from a variety of inputs, most Argentine biodiesel was produced from soybean oil and most Indonesian biodiesel was produced from palm oil. Imports from nonsubject sources were produced from a variety of inputs, with the largest share from canola/rapeseed.

Table IV-5
Biodiesel: U.S. producers' production and U.S. importers' imports by type of feedstock, 2016

* * * * *

Figure IV-3
Biodiesel: U.S. producers' production and U.S. importers' imports by type of feedstock, 2016

* * * * *

U.S. imports by cloud point

Table IV-6 presents U.S. production and imports by cloud point. The range of U.S. production from tallow and lard, and to a lesser extent other inputs, have relatively higher reported cloud point, as does imports from Indonesia produced from palm.

Table IV-6
Biodiesel: U.S. producers' production and U.S. importers' imports by reported cloud point, 2016

* * * * *

U.S. imports by grade

Table IV-7 presents U.S. production and imports by grade of biodiesel. Eighteen out of 23 responding U.S. producers reported producing No 1 B S15 and/or No 2 B S15 grade biodiesel. Four out of 6 responding importers of Argentine biodiesel reported importing No 2 B S15 grade biodiesel and 1 out of 3 importers of Indonesian biodiesel reported importing No 1 B S15 grade biodiesel.

**Table IV-7
Biodiesel: U.S. producers' production and U.S. importers' imports by reported grade, 2016**

Item	U.S. production or U.S. imports 2016							U.S. producers and U.S. importers
	U.S. producers	U.S. importers					All import sources	
		Argentina	Indonesia	Subject sources	Nonsubject sources	All import sources		
Count of firms (number)								
U.S. production / imports by grade.--								
No. 1 B S15	13	2	1	2	4	4	17	
No. 1 B S500	2	1	---	1	1	1	3	
No. 2 B S15	11	4	---	4	6	7	18	
No. 2 B S500	8	2	1	3	---	3	11	
Other	3	2	1	2	1	2	5	

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

U.S. importers' commercial U.S. shipments by type

Table IV-8 presents U.S. importers' U.S. commercial shipments of imports by product type and RIN status. U.S. importers' U.S. commercial shipments of imports of biodiesel from Argentina and Indonesia were of both B100 and B99 and with or without RINs. Imports from Argentina were concentrated in B99 sold without RINs followed by B99 with RINs, while imports from Indonesia shifted from B100 with RINs in 2014 and 2015 to B99 without RINs followed by B100 without RINs.

**Table IV-8
Biodiesel: U.S. importers' commercial U.S. shipments by type, 2014-16, January to June 2016, and January to June 2017**

* * * * *

From 2014 to 2016, total U.S. shipments of imports from Argentina increased from *** gallons to *** gallons, an increase of *** percent. The majority of U.S. importers' commercial U.S. shipments of imports from Argentina were of B99 without RINs. These shipments accounted for *** to *** percent of shipments of imports from Argentina during 2014-2016. U.S. importers' U.S. commercial shipments of B99 with RINs from Argentina followed the same trajectory as total shipments, increasing from *** gallons in 2014 to *** gallons in 2016, an increase of *** percent. U.S. importers' U.S. commercial shipments of B100 with RINs from Argentina increased by *** percent, but accounted for less than *** percent of total shipments from Argentina in 2016. Shipments of biodiesel without RINs also increased from 2014 to 2016, but in total were less than half the volume of shipments of B99 with RINs in 2016. The discrepancy between the volume of shipments of B99 with RINs and all other products is attributed to the blender's tax credit.¹⁰ Unit values for all product types and RIN statuses decreased from 2014 to 2016, in particular for B99 without RINs, which decreased by ***

¹⁰ Conference transcript, p. 39 and pp.80-81 (Doyle) and hearing transcript, p. 109 (Soanes).

percent. The average unit value for all shipments of imports from Argentina was lower than U.S. producers' average unit values for each calendar year.

From 2014 to 2016, total U.S. shipments of imports from Indonesia increased from *** gallons to *** gallons, an increase of *** percent, but then declined to *** gallons in interim 2017.¹¹ The majority of U.S. importers' commercial U.S. shipments of imports from Indonesia were of B100. These shipments accounted for *** percent of commercial U.S. shipments of imports from Indonesia in 2014 and *** percent in 2016.

Figure IV-4 presents U.S. producers' and U.S. importers' U.S. shipments by blend type in 2016.

**Figure IV-4
Biodiesel: U.S. producers' and U.S. importers' U.S. shipments by product type, 2016**

* * * * *

Geographical markets

Official statistics from Commerce show that in 2016, U.S. imports of biodiesel from Argentina entered the United States through U.S. ports located on the eastern coast (48.6 percent) or at the southern border (51.4 percent). The same source shows that nearly all U.S. imports of biodiesel from Indonesia also entered through U.S. ports located in the southern border (89.7 percent) or in the eastern coast (10.3 percent). As noted earlier in this report, the cloud point—the temperature at which biodiesel will congeal—of Indonesian palm oil based biodiesel is in the range of 55-60 degrees Fahrenheit, while Argentine soybean oil based biodiesel has a cloud point of approximately 35 degrees Fahrenheit. Due to a higher cloud point temperature, Indonesian palm oil based biodiesel does not hold up as well in colder climates as Argentine soybean oil based biodiesel.¹²

The majority of imports from Canada, the largest nonsubject source, entered through U.S. ports located in the eastern coast (39.3 percent), in the northern border (31.3 percent) or in the western border (21.4 percent). The majority of biodiesel imports from all other sources entered through U.S. ports in the eastern coast (50.9 percent) or in the western coast (42.9 percent). Table IV-9 presents the volume and share of U.S. imports by port of entry.

¹¹ Indonesian respondents noted that combination of the value of D6 RINs, availability of the BTC, and biodiesel prices, which had allowed imports of biodiesel from Indonesia to compete, ended in 2017. Hearing transcript, pp. 264-265 (Janzen).

¹² This is particularly true when comparing pure palm oil biodiesel and pure soybean oil biodiesel. Conference transcript, p. 49 (Cummings) and hearing transcript, p. 173 (Cummings).

**Table IV-9
Biodiesel: U.S. imports by port of entry, 2016**

Item	Border of entry				
	East	North	South	West	Total
	Quantity (1,000 gallons)				
U.S. imports from.--					
Argentina	213,806	---	226,540	---	440,346
Indonesia	11,344	---	99,015	---	110,360
Subject sources	225,150	---	325,556	---	550,706
Canada	42,108	33,547	8,484	22,907	107,046
All other sources	24,659	430	2,558	20,797	48,443
Nonsubject sources	66,767	33,977	11,041	43,703	155,489
All import sources	291,917	33,977	336,597	43,703	706,194
	Share of quantity across (percent)				
U.S. imports from.--					
Argentina	48.6	---	51.4	---	100.0
Indonesia	10.3	---	89.7	---	100.0
Subject sources	40.9	---	59.1	---	100.0
Canada	39.3	31.3	7.9	21.4	100.0
All other sources	50.9	0.9	5.3	42.9	100.0
Nonsubject sources	42.9	21.9	7.1	28.1	100.0
All import sources	41.3	4.8	47.7	6.2	100.0
	Share of quantity down (percent)				
U.S. imports from.--					
Argentina	73.2	---	67.3	---	62.4
Indonesia	3.9	---	29.4	---	15.6
Subject sources	77.1	---	96.7	---	78.0
Canada	14.4	98.7	2.5	52.4	15.2
All other sources	8.4	1.3	0.8	47.6	6.9
Nonsubject sources	22.9	100.0	3.3	100.0	22.0
All import sources	100.0	100.0	100.0	100.0	100.0

Source: Official import statistics using HTS statistical reporting numbers, 3826.00.1000 and 3826.00.3000, accessed October 3, 2017.

Presence in the market

Table IV-10 and figures IV-5 and IV-6 present U.S. imports by month from each source. Regarding U.S. imports of biodiesel from Argentina, December 2016 had the greatest quantity (77.9 million gallons). Subject imports from Indonesia did not exceed this volume in any of the months from January 2014 to July 2017. Imports from Indonesia peaked at 17.8 million gallons in June 2016. There were no subject imports from Indonesia in 9 out of 36 months from January 2014 to December 2016, with 6 out of the 9 months being in the winter, and were in only one month (and in very small quantity) in January-July 2017.

Table IV-10
Biodiesel: U.S. imports by source and by month, January 2014 through July 2017

Item	Calendar year			
	2014	2015	2016	2017
Quantity (1,000 gallons)				
U.S. imports: Argentina.--				
January	---	12,681	2,041	---
February	---	8,323	5,956	18,316
March	---	2,137	10,841	28,276
April	---	8,081	22,106	22,747
May	---	1,068	30,170	32,558
June	---	8,982	34,428	68,801
July	5,439	25,217	49,630	64,054
August	3,067	21,450	47,684	
September	5,843	27,443	44,941	
October	5,786	22,944	54,393	
November	11,946	22,507	60,249	
December	14,639	36,096	77,909	
Total	46,719	196,930	440,346	234,751
Quantity (1,000 gallons)				
U.S. imports: Indonesia.--				
January	---	---	---	---
February	3,580	7,453	---	---
March	---	10,011	5,172	---
April	---	3,881	8,908	---
May	---	2,232	11,264	---
June	4,474	12,616	17,849	---
July	7,178	8,569	9,874	18
August	10,441	10,169	13,443	
September	4,643	7,026	15,300	
October	11,030	4,951	9,967	
November	9,692	---	15,746	
December	---	3,795	2,836	
Total	51,038	70,702	110,360	18

Table continued on the next page.

Table IV-10—Continued
Biodiesel: U.S. imports by source and by month, January 2014 through July 2017

Item	Calendar year			
	2014	2015	2016	2017
	Quantity (1,000 gallons)			
U.S. imports: Subject sources.--				
January	---	12,681	2,041	---
February	3,580	15,776	5,956	18,316
March	---	12,148	16,012	28,276
April	---	11,961	31,014	22,747
May	---	3,300	41,434	32,558
June	4,474	21,598	52,277	68,801
July	12,616	33,786	59,504	64,072
August	13,508	31,619	61,126	
September	10,486	34,469	60,242	
October	16,816	27,895	64,359	
November	21,638	22,507	75,995	
December	14,639	39,891	80,745	
Total	97,757	267,632	550,706	234,769
	Quantity (1,000 gallons)			
U.S. imports: Canada.--				
January	1,922	1,754	6,780	4,029
February	3,897	3,352	3,154	5,231
March	9,949	4,437	8,400	4,237
April	5,080	2,637	10,002	6,337
May	4,616	4,718	8,465	7,389
June	3,738	5,235	9,946	5,105
July	6,571	13,081	8,718	7,038
August	8,897	5,031	11,184	
September	4,111	2,404	11,407	
October	8,775	6,974	6,339	
November	8,505	5,772	7,004	
December	7,989	3,028	15,648	
Total	74,051	58,422	107,046	39,365

Table continued on the next page.

Table IV-10—Continued
Biodiesel: U.S. imports by source and by month, January 2014 through July 2017

Item	Calendar year			
	2014	2015	2016	2017
	Quantity (1,000 gallons)			
U.S. imports: All other sources.--				
January	7,715	113	---	150
February	6	1,536	---	155
March	1	1,248	2,857	12
April	1,483	1,541	4,753	---
May	1	7,143	---	5
June	7	1,543	2,086	10
July	1,559	2,765	2,625	---
August	1,702	2,776	4,797	
September	235	2,154	2,822	
October	186	1,457	5,218	
November	6,987	1,244	8,832	
December	67	2,422	14,453	
Total	19,948	25,941	48,443	332
	Quantity (1,000 gallons)			
U.S. imports: Nonsubject sources.--				
January	9,637	1,867	6,780	4,179
February	3,903	4,888	3,154	5,386
March	9,950	5,685	11,257	4,249
April	6,563	4,178	14,755	6,337
May	4,617	11,861	8,465	7,394
June	3,744	6,778	12,032	5,115
July	8,130	15,845	11,343	7,038
August	10,599	7,807	15,981	
September	4,346	4,557	14,229	
October	8,960	8,431	11,557	
November	15,492	7,016	15,836	
December	8,057	5,450	30,100	
Total	93,999	84,363	155,489	39,697

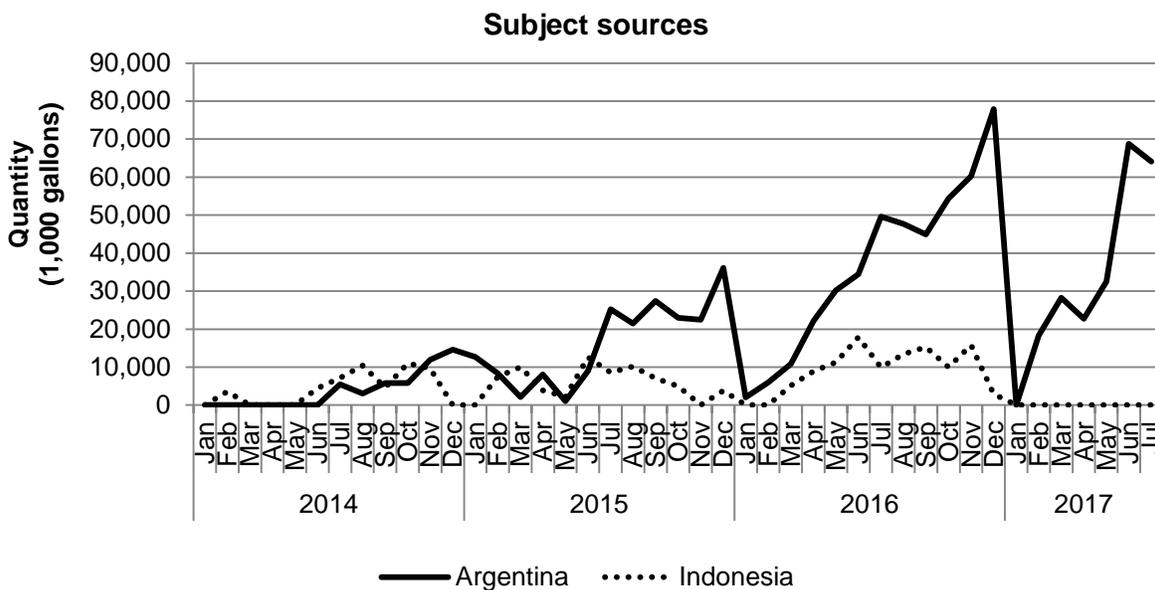
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Table IV-10—Continued
Biodiesel: U.S. imports by source and by month, January 2014 through July 2017

Item	Calendar year			
	2014	2015	2016	2017
	Quantity (1,000 gallons)			
U.S. imports: All import sources.--				
January	9,637	14,548	8,821	4,179
February	7,483	20,664	9,110	23,701
March	9,950	17,833	27,270	32,524
April	6,563	16,139	45,769	29,085
May	4,617	15,161	49,899	39,951
June	8,218	28,376	64,308	73,916
July	20,746	49,631	70,847	71,109
August	24,107	39,426	77,108	
September	14,832	39,026	74,471	
October	25,776	36,327	75,916	
November	37,130	29,523	91,831	
December	22,695	45,341	110,845	
Total	191,756	351,995	706,194	274,466

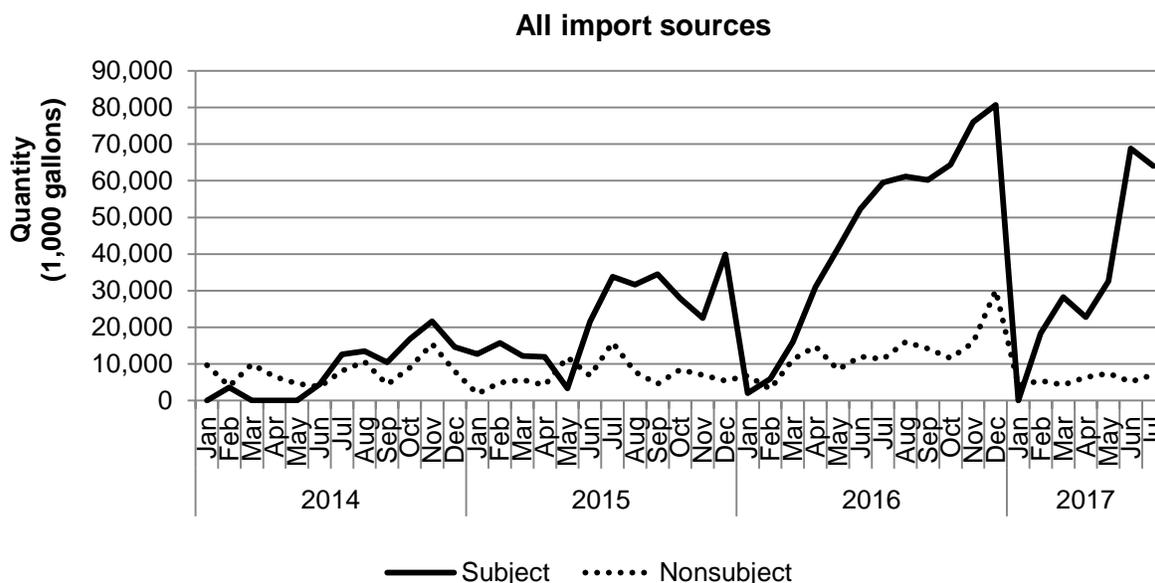
Source: Official import statistics using HTS statistical reporting numbers, 3826.00.1000 and 3826.00.3000, accessed October 3, 2017.

Figure IV-5
Biodiesel: U.S. imports from Argentina and Indonesia, by month, January 2014 through July 2017



Source: Official import statistics using HTS statistical reporting numbers, 3826.00.1000 and 3826.00.3000, accessed October 3, 2017.

Figure IV-6
Biodiesel: U.S. imports from all sources, by source, by month, January 2014 through July 2017



Source: Official import statistics using HTS statistical reporting numbers, 3826.00.1000 and 3826.00.3000, accessed October 3, 2017.

Respondent CARBIO¹³ noted that seasonality exists in the U.S. market, as changes in temperatures force states to adjust the amount of biodiesel that can be blended in diesel fuel sold in that state from month to month.¹⁴ CARBIO also noted that total domestic shipments are usually lowest in the first quarter, increase in the second and third quarter, and remain constant or even decrease in the fourth quarter. According to respondent BioSphere, Argentine biodiesel typically enters the U.S. market in the spring when demand starts to increase while domestically produced biodiesel enters the market in the winter when demand is low.¹⁵

Petitioners note that while the biodiesel market is seasonal, the domestic like product and subject imports are not adversely affected by seasonal patterns and are sold in the U.S. throughout the year in substantial quantities. Petitioner REG states that there is enough supply of feedstock and fuel to meet demand throughout the year.¹⁶ Petitioner RBF noted states that it has no issues sourcing feedstock for its operations.¹⁷

¹³ Cámara Argentina de Biocombustibles (“CARBIO”) is an association of biodiesel producers in Argentina. Its members include: Aceitera General Deheza S.A., Bunge Argentina S.A., Cargill SACI, Cofco Argentina SA, LDC Argentina SA, Molinos Agro SA, Oleaginosa Moreno Hermanos SA, and Vicentin SAIC. These companies provided prehearing and posthearing briefs as CARBIO. Details on these companies and their operations are discussed in more detail in Part VII.

¹⁴ Respondent CARBIO’s postconference brief, p. 4.

¹⁵ Conference transcript, p. 29 (Whitney).

¹⁶ Petitioners’ postconference brief, p. 14 and petitioners’ prehearing brief, pp. 27-28.

¹⁷ Ibid.

APPARENT U.S. CONSUMPTION

Tables IV-11 and IV-12 and figure IV-7 present data on apparent U.S. consumption and U.S. market shares for biodiesel. Apparent U.S. consumption, based on quantity, increased from 1.4 billion gallons in 2014 to 2.2 billion gallons in 2016, an increase of 58.0 percent. Fluctuating year-to-year, U.S. producers' U.S. shipments increased at a lower rate than apparent U.S. consumption, increasing by 24.4 percent during 2014-2016. U.S. producers' U.S. shipments were 4.4 percent lower in interim 2017 compared with interim 2016, while apparent U.S. consumption was 3.6 percent lower. From 2014 to 2016, U.S. producers' market share decreased by 18.3 percentage points while the market share of imports from Argentina and Indonesia increased by 16.6 percentage points and 1.3 percentage points respectively. The market share of imports from Canada, on the other hand, decreased by 0.4 percentage points.

Table IV-11

Biodiesel: Apparent U.S. consumption of biodiesel, 2014-16, January to June 2016, and January to June 2017

Item	Calendar year			January to June	
	2014	2015	2016	2016	2017
	Quantity (1,000 gallons)				
U.S. producers' U.S. shipments	1,200,092	1,157,178	1,493,136	670,498	640,714
U.S. imports from.--					
Argentina	46,719	196,930	440,346	105,541	170,697
Indonesia	51,038	70,702	110,360	43,193	---
Subject sources	97,757	267,632	550,706	148,734	170,697
Canada	74,051	58,422	107,046	46,746	32,328
All other sources	19,948	25,941	48,443	9,696	332
Nonsubject sources	93,999	84,363	155,489	56,443	32,660
All import sources	191,756	351,995	706,194	205,177	203,357
Apparent U.S. consumption	1,391,848	1,509,173	2,199,330	875,675	844,071
	Value (1,000 dollars)				
U.S. producers' U.S. shipments	3,989,182	3,131,542	3,584,056	1,496,772	1,719,483
U.S. imports from.--					
Argentina	149,116	523,190	1,314,492	300,977	488,542
Indonesia	159,371	182,913	304,319	117,274	---
Subject sources	308,487	706,102	1,618,811	418,250	488,542
Canada	246,745	160,681	340,618	149,370	90,286
All other sources	80,659	71,677	155,726	24,852	1,647
Nonsubject sources	327,404	232,357	496,344	174,223	91,932
All import sources	635,890	938,460	2,115,155	592,473	580,475
Apparent U.S. consumption	4,625,072	4,070,002	5,699,211	2,089,245	2,299,958

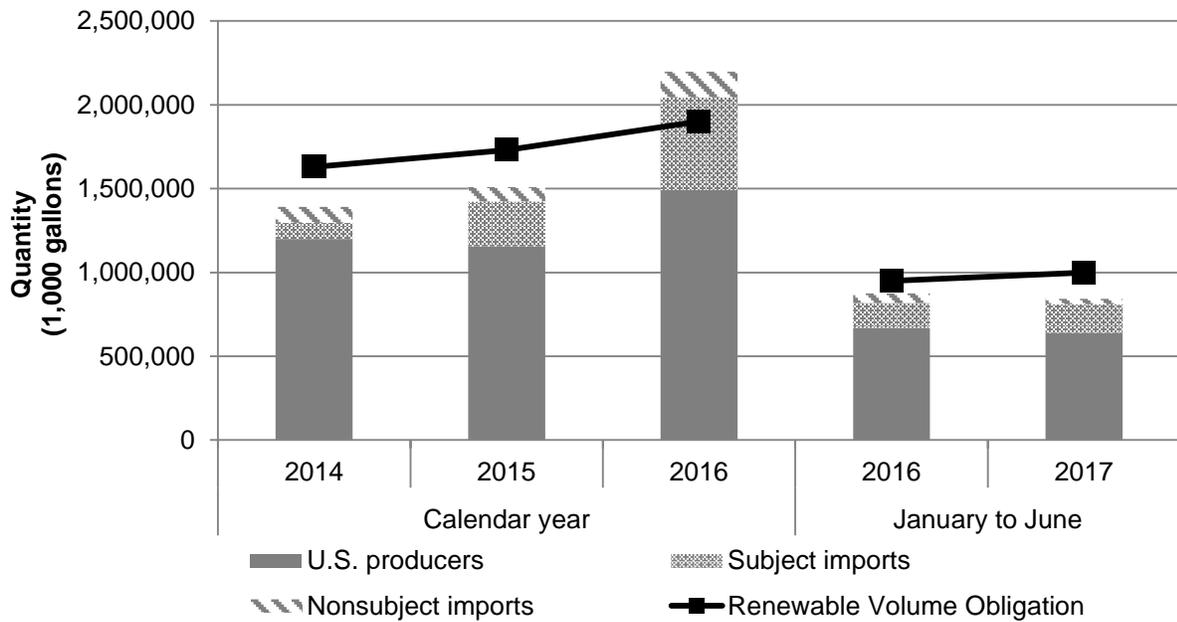
Source: U.S. Energy Information Administration Monthly Biodiesel Production Report, and official import statistics using HTS statistical reporting numbers, 3826.00.1000 and 3826.00.3000, accessed October 3, 2017.

Table IV-12**Biodiesel: U.S. market shares, 2014-16, January to June 2016, and January to June 2017**

Item	Calendar year			January to June	
	2014	2015	2016	2016	2017
	Quantity (1,000 gallons)				
Apparent U.S. consumption	1,391,848	1,509,173	2,199,330	875,675	844,071
	Share of quantity (percent)				
U.S. producers' U.S. shipments	86.2	76.7	67.9	76.6	75.9
U.S. imports from.--					
Argentina	3.4	13.0	20.0	12.1	20.2
Indonesia	3.7	4.7	5.0	4.9	---
Subject sources	7.0	17.7	25.0	17.0	20.2
Canada	5.3	3.9	4.9	5.3	3.8
All other sources	1.4	1.7	2.2	1.1	0.0
Nonsubject sources	6.8	5.6	7.1	6.4	3.9
All import sources	13.8	23.3	32.1	23.4	24.1
	Value (1,000 dollars)				
Apparent U.S. consumption	4,625,072	4,070,002	5,699,211	2,089,245	2,299,958
	Share of value (percent)				
U.S. producers' U.S. shipments	86.3	76.9	62.9	71.6	74.8
U.S. imports from.--					
Argentina	3.2	12.9	23.1	14.4	21.2
Indonesia	3.4	4.5	5.3	5.6	---
Subject sources	6.7	17.3	28.4	20.0	21.2
Canada	5.3	3.9	6.0	7.1	3.9
All other sources	1.7	1.8	2.7	1.2	0.1
Nonsubject sources	7.1	5.7	8.7	8.3	4.0
All import sources	13.7	23.1	37.1	28.4	25.2

Source: U.S. Energy Information Administration Monthly Biodiesel Production Report, and official import statistics using HTS statistical reporting numbers, 3826.00.1000 and 3826.00.3000, accessed October 3, 2017.

Figure IV-7
Biodiesel: Apparent U.S. consumption of biodiesel, 2014-16, January to June 2016, and January to June 2017



Note.—The Renewable Volume Obligation is for biomass-based diesel fuel, which includes biodiesel and renewable hydrocarbon diesel.

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

PART V: PRICING DATA

FACTORS AFFECTING PRICES

Raw material costs

The main raw material input to biodiesel is feedstock, such as soybean oil, palm oil, tallow, canola oil, used cooking oil, and lard. Domestic biodiesel is produced from a variety of feedstocks, with soybean oil the most common feedstock.¹ Soybean oil is the feedstock for imported Argentine biodiesel, and palm oil is the feedstock for imported Indonesian biodiesel. Raw material costs make up a substantial portion of COGS, accounting for between 85 percent and 88 percent of COGS during 2014-16.² Most responding U.S. producers (18 of 24) and importers (9 of 14) reported that raw material costs have fluctuated since 2014. Soybean oil and palm oil are traded on futures markets. As shown in figure V-1, prices of soybean oil and palm oil declined from 2014 to the third quarter of 2015; soybean oil prices fell 23 percent from January 2014 to November 2015 and palm oil prices fell 38 percent from January 2014 to September 2015. Prices rose through 2016, and then declined in the first part of 2017 before increasing in recent months. Overall prices for soybean oil and palm oil declined 12 percent and 22 percent, respectively, during January 2014-June 2017.³

Transportation costs to the U.S. market

Transportation costs for biodiesel shipped from subject countries to the United States were 5.0 percent for Argentina and 8.8 percent for Indonesia in 2016. These estimates were derived from official import data and represent the transportation and other charges on imports.⁴

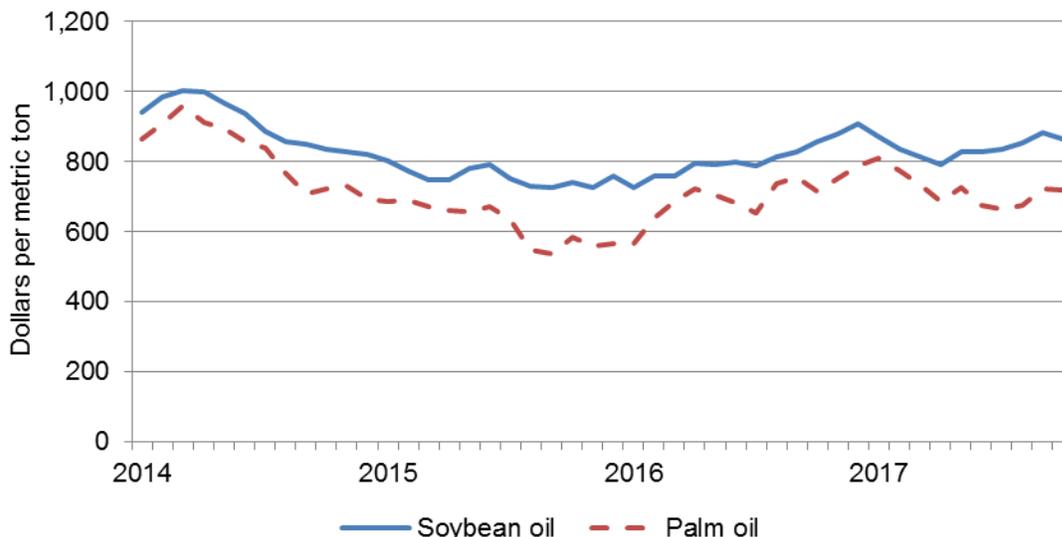
¹ Soybean oil was the feedstock for slightly more than half of domestic biodiesel production in 2016 (see table III-6).

² *** stated that the most successful producers are located near ample volumes of primary inputs that are available for purchase year-round or can be cheaply stockpiled, permitting continuous operation. In addition, it stated that vertically integrated producers that manufacture their own feedstock enjoy significant cost advantages. It continued that the domestic industry consists of plants with widely varying capacities and financial strength, so the unit costs of smaller producers can be multiples of the larger plants. It also stated that smaller or poorly-financed facilities lack the working capital necessary to secure a steady stream of feedstock, extend credit terms to customers, and comply with the RFS, and it continued that the costs associated with compliance failure create a preference among obligated parties for RINs generated by well-known, well-financed, and large-scale producers.

³ Palm oil is generally not used in the United States to produce biodiesel.

⁴ The estimated transportation costs were obtained by subtracting the customs value from the c.i.f. value of the imports for 2016 and then dividing by the customs value based on the HTS subheading 3826.00.1000 and 3826.00.3000.

Figure V-1
Biodiesel: Prices of soybean oil and palm oil, January 2014-October 2017



Source: World Bank, *Global Economic Monitor Commodities*, accessed November 14, 2017.

U.S. inland transportation costs

Biodiesel is shipped within the United States by truck, and to a lesser extent, rail.⁵ Most responding U.S. producers (17 of 24) and importers (7 of 10) reported that their customers typically arrange transportation.⁶ U.S. producers reported that their U.S. inland transportation costs ranged from 2 to 10 percent while importers reported costs of 1 to 8 percent.⁷

Purchasers that purchased biodiesel on an f.o.b. basis were asked to estimate the share of biodiesel accounted for by transportation and other logistics costs from U.S. producers and importers to the purchaser's distribution network or retail store. Purchasers reported shares of 1 to 20 percent from U.S. producers and 1 to 15 percent from importers, as shown in the tabulation below. Among purchasers that reported transport costs from U.S. producers and from importers, six reported higher transport costs from U.S. producers, three reported higher transport costs from importers, and three reported the same costs from U.S. producers as from importers. *** stated that transportation costs varied based on the market location.

* * * * *

⁵ Some biodiesel is also shipped by marine vessel. Hearing transcript, pp. 67-71 (Soanes, Stone, and Phillips).

⁶ The remainder indicated that they arrange transportation for their customers.

⁷ *** stated that the ability to reach cost-effective demand locations is essential and that plants with superior rail access and/or proximity to major end users via primary roadways are better able to compete, especially with imports travelling by more efficient ocean freight.

Purchasers were nearly evenly split on whether U.S. inland transportation costs as a share of biodiesel costs had changed since 2014, and provided varying explanations of changes. Several firms stated that transportation costs have been relatively constant or increased slightly while biodiesel prices have fluctuated. *** stated that trucking costs for domestic biodiesel to its facility in *** increased in 2014 and 2015, but that biodiesel purchased from the port of *** in 2016 incurred much lower costs. *** stated that U.S. inland transportation costs vary by region, producer, and mode of transport. *** stated that U.S. inland transportation costs were 2.3 percent in 2014, 3.2 percent in 2015, and 1.9 percent in 2016.

Purchasers were also asked whether U.S. inland transportation costs limit their ability to purchase biodiesel from a particular source. A majority of purchasers (19 of 32) reported that U.S. inland transportation costs were a limiting factor for purchases of domestic product but a minority of purchasers indicated that such costs were a limiting factor for purchases of imports. *** stated that rail costs are exorbitant compared to purchasing from the coast. *** stated that logistics (marine, rail, and truck) determine which sources best supply each of its locations. *** stated that the majority of domestic suppliers are located in the Midwest and that rail transport to its Northeast location is unreliable, inefficient, and not cost effective. Similarly, *** stated that transport from domestic biodiesel plants to its locations in the Southwest is too expensive. *** stated that transport costs can vary significantly by location and time of year. *** stated that it evaluates biodiesel prices on a freight-adjusted basis since transportation costs can vary greatly depending on the location of the production facility and the destination facility.

PRICING PRACTICES

Price factors

The value of a gallon of biodiesel is a function of the fuel value, the RIN value, and to what extent the blender's tax credit ("BTC") can be applied.⁸ Not only can a firm accumulate 1.5 RINs per gallon of biodiesel, RINs also have a monetary value that is determined by the market.⁹ As noted previously, there are also different classifications of RINs with D4 applying to domestic

⁸ Conference transcript, p. 209 (Levy). Noble stated that assumptions about the BTC and about RIN values can influence the price at which a producer or importer sells biodiesel. Respondent Noble's prehearing brief, p. 2.

⁹ Noble stated that RINs are valid for up to two years after they are generated and that "the separated RIN market is an attractive target for investors and has a history of dramatic price spikes that some have blamed on speculation." Respondent Noble's prehearing brief, p. 2.

As explained in *Part I*, RINs can become detached when an obligated party takes ownership of the biodiesel or a non-obligated party blends the biodiesel with at least 20 percent petroleum diesel. Major non-obligated parties include national truck-stop chains Pilot, Love's, and TravelAmerica. Detached RINs can be traded to any registered EPA RIN owner. Petitioners' prehearing brief, p. 24.

***.

and Argentine biodiesel and D6 applying to Indonesian biodiesel. D4 RINs are more valuable than D6 RINs, although the spread has varied during the period of investigation.

The BTC, which applies to blended biodiesel at \$1 per gallon of domestically produced biodiesel and imported biodiesel, was not in effect in 2014, 2015, or 2017, but was retroactively applied to 2014 and 2015 sales and in effect during all of 2016. Firms selling biodiesel handled the uncertainty of the tax credit in 2015 in different ways, including sharing the tax credit 50/50 with the purchaser or taking on all of the risk that the credit might not be reinstated.¹⁰ In addition, some states also offer tax incentives. For example, Illinois offers a 6.25 percent sales and use tax exemption if there is at least 10 percent biodiesel in the fuel.¹¹

U.S. producers and importers were asked to rate the importance of certain specified factors on their ability to price biodiesel (table V-1). Producers most often indicated that government mandates, tax incentives, and competition among subject imports were very important factors in their pricing of biodiesel, followed by product quality. Importers most often identified tax incentives, followed by product quality, and government mandates and U.S. inland transportation costs/logistics as very important factors.

Table V-1
Biodiesel: Importance of factors in setting prices, by number of responding firms

Factor	U.S. producers			Importers		
	Not important	Somewhat important	Very important	Not important	Somewhat important	Very important
Federal and/or state mandates	0	3	20	2	4	8
Tax incentives (i.e. blender's tax credit)	0	2	21	0	3	11
Competition from substitute products	4	11	8	2	5	7
Competition among U.S. producers	1	11	12	2	5	7
Competition from subject imports	0	3	21	2	6	6
Product quality	0	8	16	0	5	9
U.S. inland transportation costs/logistics	1	15	8	2	4	8
Weather in regional markets	4	18	2	2	10	1
Financial market speculators	9	11	4	8	3	3
Other factors	2	0	0	1	0	0

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

Pricing methods

U.S. producers and importers reported mainly using transaction-by-transaction negotiations, contracts, and published price indices to set prices (table V-2). Prices of biodiesel

¹⁰ If and when the credit is reinstated, the tax sharing agreement is already in the contract. Conference transcript, p. 218 (Stone).

¹¹ Conference transcript, p. 31 (Whitney).

are often communicated through brokers.¹² U.S. producers and importers reported selling mainly under short-term contracts, with a smaller share on a spot basis (table V-3). U.S. producers' and importers' short-term contracts ranged from 30 to 90 days.

Table V-2
Biodiesel: U.S. producers' and importers' reported price setting methods, by number of responding firms¹

Method	U.S. producers	Importers
Transaction-by-transaction	17	13
Contract	20	8
Set price list	2	1
Based on published price index	13	7
Other	2	1
Responding firms	25	14

¹ 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.

Table V-3
Biodiesel: U.S. producers' and importers' shares of U.S. commercial shipments by type of sale, 2016

Type of sale	U.S. producers	Importers
Long-term contracts	0.0	0.0
Annual contracts	0.2	0.0
Short-term contracts	87.0	84.0
Spot sales	12.8	16.0
Total	100.0	100.0

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

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

Biodiesel prices are typically quoted in relation to a published petrodiesel price, such as the New York Mercantile Exchange ("NYMEX") Ultra Low Sulphur Diesel ("ULSD") Futures.¹³ Most firms reported tying their prices to the NYMEX ULSD, although some also reported using the Chicago Board of Trade ("CBOT") Soybean Oil Index and other indices (table V-4). Other indices include the Oil Price Information Service ("OPIS") heating oil index and OPIS RIN Average. Prices for ULSD and biodiesel are presented in figure V-2.

¹² Hearing transcript, p. 49, 129 (Soanes). Respondent CARBIO's posthearing brief, exh. 2.

¹³ Hearing transcript, p. 53 (Stone). Indonesian respondents state that ULSD prices are the primary driver of biodiesel prices because biodiesel without RINs must be priced at a discount to ULSD or there is no incentive to blend it. Indonesian respondents' prehearing brief, p. 16. Petitioners state that in addition to diesel prices, the cost of feedstock, RIN values, and the value of the BTC and state incentives also are primary drivers of biodiesel prices. Hearing transcript, p. 54 (Stone).

Table V-4

Biodiesel: Published price indices used by U.S. producers, importers, and purchasers by number of responding firms¹

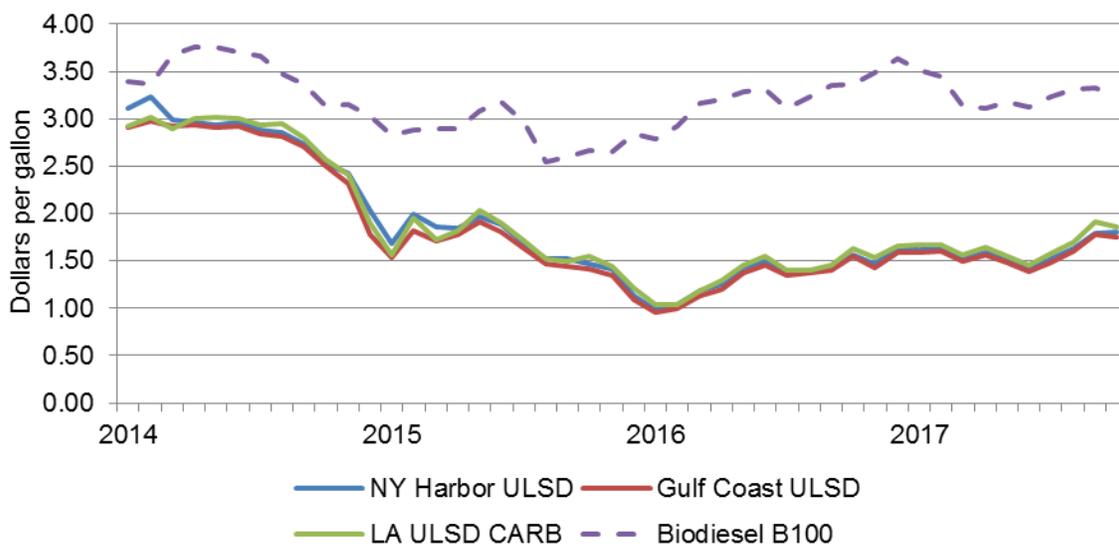
Index	U.S. producers	Importers	Purchasers
NYMEX ULSD	17	13	35
CBOT Soybean Oil	8	6	9
Other	5	4	6
Responding firms	24	13	39

¹ 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 indices.

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

Figure V-2

Biodiesel and diesel: Spot prices for ULSD and B100 biodiesel prices, monthly, January 2014-October 2017



Note.--Diesel prices are New York Harbor Ultra-Low Sulfur No 2 Diesel Spot Price, U.S. Gulf Coast Ultra-Low Sulfur No 2 Diesel Spot Price, and Los Angeles, CA Ultra-Low Sulfur CARB Diesel Spot Price. Biodiesel prices are B-100 soy methyl ester (SME) at IL, IN, and OH.

Source: U.S. Energy Information Administration (EIA), www.eia.gov/dnav/pet/pet_pri_spt_s1_m.htm, and USDA ERS, U.S. Bioenergy Statistics, table 17, www.ers.usda.gov/data-products/us-bioenergy-statistics/, accessed November 15, 2017.

D4 and D6 RIN prices are shown in figure V-3. The difference between D4 and D6 prices was as low as 2 cents (3 percent difference) in December 2014 and as high as 52 cents (54 percent difference) in March 2017. Petitioners state that the sharp drop in the D6 RIN value relative to the D4 RIN value in the first half of 2017 was a temporary phenomenon based on

speculation in the RIN market and is unlikely to be repeated.¹⁴ According to Indonesian respondents, higher market expectations for biodiesel relative to corn ethanol can increase the gap between D4 and D6 prices. In addition, they state that higher D4 values result from higher compliance costs for obligated parties and increased demand for biodiesel to meet RFS mandates.¹⁵ Furthermore, they state that imported palm oil biodiesel plays an important role in alleviating the shortage of D6 RINs caused by the annual RVOs exceeding the 10 percent ethanol blendwall.¹⁶ Respondent CARBIO states that the value of D4 RINs can be affected by dynamics in the ethanol market since soy biodiesel can qualify for multiple categories of the overall RFS.¹⁷

Figure V-3
RINs: Monthly D4 and D6 RIN prices, January 2014-September 2017

* * * * *

Most firms (16 of 23 U.S producers, 13 of 14 importers, and 34 of 38 purchasers) indicated that the discount or premium to the price indices had changed since 2014. Many firms stated that prices fluctuate daily (or even hourly) along with changing futures prices for soybean oil, ULSD, and RINs, and have gone both up and down, and also that discounts or premiums vary by individual contract or negotiation. Purchaser *** indicated that the premium of biodiesel to petroleum diesel had increased from 124 percent in 2014 to 159 percent in 2015 to 164 percent in 2016.

Most purchasers (26 of 38) also indicated that they considered changes to ULSD prices or to biodiesel raw material prices when determining the purchase price for biodiesel. Many firms stated that they look at ULSD futures prices, soybean futures prices, and RIN values. *** described biodiesel pricing as a “three-legged stool” consisting of the price of the vegetable raw material, RIN values, and ULSD prices, and stated that, with the exception of a few mandated markets, biodiesel will not be purchased when its cost minus RINs is greater than the ULSD price.

Most firms (22 of 24 producers and 13 of 14 importers) indicated that they had negotiated contracts since 2014 that included the BTC. Firms were asked to state how their contracts implemented the BTC in each year of the period of investigation.¹⁸ Many firms

¹⁴ Petitioners’ prehearing brief, pp. 75-76.

¹⁵ Indonesian respondents’ prehearing brief, p. 39.

¹⁶ The ethanol blend wall is the point at which all gasoline in the U.S. market is blended with the federal maximum of 10 percent ethanol. Hearing transcript, p. 177 (Dunphy), Indonesian respondents’ prehearing brief, exh. 1, p. 15.

¹⁷ It also stated that tight supply for biodiesel is reflected in increasing D4 RIN prices. Respondent CARBIO’s prehearing brief, p. 8, p. 15.

¹⁸ As described previously, the BTC was not in place during most of 2014 and 2015, but was retroactively applied at the end of each of those years. The BTC was in place for the entire year 2016, but has not been renewed in 2017.

responded that their contracts in 2014, 2015, and 2017 (the years that the BTC was not in place for most or all of the year) often specified that the BTC, if re-instated, would be split between the seller and customer, although the percentage split varied by the customer and contract.

Sales terms and discounts

U.S. producers and importers typically quote prices on an f.o.b. basis. A majority of responding purchasers (27 of 39) indicated that they buy biodiesel on both an f.o.b. and a delivered basis. Most producers (22 of 25) and all importers do not offer discounts. Most U.S. producers reported sales terms of net 10 days and importers reported sales terms of net 2 days to net 45 days.

Price leadership

Most purchasers (27 of 39) did not list any firms as price leaders in the U.S. biodiesel market. Among the 12 purchasers that listed price leaders, six purchasers listed ADM, four listed Louis Dreyfus, and three listed Biosphere/Musket.

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 biodiesel products shipped to unrelated U.S. customers as well as quantity and purchase cost data for biodiesel imported and consumed internally (product 1 only) during January 2014-June 2017.¹⁹

Product 1.—B100 (pure biodiesel), including RIN value when sold as 1.5 RINs per gallon.

Product 2.—B100 (pure biodiesel), sold without RINs.

Product 3.—B99 (biodiesel blend containing 99.0% - 99.9% biodiesel), including RIN value when sold as 1.5 RINs per gallon.

Product 4.—B99 (biodiesel blend containing 99.0% - 99.9% biodiesel), sold without RINs.

¹⁹ Respondent CARBIO stated that the large portion of subject imports imported directly by BioSphere for its affiliated truck stops, rather than sold on the open market, attenuates any effect of imports on domestic prices. Respondent CARBIO's prehearing brief, pp. 24-25.

Petitioners also note the importance of BioSphere in the market and state that domestic producers' commercial shipments and Biosphere's import prices are at the same level of trade since BioSphere purchases biodiesel from many of the domestic producers. Petitioners' prehearing brief, p. 51.

Firms were instructed to separately report the following components of the net invoice value: net fuel value, RIN value, and BTC value, as appropriate. For products 1 and 2 (B100), for which the BTC was available (at least in some years), firms were instructed to report the BTC value as a component of the invoice price. For products 1 and 3 (biodiesel sold with RINs), firms were instructed to report the RIN value as a component of the invoice price. The following tabulation summarizes the data that were requested for each pricing product; the net invoice value was calculated automatically in the Word form questionnaire by summing the previous columns. Many firms were not able to provide the fuel value, RIN value, and/or BTC values separate from the invoice price since suppliers do not invoice these elements separately but rather negotiate a single price to the customer.²⁰

Pricing product	Net fuel value	RIN value	BTC value	Net invoice value
Product 1- B100 sold with RINs	✓	✓	✓	Calculated
Product 2- B100 sold without RINs	✓		✓	Calculated
Product 3: B99 with RINs	✓	✓		Calculated
Product 4: B99 sold without RINs	✓			Calculated

Twenty-three U.S. producers and eleven importers²¹ provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.^{22 23} Pricing data reported by these firms accounted for all or nearly all of U.S. producers' commercial shipments of biodiesel and of U.S. commercial shipments of imports from Argentina, Indonesia, and nonsubject Canada, in 2016.²⁴

Price data for products 1-4 are presented in tables V-5 to V-8 and figures V-4 to V-7. Nonsubject country prices for Canada are presented in Appendix E. As noted previously, the RIN value differs for D4 RINs, for which domestically produced biodiesel and imports from Argentina and Canada qualify, and D6 RINs, for which Indonesian product qualifies. Because of the differing values of the D4 and D6 RINs, Indonesia respondents suggest, and petitioners agree, that Indonesian pricing data for products 1 and 3 should be adjusted by subtracting the

²⁰ Hearing transcript, p. 54 (Stone). For example, producer *** stated in its questionnaire response that it doesn't separate out the fuel value and RIN values in its sales but rather looks at both as one price.

²¹ Seven importers (***) reported data for Argentina, two reported data for Indonesia (***), and four reported data for Canada (***). Importer ***.

²² Per-unit pricing data are calculated from total quantity and total value data provided by U.S. producers and importers. The precision and variation of these figures may be affected by rounding, limited quantities, and producer or importer estimates.

²³ ***.

²⁴ ***.

D6 RIN value and adding the D4 RIN value.²⁵ Indonesian prices for products 1 and 3 are presented using these agreed upon adjustments.

Table V-5

Biodiesel: Weighted-average f.o.b. prices and quantities of domestic and imported product 1¹ and margins of underselling/(overselling), by quarters, January 2014-June 2017

Period	United States		Argentina			Indonesia		
	Net invoice price (dollars per gallon)	Quantity (gallons)	Net invoice price (dollars per gallon)	Quantity (gallons)	Margin (percent)	Adjusted net invoice price (dollars per gallon)	Quantity (gallons)	Margin (percent)
2014:								
Jan.-Mar.	3.47	89,345,827	***	***	***	***	***	***
Apr.-Jun.	3.52	119,497,551	***	***	***	***	***	***
Jul.-Sep.	3.64	138,223,511	***	***	***	***	***	***
Oct.-Dec.	3.37	96,707,864	***	***	***	***	***	***
2015:								
Jan.-Mar.	2.71	81,107,501	***	***	***	***	***	***
Apr.-Jun.	3.03	124,859,194	***	***	***	***	***	***
Jul.-Sep.	2.87	123,068,435	***	***	***	***	***	***
Oct.-Dec.	2.66	88,441,680	***	***	***	***	***	***
2016:								
Jan.-Mar.	2.57	87,672,917	***	***	***	***	***	***
Apr.-Jun.	2.96	114,365,357	***	***	***	***	***	***
Jul.-Sep.	2.97	107,672,491	***	***	***	***	***	***
Oct.-Dec.	3.21	95,644,138	***	***	***	***	***	***
2017:								
Jan.-Mar.	3.33	29,419,852	***	***	***	***	***	***
Apr.-Jun.	3.19	55,735,000	***	***	***	***	***	***

¹ Product 1: B100 (pure biodiesel), including RIN value when sold as 1.5 RINs per gallon.

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

Table V-6

Biodiesel: Weighted-average f.o.b. prices and quantities of domestic and imported product 2¹ and margins of underselling/(overselling), by quarters, January 2014-June 2017

* * * * *

²⁵ Respondents use OPIS quarterly RIN prices to make the adjustment, and petitioners used the same adjustments in their hearing exhibit. Indonesian respondents' prehearing brief, exh. 9. Petitioners' confidential hearing exh. 3.

Table V-7

Biodiesel: Weighted-average f.o.b. prices and quantities of domestic and imported product 3¹ and margins of underselling/(overselling), by quarters, January 2014-June 2017

Period	United States		Argentina			Indonesia		
	Net invoice price (dollars per gallon)	Quantity (gallons)	Net invoice price (dollars per gallon)	Quantity (gallons)	Margin (percent)	Adjusted net invoice price (dollars per gallon)	Quantity (gallons)	Margin (percent)
2014:								
Jan.-Mar.	3.37	63,508,122	***	***	***	***	***	***
Apr.-Jun.	3.48	71,188,732	***	***	***	***	***	***
Jul.-Sep.	3.53	90,683,979	***	***	***	***	***	***
Oct.-Dec.	2.98	137,783,756	***	***	***	***	***	***
2015:								
Jan.-Mar.	2.66	58,796,583	***	***	***	***	***	***
Apr.-Jun.	2.87	114,534,282	***	***	***	***	***	***
Jul.-Sep.	2.76	111,619,286	***	***	***	***	***	***
Oct.-Dec.	2.34	110,465,847	***	***	***	***	***	***
2016:								
Jan.-Mar.	2.04	116,029,401	***	***	***	***	***	***
Apr.-Jun.	2.11	152,942,247	***	***	***	***	***	***
Jul.-Sep.	2.24	177,410,641	***	***	***	***	***	***
Oct.-Dec.	2.35	183,308,267	***	***	***	***	***	***
2017:								
Jan.-Mar.	2.83	87,609,728	***	***	***	***	***	***
Apr.-Jun.	2.86	167,057,861	***	***	***	***	***	***

¹ Product 3: B99 (biodiesel blend containing 99.0% - 99.9% biodiesel), including RIN value when sold as 1.5 RINs per gallon.

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

Table V-8

Biodiesel: Weighted-average f.o.b. prices and quantities of domestic and imported product 4¹ and margins of underselling/(overselling), by quarters, January 2014-June 2017

Period	United States		Argentina			Indonesia		
	Net invoice price (dollars per gallon)	Quantity (gallons)	Net invoice price (dollars per gallon)	Quantity (gallons)	Margin (percent)	Net invoice price (dollars per gallon)	Quantity (gallons)	Margin (percent)
2014:								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-Jun.	2.65	40,697,498	***	***	***	***	***	***
Jul.-Sep.	2.72	47,098,657	***	***	***	***	***	***
Oct.-Dec.	2.07	39,299,254	***	***	***	***	***	***
2015:								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-Jun.	1.81	43,826,849	***	***	***	***	***	***
Jul.-Sep.	1.50	58,171,539	***	***	***	***	***	***
Oct.-Dec.	1.52	43,405,805	***	***	***	***	***	***
2016:								
Jan.-Mar.	0.76	38,388,348	***	***	***	***	***	***
Apr.-Jun.	1.13	65,472,330	***	***	***	***	***	***
Jul.-Sep.	0.94	68,635,356	***	***	***	***	***	***
Oct.-Dec.	0.99	60,688,964	***	***	***	***	***	***
2017:								
Jan.-Mar.	1.59	60,595,145	***	***	***	***	***	***
Apr.-Jun.	1.30	83,757,080	***	***	***	***	***	***

¹ Product 4: B99 (biodiesel blend containing 99.0% - 99.9% biodiesel), sold without RINs.

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

Figure V-4

Biodiesel: Weighted-average prices and quantities of domestic and imported product 1, by quarters, January 2014-June 2017

* * * * *

Figure V-5

Biodiesel: Weighted-average prices and quantities of domestic and imported product 2, by quarters, January 2014-June 2017

* * * * *

Figure V-6

Biodiesel: Weighted-average prices and quantities of domestic and imported product 3, by quarters, January 2014-June 2017

* * * * *

Figure V-7
Biodiesel: Weighted-average prices and quantities of domestic and imported product 4, by quarters, January 2014-June 2017

* * * * *

Import purchase cost data

One importer, BioSphere, provided import purchase cost data for imports for its own use of product 1, although it did not report data for all quarters.²⁶ In 2016, BioSphere accounted for *** percent of reported imports from Argentina and *** percent of reported imports from Indonesia.²⁷ Import purchase cost data is presented in table V-9 and figure V-8. In addition to the import purchase cost data, ***.

BioSphere stated that its contract prices for imports are typically set 4 to 6 months before shipment (but can be as long as 9 months) whereas the prices it pays for domestic biodiesel are fixed a few days to a month before shipment. Therefore, it states, import prices on the date of the contract should be used rather than the date of import in order to compare the prices that suppliers are offering when BioSphere is making its purchase decision.²⁸

Price trends²⁹

In general, prices decreased overall during January 2014-June 2017, with most prices series showing declines in 2014 and 2015, and increases in 2016 and 2017. Table V-10 summarizes the price trends, by country and by product. Domestic price decreases ranged from *** to *** percent during January 2014-June 2017. Price declines were steeper for biodiesel sold without RINs (products 2 and 4) than the biodiesel sold without RINs (product 1 and 3).

Price decreases for imports from Argentina ranged from *** to *** percent. Pricing for imports from Indonesia were not available in every quarter, and no prices were reported in 2017, but the price decreases ranged from *** to *** percent for the quarters for which data were available. Indonesian respondents stated that it was not economically viable for them to participate in the U.S. market in 2017 because of the expiration of the BTC and low petrodiesel prices.³⁰

²⁶ ***.

²⁷ No importers reported import cost data for imports from Canada.

²⁸ Hearing transcript, pp. 151-152 (Dawson). Respondent CARBIO's posthearing brief, pp. 10-11; exh. 2, p. 4; and exh. 8.

²⁹ Respondent CARBIO states that prices of petrodiesel and for soybean oil in 2014 and 2015 were key factors in the price trends for biodiesel. It also states that biodiesel prices increased relative to petrodiesel prices during the period of investigation. Respondent CARBIO's prehearing brief, pp. 26-32.

³⁰ Indonesian respondents' prehearing brief, p. 17.

Table V-9

Biodiesel: Weighted-average f.o.b. prices and quantities of domestic and landed duty paid costs of imported product 1,¹ by quarters, January 2014-June 2017

Period	United States		Argentina (cost)		Indonesia (cost)	
	Net invoice price (dollars per gallon)	Quantity (gallons)	Unit LDP value (dollars per gallon)	Quantity (gallons)	Unit LDP value (dollars per gallon)	Quantity (gallons)
2014:						
Jan.-Mar.	3.47	89,345,827	***	***	***	***
Apr.-June	3.52	119,497,551	***	***	***	***
July-Sept.	3.64	138,223,511	***	***	***	***
Oct.-Dec.	3.37	96,707,864	***	***	***	***
2015:						
Jan.-Mar.	2.71	81,107,501	***	***	***	***
Apr.-June	3.03	124,859,194	***	***	***	***
July-Sept.	2.87	123,068,435	***	***	***	***
Oct.-Dec.	2.66	88,441,680	***	***	***	***
2016:						
Jan.-Mar.	2.57	87,672,917	***	***	***	***
Apr.-June	2.96	114,365,357	***	***	***	***
July-Sept.	2.97	107,672,491	***	***	***	***
Oct.-Dec.	3.21	95,644,138	***	***	***	***
2017:						
Jan.-Mar.	3.33	29,419,852	***	***	***	***
Apr.-June	3.19	55,735,000	***	***	***	***

¹ Product 1: B100 (pure biodiesel), including RIN value when sold as 1.5 RINs per gallon.

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

Figure V-8

Biodiesel: Weighted-average prices and quantities of domestic product 1, and landed duty paid costs and quantities of imported product 1, by quarters, January 2014-June 2017

* * * * *

Price comparisons

As shown in table V-11, prices for biodiesel imported from Argentina were below those for U.S.-produced product in 24 of 50 instances (***) gallons); margins of underselling ranged from *** to *** percent, with an average of *** percent. In the remaining 26 instances (***) gallons), prices for biodiesel from Argentina were between *** and *** percent above prices for the domestic product, with an average of *** percent.

Prices for biodiesel imported from Indonesia, adjusted for RIN values, were below those for U.S.-produced product in 25 of 34 instances (***) gallons); margins of underselling ranged from *** percent to *** percent, with an average of *** percent. In the remaining 9 instances (***) gallons), prices for biodiesel from Indonesia were between *** and *** percent above prices for the domestic product, with an average of *** percent. Indonesian respondents state

that Indonesian biodiesel sells at a discount in the U.S. market because of (1) its high-cloud point and (2) it is sold with a D6 RIN instead of a D4 RIN.³¹

Table V-10
Biodiesel: Summary of weighted-average f.o.b. prices for products 1-4 from the United States, Argentina, and Indonesia

Item	Number of quarters	Low price (dollars per gallon)	High price (dollars per gallon)	Change in price over period ¹ (percent)
Product 1: United States	14	2.57	3.64	(8.1)
Argentina	***	***	***	***
Indonesia	***	***	***	***
Argentina (cost)	***	***	***	***
Indonesia (cost) ²	***	***	***	***
Product 2: United States	***	***	***	***
Argentina	***	***	***	***
Indonesia	***	***	***	***
Product 3: United States	14	2.04	3.53	(15.3)
Argentina	***	***	***	***
Indonesia	***	***	***	***
Product 4: United States	14	0.76	2.72	(46.3)
Argentina	***	***	***	***
Indonesia	***	***	***	***

¹ Percentage change from the first quarter in which data were available to the last quarter in which price data were available. There were no price data for Indonesia in 2017.

² Cost data for Indonesia were ***.

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

Table V-11
Biodiesel: Instances of underselling/overselling and the range and average of margins, by country, January 2014-June 2017

* * * * *

LOST SALES AND LOST REVENUE

In the preliminary phase of the investigations, the Commission requested that U.S. producers of biodiesel report purchasers where they experienced instances of lost sales or

³¹ Indonesian respondents' prehearing brief, p. 52.

revenue due to competition from subject imports since 2014. Eight U.S. producers submitted lost sales and lost revenue allegations and identified 26 firms where they lost sales or revenue (8 consisting of lost revenue allegations and 18 consisting of both types of allegations). All allegations provided referenced subject product from Argentina, with 5 allegations also including Indonesia. All allegations specified the allegation timing as 2014-16, except one that reported 2015 and 2016. All allegations were by individual sale of biodiesel. In the final phase of the investigation, of the 25 responding U.S. producers, 20 reported that they had to reduce prices, 3 reported that they rolled back announced price increases, and 17 reported that they had lost sales.

As indicated in *Part II*, 39 firms provided purchaser questionnaire responses. Responding purchasers reported purchasing and importing 2.4 million gallons of biodiesel in 2016 (table V-12). Of the 39 responding purchasers, 14 reported that, since 2014, they had purchased imported biodiesel from subject countries instead of U.S.-produced product – 12 from Argentina and 7 from Indonesia. Eleven of these purchasers reported that subject import prices were lower than U.S.-produced product, and 9 of these purchasers reported that price was a primary reason for the decision to purchase imported product rather than U.S.-produced product. Eight purchasers estimated the quantity of biodiesel from subject countries purchased instead of domestic product; quantities ranged from 1,650 gallons to 116,000 gallons (tables V-13a and V-13b). Purchasers identified availability, timing, logistics, quality, and transportation costs as non-price reasons for purchasing imported rather than U.S.-produced product.

Of the 39 responding purchasers, 10 reported that U.S. producers had reduced prices in order to compete with lower-priced imports from subject countries (tables V-14a and V-14b; 23 reported that they did not know). The reported estimated price reduction ranged from 1 to 40 percent.

Table V-12
Biodiesel: Purchasers’ responses to purchasing patterns

* * * * *

Table V-13a
Biodiesel: Purchasers’ responses to purchasing subject imports instead of domestic product

* * * * *

Table V-13b
Biodiesel: Summary of Purchasers’ responses to purchasing subject imports instead of domestic product

Source	Count of purchasers reporting subject instead of domestic	Count of purchasers reported that imports were priced lower	Count of purchasers reporting that price was a primary reason for shift	Quantity subject purchased (gallons)	Other reasons for shift
Argentina	12	10	8	***	5
Indonesia	7	5	5	***	4
All subject sources	14	11	9	***	6

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

Table V-14a
Biodiesel: Purchasers' responses to U.S. producer price reductions

* * * * *

Table V-14b
Biodiesel: Summary of purchasers' responses to U.S. producer price reductions

Source	Count of purchasers reporting U.S. producers reduced prices	Simple average of estimated U.S. price reduction (percent)	Range of estimated U.S. price reductions (percent)
Argentina	10	16.9	1 to 40
Indonesia	4	40.0	(¹)
All subject sources	10	16.9	1 to 40

¹ Only one firm provided an estimate for Indonesia.

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

PART VI: FINANCIAL EXPERIENCE OF U.S. PRODUCERS

BACKGROUND

Twenty-four U.S. producers provided usable financial data, the same number that provided information in the trade section of the Commission's questionnaire.¹ Firms were requested to provide data on a calendar year basis and the trade and financial sections of the Commission's questionnaire generally reconciled (with ***, although the difference is very small in relation to the total). Four firms reported transfers to related parties, including producers of petroleum diesel; five firms reported internal consumption of biodiesel for the production of other products, including blending at their own fuel stations. One firm (***) began operations in 2015 while several others expanded operations between 2014 and 2016. This industry is concentrated, with the leading four firms and eight firms accounting for nearly 54 percent and 77 percent, respectively, of reported sales by quantity in 2016.

As the largest U.S. producer stated, "the biodiesel industry relies substantially on federal programs requiring the consumption of biofuels. Biodiesel has historically been more expensive to produce than petroleum-based diesel, and governmental programs support a market for biodiesel that otherwise might not exist."² Primary among government programs is the Renewable Fuel Standard ("RFS") program,³ which requires the consumption of biomass-based diesel fuel, which includes biodiesel and renewable hydrocarbon diesel, at specified volumes on an annual basis to replace or reduce the quantity of petroleum-based transportation fuel or heating oil. The minimum consumption volume, or Renewable Volume Obligation ("RVO"), was 1.28 billion gallons in 2013, increased to 1.63 billion gallons in 2014, 1.73 billion gallons in 2015, 1.90 billion gallons in 2016, and was set by the EPA at 2.00 billion gallons for 2017 and 2.10

¹ Firms are identified in Parts I and III of the report. Also, see discussion of coverage in Part I of this report. One firm, ***. Commission staff verified the questionnaire response of REG (Verification Report REG Biodiesel rev, November 21, 2017. EDIS document 629626). ***. Staff requested ***.

² REG, 2016 Form 10-K, p. 11. The firm uses the term biomass-based diesel to distinguish it from petroleum diesel. Biomass-based diesel includes biodiesel, the subject product under investigation, and renewable hydrocarbon diesel, which is not covered under these investigations. Petitioners estimate that in 2016 approximately 421 million gallons of renewable hydrocarbon diesel was produced, equivalent to 22 percent of biomass-based diesel mandated volume in that year. Petitioners' posthearing brief, answers to question #9, p. II-16 and exh. F.

³ The RFS program is administered by the U.S. Environmental Protection Agency ("EPA") in consultation with the U.S. Department of Agriculture and the U.S. Department of Energy. The RFS program was designed to implement changes made by Congress to the Clean Air Act in 2005 and expanded in 2007. Certain additional regulations were adopted in mid-2010, including a system to track renewable fuel production and compliance with the RFS (credits called Renewable Identification Numbers or "RINs") and the RFS program then became known as "RFS2." "Prior to the 2010 implementation of RFS2, the biodiesel industry relied principally on tax incentives to make the price of biodiesel more cost competitive with the price of petroleum-based diesel fuel to the end user." REG 2016 Form 10-K, p. 12.

billion gallons for 2018. Obligated parties, which are refiners or importers of gasoline or diesel fuel, achieve compliance by blending biodiesel into transportation fuel or by obtaining credits, called Renewable Identification Numbers (“RIN”).⁴ The EPA tracks renewable fuel production and compliance with the renewable fuel standard through RINs; EPA-registered producers of renewable fuel may generate RINs for each gallon of renewable fuel they produce, which is generally 1.5 RINs for each gallon of biodiesel produced.

While the RFS program has supported the consumption of biodiesel, Federal and state tax incentives have aided the industry. At the national level, there is the federal biodiesel mixture excise tax credit, known as the blender’s tax credit (“BTC”). Under the BTC, the entity to first blend pure biodiesel (B100) with petroleum based diesel fuel received a \$1.00 per-gallon refundable tax credit.⁵ The BTC could be used to reduce excise tax liability or could be exchanged for cash. The BTC has been described as an incentive shared across the entire value chain through routine, daily trading and negotiation. Parties at the staff conference indicated that the BTC influenced sales values. For example, “many obligated parties and discretionary blenders have shifted responsibility for claiming the credit to biodiesel producers, who then share the value of the credit with their customers through a lower price.”⁶ “The final price of biodiesel is influenced primarily by three factors: First, the price of the fuel itself. Second, the biodiesel price may include the market value of the RIN, and third, the biodiesel price may reflect the value of the federal blender’s tax credit or some portion of it.”⁷ A spokesman for Louis Dreyfus stated that when the tax credit exists, producers have generally sold biodiesel as B99 and because the cost of blending is inconsequential, the producer implicitly includes the revenue from the credit in his sales decision; when the tax credit lapsed, a share of the eventual tax credit was split with the consumer, depending on the extent to which the parties were willing to accept the legislative risk.⁸ It is not clear the extent to which or for which periods

⁴ All RIN activity under RFS2 must be entered into the EPA's moderated transaction system, which tracks RIN generation, transfer, and retirement. RINs are retired when used for compliance with the RFS2 requirements. An obligated party can obtain RINs by buying renewable fuels with RINs attached, buying RINs that have been separated, or producing renewable fuels themselves. Obligated parties may carry over up to 20 percent unused RINs between compliance years, but RINs expire in the year following generation; they may also carry a compliance deficit into the following year but that deficit must be made up in the following year. RINs are separated (made independent) when the obligated party owns the biodiesel; when the biodiesel is blended to below 80 percent with petroleum diesel (e.g., B80); when the biodiesel is blended with petroleum diesel for transportation uses (e.g., B5, B10, etc.); or when the biodiesel is exported. REG, 2016 Form 10-K, p. 6.

⁵ The BTC became effective January 1, 2005 and then lapsed on January 1, 2010 before being reinstated retroactively on December 17, 2010. The BTC again lapsed as of December 31, 2011 and on January 2, 2013, it was again reinstated, retroactively for 2012 and through December 31, 2013. The BTC lapsed again on December 31, 2013 and was retroactively reinstated for 2014 on December 19, 2014. On December 18, 2015, the BTC was retroactively reinstated for 2015 and was in effect until December 31, 2016. The BTC lapsed again on January 1, 2017. These changes affected sales (discussed later).

⁶ Conference transcript, p. 166 (Steckel).

⁷ Conference transcript, p. 175 (Stone).

⁸ Conference transcript, p. 39 (Doyle).

domestic producers offset prices by sharing the BTC with their customers or whether that was in the form of a price reduction or subsequent credit. Parties seemed to agree that price negotiations during the period in which the BTC lapsed were still impacted by the possibility of retroactive application. While the BTC is a national program, there are programs at the state level that also provide tax credits and other incentives that encourage the use of biodiesel; approximately 40 states are said to have such programs currently.⁹

OPERATIONS ON BIODIESEL

Table VI-1 presents aggregated data on U.S. producers' operations in relation to biodiesel over the full yearly periods of 2014 through 2016 as well as January-June 2016 ("interim 2016") and January-June 2017 ("interim 2017"). Table VI-1 includes the data for sales of independent RINs and the blenders' tax credit (BTC) in sales.¹⁰ Commercial sales, which include exports, are *** compared with the total shipments shown in table III-8.¹¹ State tax credits, municipal tax credits, and other incentives are presented below the operating income line in "other income." Table VI-2 presents changes in average unit values between years and between the interim periods.

⁹ A matrix of state policies may be found at the Alternative Fuels Data Center of the U.S. Department of Energy.

¹⁰ The Commission's questionnaire asked firms where they normally classified RINs and BTC. Nine of eighteen firms responded that RINs were classified in sales and 14 of 24 firms stated that the BTC was classified in sales.

¹¹ Also, see table III-9 in Part III for a breakdown of U.S. commercial sales by B100 and B99 sold with and without RINs. As noted earlier, ***.

Table VI-1
Biodiesel: Results of operations of U.S. producers, 2014-16, January-June 2016, and January-June 2017

Item	Calendar year			January-June	
	2014	2015	2016	2016	2017
	Quantity (1,000 gallons)				
Commercial sales	1,018,350	1,031,478	1,352,747	608,479	570,070
Internal consumption ¹	***	***	***	***	***
Transfers to related firms ²	***	***	***	***	***
Total net sales	1,061,627	1,068,014	1,424,831	641,478	601,755
	Value (1,000 dollars)				
Commercial sales	3,295,103	2,632,291	2,981,590	1,286,491	1,384,264
Internal consumption ¹	***	***	***	***	***
Transfers to related firms ²	***	***	***	***	***
Independent RIN sales ³	124,087	184,730	305,168	76,344	***
Federal Blenders' Tax Credit ⁴	333,479	425,985	898,170	403,387	***
Total net sales	3,874,002	3,330,023	4,328,873	1,829,719	1,634,468
Cost of goods sold.--					
Raw materials	3,192,578	2,551,601	3,434,803	1,504,316	1,476,426
Direct labor	50,467	55,593	65,931	31,143	33,596
Other factory costs	396,801	391,837	443,878	221,041	200,587
Less: By-product revenues ⁵	(122,407)	(81,064)	(72,108)	(34,903)	(38,029)
Total COGS	3,517,439	2,917,967	3,872,504	1,721,597	1,672,580
Gross profit	356,563	412,056	456,369	108,122	(38,112)
SG&A expense	147,505	157,423	184,574	79,789	87,867
Operating income or (loss)	209,058	254,633	271,795	28,333	(125,979)
Interest expense	***	***	***	***	***
All other expenses ⁶	***	***	***	***	***
All other income ⁷	***	***	***	***	***
Net income or (loss)	215,692	192,853	233,844	9,607	(117,388)
Depreciation/amortization	60,032	65,017	74,464	36,338	37,877
Cash flow	275,724	257,870	308,308	45,945	(79,511)
	Ratio to net sales (percent)				
Cost of goods sold.--					
Raw materials	82.4	76.6	79.3	82.2	90.3
Direct labor	1.3	1.7	1.5	1.7	2.1
Other factory costs	10.2	11.8	10.3	12.1	12.3
Less: By-product revenues ⁵	(3.2)	(2.4)	(1.7)	(1.9)	(2.3)
Average COGS	90.8	87.6	89.5	94.1	102.3
Gross profit	9.2	12.4	10.5	5.9	(2.3)
SG&A expense	3.8	4.7	4.3	4.4	5.4
Operating income or (loss)	5.4	7.6	6.3	1.5	(7.7)
Net income or (loss)	5.6	5.8	5.4	0.5	(7.2)

Table continued on next page.

Table VI-1 -- Continued

Biodiesel: Results of operations of U.S. producers, 2014-16, January-June 2016, and January-June 2017

Item	Calendar year			January-June	
	2014	2015	2016	2016	2017
Ratio to total COGS before by-product offset (percent)					
Cost of goods sold (before by-product offset)--					
Raw materials	87.7	85.1	87.1	85.6	86.3
Direct labor	1.4	1.9	1.7	1.8	2.0
Other factory costs	10.9	13.1	11.3	12.6	11.7
Total COGS	96.6	97.3	98.2	98.0	97.8
Unit value (dollars per gallon)					
Commercial sales	3.24	2.55	2.20	2.11	2.43
Internal consumption ¹	***	***	***	***	***
Transfers to related firms ²	***	***	***	***	***
Total net sales	3.65	3.12	3.04	2.85	2.72
Cost of goods sold.--					
Raw materials	3.01	2.39	2.41	2.35	2.45
Direct labor	0.05	0.05	0.05	0.05	0.06
Other factory costs	0.37	0.37	0.31	0.34	0.33
Less: By-product revenues ⁵	(0.12)	(0.08)	(0.05)	(0.05)	(0.06)
Total COGS	3.31	2.73	2.72	2.68	2.78
Gross profit	0.34	0.39	0.32	0.17	(0.06)
SG&A expense	0.14	0.15	0.13	0.12	0.15
Operating income or (loss)	0.20	0.24	0.19	0.04	(0.21)
Net income or (loss)	0.20	0.18	0.16	0.01	(0.20)
Number of firms reporting					
Operating losses	9	8	8	12	19
Net losses	7	8	10	13	18
Data	24	25	25	25	24

¹ Reported data accounted for mostly by ***.

² Reported data accounted for mostly by ***.

³ Fifteen firms reported sales of independent RINs in 2016; those firms accounting for a majority of such sales were ***.

⁴ Twenty one firms received the BTC in 2016; those firms accounting for a majority of the BTC received were ***.

⁵ Nineteen firms reported data for by-product revenues, which represents the sale or consumption of glycerine, fatty acids, and black esters, in 2016. These are mostly included in net sales revenue in their records (the Commission's questionnaire requested that reporting firms include it as an offset to COGS).

⁶ Includes other expenses such as asset impairments and losses on hedging operations.

⁷ Includes state and municipal tax credits for biodiesel sales and other items such as the gains from hedging operations.

Note.-- Ratios shown as "0.0" and per-units shown as "0.00" represent values greater than zero, but less than 0.05 and 0.005, respectively.

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

Table VI-2
Biodiesel: Changes in average unit values for all firms, between 2014-16, January-June 2016, and January-June 2017

Item	Between calendar years			Between partial year period
	2014-16	2014-15	2015-16	2016-17
Commercial sales	(1.03)	(0.68)	(0.35)	0.31
Internal consumption	***	***	***	***
Transfers to related firms	***	***	***	***
Total net sales	(0.61)	(0.53)	(0.08)	(0.14)
Cost of goods sold.--				
Raw materials	(0.60)	(0.62)	0.02	0.11
Direct labor	(0.00)	0.00	(0.01)	0.01
Other factory costs	(0.06)	(0.01)	(0.06)	(0.01)
Less: By-product revenues	0.06	0.04	0.03	(0.01)
Average COGS	(0.60)	(0.58)	(0.01)	0.10
Gross profit	(0.02)	0.05	(0.07)	(0.23)
SG&A expense	(0.01)	0.01	(0.02)	0.02
Operating income or (loss)	(0.01)	0.04	(0.05)	(0.25)
Net income or (loss)	(0.04)	(0.02)	(0.02)	(0.21)

Note.—Per-unit values shown as "0.00" represent values greater than zero, but less than "0.005".

Source: Calculated from the data in table VI-1.

Table VI-3 presents selected sales and cost data reported by the responding U.S. producers of biodiesel. The eight largest firms are presented individually, the other firms are aggregated. As previously stated, these eight firms accounted for nearly 77 percent of reported net sales quantity in 2016. Total net sales quantity includes commercial sales, internal consumption, and transfers while the value of total net sales includes those three categories of sales as well as sales of independent RINs and receipts of the BTC.

Table VI-3
Biodiesel: Results of operations of U.S. producers, by firm, 2014-16, January-June 2016, and January-June 2017

* * * * *

Total net sales

As described by the data in tables VI-1, VI-2, and VI-3, total net sales quantity rose sharply between 2015 and 2016 after increasing from 2014 to 2015. Most of the increase was

due to the increase of commercial sales.¹² Total sales quantity was somewhat lower in interim 2017 compared with interim 2016. Total sales value increased sharply in 2016 from 2015 after falling between 2014 and 2015. Total sales value was lower in interim 2017 than in interim 2016. Contributing to the change in total net sales were the sales of independent RINs¹³ and the federal blenders' tax credit (BTC), both of which approximately tripled between 2014 and 2016; while sales of independent RINs were much greater in interim 2017 compared to interim 2016, reported receipts of the BTC were dramatically lower between those same two periods.¹⁴ The value of RINs may vary depending upon the current status of the government mandate.¹⁵ Receipts of the BTC dropped off sharply in interim 2017 compared with the same period one year earlier because the BTC lapsed at the end of 2016 (BTC reported reflects credits applied for in 2016 but not received until 2017).¹⁶

¹² The ***. REG purchased several facilities that had been shut down by their owners; REG commenced operations at plants in Geismar, Louisiana; Grays Harbor, Washington; and Madison, Wisconsin and these plants have a nameplate capacity of 195 million gallons per year. REG, 2016 Form 10-K, p. 3.

¹³ As noted earlier, biodiesel can be sold with associated RINs attached or RINs may be separated from the gallons of renewable fuel they represent, and once separated they may be sold as a separate commodity. According to REG's public statements, the value of RINs is significant to the price of biodiesel: "In 2015, RIN prices as a percentage contribution to the average B100 spot price, as reported by OPIS, fluctuated significantly throughout the year and ranged from a low of \$0.58 per gallon, or 23%, in September to a high of \$1.55 per gallon, or 53%, in January. In 2016, RIN prices as a percentage contribution to the average B100 spot price, as reported by OPIS, ranged from a low of \$1.05 per gallon, or 37%, in September to a high of \$1.89 per gallon, or 54%, in January." REG, 2016 Form 10-K, pp. 6-7.

¹⁴ According to REG's public report, "historically sales have increased shortly before the BTC lapses and then decreased shortly thereafter. We believe reduced demand in the first quarters of 2014 and 2015 also resulted from the lapsing of the BTC at the end of 2013 and 2014, respectively. Similarly, we believe that the lapsing of the BTC on December 31, 2016 caused an acceleration of revenues in the fourth quarter of 2016, which is likely to result in a decline in demand during the first quarter of 2017." REG, 2016 Form 10-K, p. 12.

¹⁵ Conference transcript, pp. 24-25 (Whitney). One U.S. producer responded to a question why the firm's sales value appeared low on a per-unit basis (***) and stated that the firm sells only B99 without RINs based on a discount to NYMEX {New York Mercantile Exchange}. Email from *** to staff, April 24, 2017, filed by Cassidy Levy.

¹⁶ Changes in the BTC were explained as follows: "The BTC was not in effect during most of 2014 or 2015, but was reinstated and applied retroactively late in each year. Under those circumstances, *** chose to chiefly sell B100 to our customers, allowing our buyers to file for, collect, and retain all the tax credit proceeds associated with those sales. The revenue we report for the BTC in each of 2014 and 2015 reflects the relatively small volumes of B99 we sold in each of those years, and the tax credit revenue we received via those sales. In 2016, the tax credit was in effect for the entire year; accordingly, we chose to sell higher volumes of B99 and file for, collect, and retain the tax credit proceeds ourselves on a higher proportion of our sales." Email from ***. Another firm explained that when the BTC was reinstated retroactively in 2014 and 2015, it received most of BTC in the subsequent year and that 2016 included the BTC for both 2015 and 2016. Email from ***. *** reported the BTC in 2017 and explained its data: "****." Email from ***.

The average unit value of commercial sales fell from 2014 to 2016 but was higher in interim 2017 compared with interim 2016. The average unit value of total sales (including independent RINs and the federal BTC) also declined from 2014 to 2016 but the decline was not as great as that of commercial sales; the average unit value of total sales was lower in interim 2017 compared with interim 2016 reflecting the changes in RINs and BTC.¹⁷

Operating costs and expenses

Biodiesel has traditionally been marketed primarily as an additive or alternative to petroleum-based diesel fuel, and, as a result, biodiesel prices have been influenced by the price of petroleum-based diesel fuel, adjusted for government incentives supporting renewable fuels, rather than biodiesel production costs.¹⁸ Nonetheless, raw material costs are substantial in this industry. Feedstock costs are volatile; they include virgin vegetable oils (including soybean oil and canola) and what are described as lower cost feedstocks like inedible animal fat (such as beef tallow, choice white grease, and poultry fat derived from livestock), inedible corn oil, and used cooking oil. As depicted by the data in table VI-1, raw material costs increased sharply in dollar terms from 2015 to 2016 after falling between 2014 and 2015; they were larger in interim 2016 than in interim 2017.¹⁹ Raw material costs as a share of total COGS declined slightly between 2014 and 2016 but were greater in interim 2017 than in interim 2016; changes in the ratio of raw materials to total net sales and the average unit value of raw material costs were similar to its share of total COGS. Comparing changes in the average unit value of commercial sales and total net sales with raw material costs (table VI-2), the commercial sales unit value declined more than the raw materials unit value from 2014 to 2016, although the commercial sales unit value fell from 2015 to 2016 while raw material costs increased; total sales unit value declined less than did raw material costs from 2014 to 2016. The increase in the unit value of commercial sales was greater than that of raw material costs between the interim periods, but the unit value of total net sales decreased between the interim periods.

By-products, consisting of the sale of glycerine and fatty acids and other products produced during the course of producing biodiesel are not insubstantial in this industry, representing 2.3 percent to 3.6 percent of total net sales (not including RINs or the BTC) during

¹⁷ As noted in the preliminary phase of these investigations, the tax credit plays a role in price determination. For example, at the staff conference, Mr. Doyle (Louis Dreyfus) contrasted sales of B99 in 2016 when the BTC was effective with those in 2015 when there was no credit and stated that the 2016 BTC was implicit in the sales price. Sales prices may have been greater in 2015 when the BTC was not in effect but may have been shared to an extent with the purchaser depending on the seller's risk averseness. Mr. Doyle further stated that sellers do include the BTC in the sales price. Conference transcript, p. 81 and 119-120 (Doyle). Also, conference transcript, p. 120 (Whitney, referring to the spread in prices between B100 and B99). Mr. Durling (counsel to Carbio) also stated that the nature of the BTC differed from other tax credits in that it could be cashed in or used as a credit against an excise tax liability and should be viewed as a revenue stream. Conference transcript, p. 81 (Durling).

¹⁸ REG, 2016 Form 10-K, p. 13.

¹⁹ ***.

2014-16. As shown in table VI-1, by-product revenues fell from \$122.4 million in 2014 to \$72.1 million in 2016.^{20 21}

Other factory costs constituted the second greatest component of total COGS (table VI-1). These costs increased from 2014 to 2016 in dollar terms, as a ratio to total net sales, but declined on a per-unit basis.²² Other factory costs were lower in interim 2017 compared with interim 2016 on a dollar basis, and on a per-unit basis but increased as a ratio to sales. Direct labor costs also increased from 2014 to 2016 and were higher in interim 2017 than in interim 2016. Direct labor costs accounted for 1.3 percent to 2.1 percent of total net sales during the period, and between 5 to 6 cents per gallon of sales.

SG&A expenses are low relative to raw materials and other factory costs, at approximately 3.8 to 5.4 percent of total sales. Between 2014 and 2016, SG&A expenses increased on a dollar basis and were greater in interim 2017 than in interim 2016.

Shown in table VI-1 below the operating income line are interest expense, other expense, and other income. Other expenses rose irregularly from 2014 to 2016 but were lower in interim 2017 than in interim 2016. Other expenses also include losses on hedging of raw materials and asset impairments.²³ The category of all other income, which includes items such as state and local tax credits, co-product revenues, and the gains on raw material hedging, declined from 2014 to 2016 and was greater in interim 2016 than in interim 2017.²⁴ The net amount of these three items was positive (other income was greater than interest expense and other expenses together) in 2014 which made net income greater than operating income; in interim 2017 the net loss was smaller than the industry's operating loss. The total of the three items was negative in the other periods resulting in net income being lower than operating income in 2015, 2016, and interim 2016. As shown in table VI-1, both operating income and net income before taxes were positive during the three full years, 2014 through 2016 and in interim 2016. Both were negative in interim 2017.

Profitability

As may be seen from the data in table VI-1, the reporting firms together recorded a gross profit, operating profit, and positive net income before taxes, and positive cash flow

²⁰ By-products are either sold or consumed. If consumed there is a "revenue" recognized which offsets the cost that otherwise would be incurred (e.g., methanol used in the transesterification reaction) as a product produced in the course of producing biodiesel. If by-products are sold, then the net revenue is recognized. In either case, the revenue or cost offset is recognized in the period in which it is incurred. The Commission's questionnaire asked firms where they normally classified by-product revenue. Of the reported \$*** was included in net sales. In both years most of the remainder was included in other income. U.S. producers' questionnaire responses, section III-9b. There were several instances of firms categorizing glycerine products not as by-products but as co-products; these firms either did not report the sales or classified the sales as other income.

²¹ ***.

²² Other factory costs of ***.

²³ ***. As noted earlier, ***.

²⁴ ***.

during the full yearly periods, but operating and net losses in interim 2017 and negative cash flow in interim 2017. While a majority of firms reported operating profit and positive net income in each of the three full yearly periods, the number reporting both operating and net losses increased to a majority of the firms during interim 2017.

Variance analysis

A variance analysis for the operations of U.S. producers of biodiesel is presented in table VI-4.²⁵ The information for this variance analysis is derived from table VI-1. A variance analysis is a method to assess the changes in profitability from period to period by measuring the impact of changes in the relationships between price, cost, and volume. A calculation is made of the impact of each factor by varying only that factor while holding all other factors constant. The components of net sales variances are either favorable (positive), resulting in an increase in net sales and profitability or unfavorable (negative), resulting in the opposite. As the data depict, operating income rose from 2014 to 2016 because a favorable net cost/expense variance (unit costs/expenses fell) together with a favorable volume variance were greater than the unfavorable price variance (unit sales values fell). Operating income fell between the interim periods because of the combination of the three unfavorable variances on price, net cost/expense, and volume. Similarly, net income fell between 2014 and 2016 due to an unfavorable price variance that was greater than the favorable variances on net cost/expense and volume, and net income fell between the interim periods because of the combination of unfavorable price and net cost/expense variances.

²⁵ 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.

Table VI-4
Biodiesel: Variance analysis on the operations of U.S. producers, 2014-16, January-June 2016,
and January-June 2017

Item	Between calendar years			Between partial year period
	2014-16	2014-15	2015-16	2016-17
Total net sales:				
Price variance	(870,503)	(567,286)	(113,690)	(81,947)
Volume variance	1,325,374	23,307	1,112,540	(113,304)
Total net sales variance	454,871	(543,979)	998,850	(195,251)
Total COGS:				
Cost variance	848,322	620,634	20,338	(57,591)
Volume variance	(1,203,387)	(21,162)	(974,875)	106,608
Total COGS variance	(355,065)	599,472	(954,537)	49,017
Gross profit variance	99,806	55,493	44,313	(146,234)
SG&A expenses:				
Cost/expense variance	13,395	(9,031)	25,443	(13,019)
Volume variance	(50,464)	(887)	(52,594)	4,941
Total SG&A expense variance	(37,069)	(9,918)	(27,151)	(8,078)
Operating income variance	62,737	45,575	17,162	(154,312)
Summarized (at the operating income level) as:				
Price variance	(870,503)	(567,286)	(113,690)	(81,947)
Net cost/expense variance	861,717	611,603	45,781	(70,610)
Net volume variance	71,523	1,258	85,071	(1,754)
Financial expenses:				
Cost/expense variance	(46,855)	(68,454)	44,469	26,157
Volume variance	2,270	40	(20,640)	1,160
Total financial expense variance	(44,585)	(68,414)	23,829	27,317
Net income variance	18,152	(22,839)	40,991	(126,995)
Summarized (at the net income level) as:				
Price variance	(870,503)	(567,286)	(113,690)	(81,947)
Net cost/expense variance	814,863	543,149	90,250	(44,453)
Net volume variance	73,793	1,298	64,431	(595)

Note.—These data are derived from the data in table VI-1. Unfavorable variances are shown in parentheses, all others are favorable.

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

CAPITAL EXPENDITURES AND RESEARCH AND DEVELOPMENT EXPENSES

In accounting terms, capital expenditures increase the value of specific plant and equipment and total assets, while charges for depreciation and amortization (in the case of intangible assets), impairments, and divestitures (or retirement or abandonment of property) decrease the value of assets. Capital expenditures and research and development (“R&D”) expenses are incurred to achieve improvements in equipment and the quality of

products produced or reduce operating costs. Table VI-5 presents capital expenditures and research and development (“R&D”) expenses as reported by the producing firms.

**Table VI-5
Biodiesel: Capital expenditures and R&D expenses of U.S. producers, 2014-16, January-June 2016, and January-June 2017**

Item	Calendar year			January-June	
	2014	2015	2016	2016	2017
	Capital expenditures (1,000 dollars)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All other firms	***	***	***	***	***
Total	116,179	***	89,609	56,885	30,692
	R&D expenses (1,000 dollars)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All other firms	***	***	***	***	***
Total	***	***	***	***	***

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

Generally speaking, firms stated that their capital expenditures were directed to improve product quality and operations, including capacity increases, energy usage and cost reduction and productivity or efficiency improvements.²⁶ Responding firms indicated that the nature and focus of their R&D was to improve ***.²⁷

ASSETS AND RETURN ON ASSETS

The Commission’s questionnaire requested firms to provide data on their total assets associated with the production, warehousing, and sale of biodiesel. The value of total net assets decreased from 2014 to 2016 by approximately \$155.9 million, equivalent to 9.3 percent. Firms stated that their assets fell due to several reasons, including return of capital to owner (i.e.,

²⁶ U.S. producers’ questionnaires, section III-14.

²⁷ U.S. producers’ questionnaires ***, section III-14.

owner distributions), reduced value of non-plant equipment such as cash and accounts receivable, and ***.²⁸

The ratio of operating income to total net sales (operating margin) increased irregularly over the three yearly periods as depicted in table VI-1. With the lower asset values in 2016 compared to those in 2014, the ratio of operating income to net assets increased. Table VI-6 presents data on the U.S. producers' total net assets as well as the calculated ratio.

Table VI-6
Biodiesel: U.S. producers' total assets, and the ratios of operating income or (loss) and net income or (loss) to total net assets, 2014-16

Firm	Calendar years		
	2014	2015	2016
	Total net assets (1,000 dollars)		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
All other firms	***	***	***
Total	1,671,337	1,639,592	1,515,419
	Operating return on assets (percent)		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
All other firms	***	***	***
Average	12.5	15.5	17.9

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

CAPITAL AND INVESTMENT

The Commission requested U.S. producers of biodiesel to describe any actual or potential negative effects of imports of biodiesel from Argentina and Indonesia on their firms' growth, investment, ability to raise capital, development and production efforts, or the scale of capital investments. Table VI-7 tabulates the responses on actual and anticipated negative effects of imports on investment, growth, and development. Table VI-8 presents firms'

²⁸ U.S. producers' questionnaires, section III-13.

narrative responses on actual and anticipated negative effects on investment, and growth and development of imports of biodiesel from Argentina and Indonesia.

Table VI-7

Biodiesel: Negative effects of imports from Argentina and Indonesia on investment, growth, and development since January 1, 2014 and anticipated negative effects of imports from Argentina and Indonesia

Item	No	Yes
Negative effects on investment ¹	5	20
Cancellation, postponement, or rejection of expansion projects		13
Denial or rejection of investment proposal		4
Reduction in the size of capital investments		11
Return on specific investments negatively impacted		12
Other		4
Negative effects on growth and development ²	8	16
Rejection of bank loans		5
Lowering of credit rating		0
Problem related to the issue of stocks or bonds		2
Ability to service debt		2
Other		12
Anticipated negative effects of imports ³	3	22

¹ The following firms responded “no” to this question: ***.

² The following firms responded “no” to this question: ***. One firm, ***.

³ The following firms responded “no” to this question: ***.

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

Table VI-8

Biodiesel: U.S. producers’ narrative responses on actual and anticipated negative effects on investment, growth, and development since January 1, 2014

* * * * *

PART VII: THREAT CONSIDERATIONS AND INFORMATION ON NONSUBJECT COUNTRIES

Section 771(7)(F)(i) of the Act (19 U.S.C. § 1677(7)(F)(i)) provides that—

In determining whether an industry in the United States is threatened with material injury by reason of imports (or sales for importation) of the subject merchandise, the Commission shall consider, among other relevant economic factors¹--

- (I) if a countervailable subsidy is involved, such information as may be presented to it by the administering authority as to the nature of the subsidy (particularly as to whether the countervailable subsidy is a subsidy described in Article 3 or 6.1 of the Subsidies Agreement), and whether imports of the subject merchandise are likely to increase,*
- (II) any existing unused production capacity or imminent, substantial increase in production capacity in the exporting country indicating the likelihood of substantially increased imports of the subject merchandise into the United States, taking into account the availability of other export markets to absorb any additional exports,*
- (III) a significant rate of increase of the volume or market penetration of imports of the subject merchandise indicating the likelihood of substantially increased imports,*
- (IV) whether imports of the subject merchandise are entering at prices that are likely to have a significant depressing or suppressing effect on domestic prices, and are likely to increase demand for further imports,*
- (V) inventories of the subject merchandise,*

¹ Section 771(7)(F)(ii) of the Act (19 U.S.C. § 1677(7)(F)(ii)) provides that “The Commission shall consider {these factors} . . . as a whole in making a determination of whether further dumped or subsidized imports are imminent and whether material injury by reason of imports would occur unless an order is issued or a suspension agreement is accepted under this title. The presence or absence of any factor which the Commission is required to consider . . . shall not necessarily give decisive guidance with respect to the determination. Such a determination may not be made on the basis of mere conjecture or supposition.”

- (VI) *the potential for product-shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products,*
- (VII) *in any investigation under this title which involves imports of both a raw agricultural product (within the meaning of paragraph (4)(E)(iv)) and any product processed from such raw agricultural product, the likelihood that there will be increased imports, by reason of product shifting, if there is an affirmative determination by the Commission under section 705(b)(1) or 735(b)(1) with respect to either the raw agricultural product or the processed agricultural product (but not both),*
- (VIII) *the actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product, and*
- (IX) *any other demonstrable adverse trends that indicate the probability that there is likely to be material injury by reason of imports (or sale for importation) of the subject merchandise (whether or not it is actually being imported at the time).²*

Information on the nature of the subsidies was presented earlier in this report; information on the volume and pricing of imports of the subject merchandise is presented in *Parts IV and V*; and information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts is presented in *Part VI*. Information on inventories of the subject merchandise; foreign producers' operations, including the potential for "product-shifting;" any other threat indicators, if applicable; and any dumping in third-country markets, follows. Also presented in this section of the report is information obtained for consideration by the Commission on nonsubject countries.

THE INDUSTRY IN ARGENTINA

The Commission issued foreign producers' or exporters' questionnaires to 12 firms believed to produce and/or export biodiesel from Argentina.³ Usable questionnaire responses

² Section 771(7)(F)(iii) of the Act (19 U.S.C. § 1677(7)(F)(iii)) further provides that, in antidumping investigations, ". . . the Commission shall consider whether dumping in the markets of foreign countries (as evidenced by dumping findings or antidumping remedies in other WTO member markets against the same class or kind of merchandise manufactured or exported by the same party as under investigation) suggests a threat of material injury to the domestic industry."

³ These firms were identified through a review of information submitted in the petition and contained in *** records.

were received from 10 firms, 8 of which identified themselves as producers of subject merchandise and 2 of which identified themselves as resellers of subject merchandise.⁴ These firms' exports to the United States accounted for approximately 87 percent of U.S. imports of biodiesel from Argentina during 2014-2016. Table VII-1 presents information on the biodiesel operations of the responding producers in Argentina.

**Table VII-1
Biodiesel: Summary data for producers in Argentina, 2016**

Firm	Production (1,000 gallons)	Share of reported production (percent)	Exports to the United States (1,000 gallons)	Share of reported exports to the United States (percent)	Total shipments (1,000 gallons)	Share of firm's total shipments exported to the United States (percent)
Cargill	***	***	***	***	***	***
Cofco	***	***	***	***	***	***
Explora	***	***	***	***	***	***
Louis Dryfus	***	***	***	***	***	***
Molinos Agro	***	***	***	***	***	***
Oleaginoso	***	***	***	***	***	***
T6 Industrial	***	***	***	***	***	***
Vicentin SAIC	***	***	***	***	***	***
Total	***	***	***	***	***	***

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

Table VII-2 presents export data for the responding resale exporters in Argentina in 2016.

**Table VII-2
Biodiesel: Summary data on resellers in Argentina, 2016**

Firm	Resales exported to the United States (1,000 gallons)	Share of reported resales exported to the United States (percent)
Aceitera	***	***
Bunge	***	***
Total	***	***

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

Changes in operations

Three Argentine producers reported changes in operations since January 1, 2014. *** experienced a curtailment in production ***. According to ***. ***.

⁴ As discussed in Part IV, Aceiteria General Deheza SA ("Aceiteria"), Bunge Argentina SA ("Bunge"), Cargill SACI, Cofco Argentina SA ("Cofco"), LDC Argentina, Molinos, Renova SA, Oleaginoso Moreno Hermanos S.A. ("Oleaginoso"), and Vicentin SAIC ("Vicentin") are member companies of Cámara Argentina de Biocombustibles ("CARBIO"). Renova SA has a ***. Aceitera and Bunge ***. Aceitera and Bunge ***. Aceitera and Bunge ***.

Operations on biodiesel

When asked about anticipated changes in the character of its operations or the organization of its future biodiesel production, *** reported that it ***.

The Commission also asked Argentine producers to identify any production constraints. Most responding producers reported that production is ***. Several responding producers note that ***. Producer *** reported that ***.

Table VII-3 presents data on the biodiesel industry in Argentina from responding producers and exporters.

Table VII-3
Biodiesel: Data on industry in Argentina, 2014-16, and projection calendar years 2017 and 2018

Item	Actual experience					Projections	
	Calendar year			January to June		Calendar year	
	2014	2015	2016	2016	2017	2017	2018
	Quantity (1,000 gallons)						
RFS certified capacity Q	***	***	***	***	***	***	***
Non-RFS certified capacity Q	***	***	***	***	***	***	***
Capacity	687,174	661,953	661,953	330,949	330,949	661,953	661,966
Production using.-- Soybean	479,779	259,686	450,412	185,824	223,674	458,621	537,651
Palm	---	---	---	---	---	---	---
Other feedstocks	---	---	---	---	---	---	---
Total production	479,779	259,686	450,412	185,824	223,674	458,621	537,651
End-of-period inventories	10,308	11,262	11,095	16,370	23,759	8,879	8,729
Shipments:							
Home market shipments:							
Internal consumption/ transfers	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to:							
United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	477,556	260,560	455,699	180,354	209,505	459,504	537,801

Table continued on next page.

Table VII-3--Continued
Biodiesel: Data on industry in Argentina, 2014-16, and projection calendar years 2017 and 2018

Item	Actual experience					Projections	
	Calendar year			January to June		Calendar year	
	2014	2015	2016	2016	2017	2017	2018
	Ratios and shares (percent)						
Capacity utilization	69.8	39.2	68.0	56.1	67.6	69.3	81.2
Inventories/production	2.1	4.3	2.5	4.4	5.3	1.9	1.6
Inventories/total shipments	2.2	4.3	2.4	4.5	5.7	1.9	1.6
Share of production using.-- Soybean	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Palm	---	---	---	---	---	---	---
Other feedstocks	---	---	---	---	---	---	---
Total production	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Share of shipments:							
Home market shipments:							
Internal consumption/ transfers	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to:							
United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
	Quantity (1,000 gallons)						
Resales exported to the United States	***	***	***	***	***	***	***
Total exports to the United States	***	***	***	***	***	***	***
	Ratios and shares (percent)						
Share of total exports to the United States.-- Exported by producers	***	***	***	***	***	***	***
Exported by resellers	***	***	***	***	***	***	***
Adjusted share of total shipments exported to US	***	***	***	***	***	***	***

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

Argentine producers' production capacity decreased from *** gallons in 2014 to *** gallons in 2015, and *** in 2016. Capacity in 2017 is projected to stay the same but is expected to increase by *** percent in 2018. Fluctuating year to year, producers' production decreased from *** gallons in 2014 to *** gallons in 2015, and then increased to *** gallons in 2016 for an overall decrease of *** percent. Cofco and Vicentin reported that ***.⁵ Production is projected to increase by *** percent in 2017 and to be *** percent greater in 2018 relative to 2016. Capacity utilization ranged from *** percent to *** percent during 2014-16.

Argentine producers' total home market shipments decreased from *** gallons in 2014 to *** gallons in 2016, a decrease of *** percent. It is projected to increase by *** percent in 2017 and increase *** percent from 2017 to 2018. Home market shipments accounted for *** percent to *** percent of total shipments during 2014-2016. According to ***.

In 2014, Argentine export shipments were largely destined for non-U.S. markets, which accounted for *** percent of all export shipments. However, in 2015 and 2016, the majority of

⁵ ***, email message to USITC staff, April 12, 2017.

export shipments went to the U.S. market, which accounted for *** percent to *** percent of all export shipments during that period. Exports to the United States increased from *** gallons in 2014 to *** gallons in 2016; the majority of the increase occurred from 2015 to 2016. *** noted that the increase is attributed to ***.⁶

Exports to the United States are projected to decrease by *** percent in 2017 and by *** percent from 2017 to 2018. Exports to non-U.S. markets, on the other hand, is projected to increase by *** percent in 2017 and by *** percent in 2018. Several responding producers noted that their projections for exports to non-U.S. markets are based on ***.

To qualify under the RFS is a lengthy and cumbersome process that can take from six months to a year to complete.⁷ The certification process involves a qualifying third party engineer conducting a full engineering study against an extensive set of criteria. The engineer then drafts a report, which has to be processed by the EPA.⁸ In order for qualifying soybean-based biomass (including biodiesel) to remain compliant with EPA regulations, an Argentine producer must continuously abide by the EPA's extensive tracking requirements. These tracking programs require an independent third-party auditor to conduct an annual survey of the entire biofuel supply chain, from soybean production through intermediate processing, to biodiesel production.⁹ CARBIO's current certification scheme was approved by the EPA in January 2015.¹⁰

Alternative products

Responding Argentine firms did not produce other products on the same equipment and machinery used to produce biodiesel. No other products can be produced on the same equipment used to produce biodiesel.¹¹

Exports

According to Global Trade Atlas ("GTA"), the leading export markets for biodiesel from Argentina are the United States, the United Kingdom, Spain and Peru. In 2016, the United States was the largest export market for biodiesel from Argentina, accounting for 91.2 percent of exports, followed by Peru, which accounted for 8.4 percent. In 2014, the United Kingdom, Spain, and the Peru were larger markets than the United States, accounting for 35.9, 31.0, and 15.6 percent of exports, respectively. However due to EU antidumping duties on biodiesel from Argentina, there were no exports to Spain or the United Kingdom in 2016. Table VII-4 presents data on Argentine exports of biodiesel.

⁶ Email from *** , April 12, 2017.

⁷ Conference transcript, p. 94 (Cummings).

⁸ Conference transcript, p. 94 (Cummings) and hearing transcript, pp. 225-226 (Dunphy).

⁹ Respondent CARBIO's postconference brief, exh. 12 and respondent CARBIO's prehearing brief, p. 53.

¹⁰ Ibid.

¹¹ Argentine producers' questionnaire responses, section II-5.

Table VII-4
Biodiesel: Argentine exports by destination market, 2014-16

Destination market	Calendar year		
	2014	2015	2016
	Quantity (1,000 gallons)		
Argentina exports to the United States	53,384	177,177	442,835
Argentina exports to other major destination markets.--			
Peru	74,269	49,050	40,623
Panama	---	3,036	2,030
United Kingdom	170,998	4,179	---
Spain	148,081	1,866	---
Ivory Coast	8,956	---	---
Australia	7,987	---	---
Netherlands	7,463	---	---
Korea	4,329	---	---
All other destination markets	1,499	---	---
Total Argentina exports	476,965	235,308	485,489
	Value (1,000 dollars)		
Argentina exports to the United States	140,823	385,220	1,138,019
Argentina exports to other major destination markets.--			
Peru	203,832	99,159	97,284
Panama	---	6,733	4,257
United Kingdom	477,290	9,871	---
Spain	396,576	4,625	---
Ivory Coast	25,530	---	---
Australia	22,680	---	---
Netherlands	19,564	---	---
Korea	12,184	---	---
All other destination markets	4,247	---	---
Total Argentina exports	1,302,725	505,609	1,239,560

Table continued on the next page.

Table VII-4--Continued
Biodiesel: Argentine exports by destination market, 2014-16

Destination market	Calendar year		
	2014	2015	2016
	Unit value (dollars per gallon)		
Argentina exports to the United States	2.64	2.17	2.57
Argentina exports to other major destination markets.--			
Peru	2.74	2.02	2.39
Panama	---	2.22	2.10
United Kingdom	2.79	2.36	---
Spain	2.68	2.48	---
Ivory Coast	2.85	---	---
Australia	2.84	---	---
Netherlands	2.62	---	---
Korea	2.81	---	---
All other destination markets	2.83	---	---
Total Argentina exports	2.73	2.15	2.55
	Share of quantity (percent)		
Argentina exports to the United States	11.2	75.3	91.2
Argentina exports to other major destination markets.--			
Peru	15.6	20.8	8.4
Panama	---	1.3	0.4
United Kingdom	35.9	1.8	---
Spain	31.0	0.8	---
Ivory Coast	1.9	---	---
Australia	1.7	---	---
Netherlands	1.6	---	---
Korea	0.9	---	---
All other destination markets	0.3	---	---
Total Argentina exports	100.0	100.0	100.0

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

Source: Official Argentina export statistics under HS subheading 3826.00 as reported by Argentina National Institute of Statistics & Census (INDEC) in the IHS/GTA database, accessed October 4, 2017.

THE INDUSTRY IN INDONESIA

The Commission issued foreign producers' or exporters' questionnaires to four firms believed to produce and/or export biodiesel from Indonesia.¹² Usable questionnaire responses were received from four firms: PT Pelita Agung Agrindustri ("Pelita"),¹³ PT Permata Hijau Palm Oleo ("Permata"),¹⁴ PT Wilmar Bioenergi Indonesia ("Wilmar"),¹⁵ and PT Musim Mas ("Musim Mas").¹⁶ ¹⁷ Wilmar's and Musim Mas' exports to the United States accounted for *** percent of the U.S. imports of biodiesel from Indonesia and all RFS-certified capacity in Indonesia during January 2014-June 2017. Table VII-5 presents information on the biodiesel operations of the responding producers and exporters in Indonesia.

Table VII-5
Biodiesel: Summary data for producers in Indonesia, 2016

Firm	Production (1,000 gallons)	Share of reported production (percent)	Exports to the United States (1,000 gallons)	Share of reported exports to the United States (percent)	Total shipments (1,000 gallons)	Share of firm's total shipments exported to the United States (percent)
Musim Mas	***	***	***	***	***	***
Pelita Agung	***	***	***	***	***	***
Permata	***	***	***	***	***	***
Wilmar	***	***	***	***	***	***
Total	***	***	***	***	***	***

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

Changes in operations

*** reported several operational and organizational changes since January 1, 2014 (table VII-6). *** experienced ***. *** experienced ***. *** also reported that ***.

¹² These firms were identified through a review of information submitted in the petition and contained in *** records.

¹³ Pelita reported that biodiesel represented *** percent of its total sales in its most recent fiscal year.

¹⁴ Permata reported that biodiesel represented *** percent of its total sales in its most recent fiscal year.

¹⁵ Wilmar reported that biodiesel represented *** percent of its total sales in its most recent fiscal year.

¹⁶ Musim Mas reported that biodiesel represented *** percent of its total sales in its most recent fiscal year.

¹⁷ Permata and Pelita did not report any exports to the United States from January 2014 to June 2017.

Table VII-6
Biodiesel: Reported changes in operations by producers in Indonesia, since January 1, 2014

* * * * *

Operations on biodiesel

When asked about production constraints, Wilmar noted that ***. Wilmar also reported that ***.

Indonesian biodiesel produced using palm oil does not qualify to generate RINs under the RFS program since it does not meet the program’s minimum greenhouse gas reduction threshold.¹⁸ However, the EPA grandfathered volume from two Indonesian production facilities (one owned by Wilmar and the other by Musim Mas) to continue supplying the U.S. market.¹⁹ These facilities were grandfathered based on the identification of certain RFS-qualifying palm plantations and processing facilities that have been operating prior to December 19, 2007.²⁰ In order to remain compliant with EPA regulations, Wilmar and Musim Mas must be able to trace and audit each truckload of palm fruit from the plantation to the processing facilities. This regulatory framework was in place during the period of investigation.²¹

Table VII-7 presents data on the biodiesel industry in Indonesia from responding producers.

Table VII-7
Biodiesel: Data on industry in Indonesia, 2014-16, January to June 2016, and January to June 2017 and projection calendar years 2017 and 2018

* * * * *

Total production capacity increased *** gallons from 2014 to 2016; the majority of the increase occurred from 2015 to 2016. RFS certified capacity has remained constant during 2014-16, and is projected to remain constant in 2017 and 2018, at *** gallons, while non-RFS certified capacity increased *** percent between 2014 and 2016 and is projected to increase by *** percent in 2017 and by *** percent from 2017 to 2018. Production declined irregularly between 2014 and 2016, ending *** percent lower in 2016 than in 2014, and is projected to decline *** percent in 2017 and then increasing *** percent in 2018. Capacity utilization followed a similar trend, ending *** percentage points lower in 2016 than in 2014, and are

¹⁸ Respondents Wilmar, Wilmar North America, and Musim Mas’ postconference brief, exh. 2, and hearing transcript, pp. 172-173 (Cummings) and pp. 175-176 (Dunphy).

¹⁹ Conference transcript, pp. 46-47 (Cummings). Respondents Wilmar, Wilmar North America, and Musim Mas’ postconference brief, p. 4, and hearing transcript, pp. 175-176 (Dunphy).

²⁰ Respondents Wilmar, Wilmar North America, and Musim Mas’ postconference brief, p. 4, and hearing transcript, pp. 175-176 (Dunphy).

²¹ Wilmar reported that ***. Respondents noted that the since 2014, the EPA has placed new RFS grandfather facility applications on hold. Hearing transcript, p. 224 (Dunphy).

projected to be *** percentage point lower in 2017, and then *** percentage points higher in 2018.

The majority of shipments were to the home market, ranging from *** percent of total shipments in 2014 to *** percent in 2016, and are projected to be *** and *** percent in 2017 and 2018, respectively. Exports to the United States increased from *** gallons in 2014 to *** gallons in 2016, an increase of *** percent. Respondents attribute the increase in 2015 to a decline in the price of petro-diesel heating oil in 2015 and the lapse of the blenders tax credit, which made producing biodiesel less profitable and required an increase in subject imports to meet the RFS target.²² They also note that subject import volume was depressed in 2014 due to forward buying in 2013 before the expiration of the tax credit.²³

The share of exports to the United States increased irregularly between 2014 and 2016, while exports to other markets declined. This trend is projected to reverse, with *** of exports to the United States in 2017 and 2018, while exports to other markets increase from *** percent of total shipments in 2016 to *** percent in 2017 and *** percent in 2018.²⁴

Table VII-8 presents production capacity, production, and capacity utilization data for EPA grandfathered and non-grandfathered facilities provided in the preliminary phase of these investigations.

Table VII-8

Biodiesel: Data on grandfathered and non-grandfathered production capacity, production and capacity utilization, 2014-16, and projection calendar years 2017 and 2018

* * * * *

Wilmar and Musim Mas' non-grandfathered production fluctuated from year to year, decreasing from *** gallons in 2014 to *** gallons in 2015, and then increasing to *** gallons in 2016 for an overall decrease of *** percent. *** reported that ***. *** noted that its palm methyl ester production *** from 2014 to 2015. Grandfathered production also fluctuated from year to year. It decreased from *** gallons in 2014 to *** gallons in 2015 and then increased to *** gallons in 2016 for an overall increase of *** percent. The minimal change in grandfathered production is due to an increase in *** production being offset by an equivalent decrease in *** production.²⁵ Non-grandfathered production is projected to be slightly higher in 2017 and to increase by *** percent from 2017 to 2018. Grandfathered production, on the

²² Conference transcript, p.56 (Szamosszegi). Respondents Wilmar, Wilmar North America, and Musim Mas' postconference brief, exh. 13.

²³ Conference transcript, p. 55. (Szamosszegi).

²⁴ Indonesian respondents noted that combination of the value of D6 RINs, availability of the BTC, and biodiesel prices, which allowed U.S. imports of biodiesel from Indonesia to compete, ended in 2017. Hearing transcript, pp. 264-265 (Janzen). Wilmar North America adds that ***. Indonesian producers' questionnaire responses, section II-5. *** reported that fatty alcohol for use in other products can be produced in the same facility as biodiesel.

²⁵ ***, email message to Commission staff, April 26, 2017.***, email message to USITC staff, April 25, 2017.

other hand, is projected to decrease by *** percent in 2017 and to increase *** percent from 2017 to 2018. *** projected ***.²⁶

Fluctuating from year to year, capacity utilization of grandfathered facilities decreased from *** percent in 2014 to *** percent in 2015 and then increased to *** percent in 2016 for an overall increase of *** percentage points. Capacity utilization of their non-grandfathered facilities also fluctuated year to year, decreasing from *** percent in 2014 to *** percent in 2015 and then increasing to *** percent in 2016 for an overall decrease of *** percentage points.

Alternative products

Responding Indonesian firms did not produce other products on the same equipment and machinery used to produce biodiesel and reported no other products can be produced on the same equipment used to produce biodiesel.²⁷

Exports

According to GTA, the leading export markets for biodiesel from Indonesia are the United States, Spain, Italy, Korea, and, China. In 2016, the United States was the top export market for biodiesel from Indonesia, accounting for 88.9 percent of exports, followed by the Spain and Italy, accounting for 5.5 and 4.8 percent, respectively. Table VII-9 presents data on Indonesian exports of biodiesel.

²⁶ ***, email message to Commission staff, April 25, 2017.

²⁷ Indonesian producers' questionnaire responses, section II-5. *** reported that fatty alcohol for use in other products can be produced in the same facility as biodiesel.

Table VII-9
Biodiesel: Indonesian exports by destination market, 2014-16

Destination market	Calendar year		
	2014	2015	2016
	Quantity (1,000 gallons)		
Indonesia exports to the United States	55,089	65,931	111,059
Indonesia exports to other major destination markets.--			
Spain	45,466	8,359	6,866
Italy	---	---	5,971
Korea	---	269	794
China	242,440	4,025	299
United Kingdom	---	---	2
Belgium	---	143	1
Singapore	20,890	0	0
Philippines	24	---	0
All other destination markets	48,436	11,502	---
Total Indonesia exports	412,345	90,229	124,992
	Value (1,000 dollars)		
Indonesia exports to the United States	149,526	146,996	255,564
Indonesia exports to other major destination markets.--			
Spain	122,143	14,504	16,491
Italy	---	---	13,340
Korea	---	340	1,128
China	672,812	11,495	717
United Kingdom	---	---	5
Belgium	---	466	2
Singapore	56,849	0	0
Philippines	73	---	0
All other destination markets	139,937	21,363	---
Total Indonesia exports	1,141,338	195,163	287,247

Table continued on the next page.

Table VII-9--Continued
Biodiesel: Indonesian exports by destination market, 2014-16

Destination market	Calendar year		
	2014	2015	2016
	Unit value (dollars per gallon)		
Indonesia exports to the United States	2.71	2.23	2.30
Indonesia exports to other major destination markets.--			
Spain	2.69	1.74	2.40
Italy	---	---	2.23
Korea	---	1.27	1.42
China	2.78	2.86	2.40
United Kingdom	---	---	2.35
Belgium	---	3.25	2.30
Singapore	2.72	0.17	61.97
Philippines	3.04	---	472.32
All other destination markets	2.89	1.86	---
Total Indonesia exports	2.77	2.16	2.30
	Share of quantity (percent)		
Indonesia exports to the United States	13.4	73.1	88.9
Indonesia exports to other major destination markets.--			
Spain	11.0	9.3	5.5
Italy	---	---	4.8
Korea	---	0.3	0.6
China	58.8	4.5	0.2
United Kingdom	---	---	0.0
Belgium	---	0.2	0.0
Singapore	5.1	0.0	0.0
Philippines	0.0	---	0.0
All other destination markets	11.7	12.7	---
Total Indonesia exports	100.0	100.0	100.0

Source: Official Indonesia export statistics under HS subheading 3826.00 as reported by Statistics Indonesia in the IHS/GTA database, accessed October 4, 2017.

SUBJECT COUNTRIES COMBINED

Table VII-10 presents summary data on biodiesel operations of the reporting subject producers in the subject countries.

Table VII-10
Biodiesel: Data on industry in subject countries, 2014-16, and projection for 2017 and 2018

* * * * *

U.S. INVENTORIES OF IMPORTED MERCHANDISE

Table VII-11 presents data on U.S. importers' reported end-of-period inventories of biodiesel. From 2014 to 2016, U.S. importers' inventories of U.S. imports from Argentina and Indonesia increased by *** gallons and *** gallons, respectively. The majority of inventories are held by *** and ***.

Table VII-11

Biodiesel: U.S. importers' end-of-period inventories of imports by source, 2014-16, January to June 2016, and January to June 2017

* * * * *

U.S. IMPORTERS' OUTSTANDING ORDERS

The Commission requested importers to indicate whether they imported or arranged for the importation of biodiesel from Argentina and Indonesia after June 30, 2017. Responding importers reported *** gallons of arranged imports from Argentina, but did *** from Indonesia. ***, the largest U.S. importer of biodiesel from Indonesia, noted that ***.²⁸ Table VII-12 presents U.S. import shipments of biodiesel arranged for importation after June 30, 2017.

Table VII-12

Biodiesel: Arranged imports, July 2017 through June 2018

* * * * *

ANTIDUMPING OR COUNTERVAILING DUTY ORDERS IN THIRD-COUNTRY MARKETS

In November 2013, the European Union ("EU") imposed antidumping duties on biodiesel from Argentina and Indonesia. In response to this measure, CARBIO and the Argentine Foreign Ministry filed a dispute in front of the WTO and the EU General Court. On September 15, 2016, the EU General Court annulled the EU antidumping regulation imposing the duties and on October 6, 2016, the WTO Appellate Body ruled that the EU violated the Anti-Dumping Agreement by failing to calculate the cost of production of biodiesel on the basis of the records kept by the producers and exporters under investigation.²⁹ The Appellate Body also ruled that the EU acted inconsistently with Articles 3.1 and 3.4 of the Anti-Dumping Agreement when making their injury determination. On May 20, 2016, the EU appealed the WTO Appellate Body's decision on the order, which was unsuccessful.³⁰

Following the appeal, the European Commission ("EC") initiated a review of the anti-dumping measures on biodiesel from Argentina and Indonesia. The scope of the review focuses

²⁸ Wilmar Oleo North America's importers' questionnaire response, "Supplement to Narratives", p. 2.

²⁹ Respondent CARBIO's postconference brief, p. 46.

³⁰ Petitioners' postconference brief, "Answers to Staff Questions", p. 2.

on two issues: the cost of the production of the biodiesel from Argentina and Indonesia when constructing its normal value, and the production capacity and capacity utilization in the context of establishing the impact of the dumped imports on the domestic industry. The European biodiesel industry has provided options for how the EC can comply with the WTO Appellate Body decision while maintaining its duties on Argentina and Indonesia. The agreed-upon reasonable period of time for the EU to come into compliance with the WTO Appellate Body's decision is August 10, 2017.³¹ Regarding the European Central Court's decision, the European Council agreed to appeal the court's decision on November 24, 2016.³² On September 19, 2017, the EU published recalculated dumping margins and duties on all Argentine exporters.³³ The recalculated duties averaged 6.7 percent, compared to the original duties of 24.6 percent.³⁴ On October 10, 2017, the EU informed the WTO Dispute Settlement Body that it had adopted the measure necessary to comply with the Body's recommendations and rulings.^{35 36}

On October 26, 2016, Peru imposed antidumping duties on biodiesel from Argentina, effective for five years.³⁷ Under the ruling, duties have been assessed on the following companies: Cargill SACI (\$134.70 per ton), Bunge (\$141.40 per ton), and Cofco (\$152.70 per ton).³⁸ Louis Dreyfus and all other Argentine companies were assessed the highest duty of \$191.60 per ton.³⁹

INFORMATION ON NONSUBJECT COUNTRIES

In assessing whether the domestic industry is materially injured or threatened with material injury "by reason of subject imports," the legislative history states "that the Commission must examine all relevant evidence, including any known factors, other than the

³¹ Ibid.

³² Ibid.

³³ "Commission Implementing Regulation (EU) 2017/1578 of 18 September 2017," *Official Journal of the European Union*, September 19, 2017, pp. L 239/9–24, <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R1578&from=EN>, accessed November 27, 2017.

³⁴ Hearing transcript, p. 27 (Brizuela).

³⁵ "European Union - Anti-Dumping Measures on Biodiesel from Argentina - Status report by the European Union – Addendum", October 13, 2017, found at [https://docs.wto.org/dol2fe/Pages/FE_Search/FE_S_S006.aspx?Query=\(@Symbol=%20wt/ds473/*\)&Language=ENGLISH&Context=FomerScriptedSearch&languageUIChanged=true#](https://docs.wto.org/dol2fe/Pages/FE_Search/FE_S_S006.aspx?Query=(@Symbol=%20wt/ds473/*)&Language=ENGLISH&Context=FomerScriptedSearch&languageUIChanged=true#), retrieved on October 23, 2017.

³⁶ Both responding Indonesian producers reported that they were impacted by the EU anti-dumping duty orders on shipments of biodiesel from Argentina or Indonesia into the European Union. Both stated that ***.

³⁷ Reuters, "Peru Imposes Anti-Dumping Tariffs on Biodiesel Imports from Argentina", <http://www.reuters.com/article/us-peru-biodiesel-argentina-idUSKCN12Q2OD>, accessed April 19, 2017.

³⁸ Ibid.

³⁹ Neither responding Indonesian producers reported that they were impacted by the Peru anti-dumping duty orders on shipments of biodiesel from Argentina into Peru.

dumped or subsidized imports, that may be injuring the domestic industry, and that the Commission must examine those other factors (including non-subject imports) ‘to ensure that it is not attributing injury from other sources to the subject imports.’”⁴⁰

The industry in Canada

As of November 2017, there were *** Canadian biodiesel production facilities with a total annual capacity of *** gallons. The two largest facilities are *** with a production capacity of *** gallons and *** with a production capacity of *** gallons together accounting for *** percent of Canadian capacity.⁴¹ Canadian facilities can use the various inputs that U.S. facilities can, but canola oil predominates as Canada is a large producer of canola oil.⁴² Reportedly as of 2013–2014, “the majority of {Canadian} production was exported to the United States to take advantage of the blender’s tax credit, while a higher volume of biodiesel was imported to meet the {Canadian} biodiesel mandate obligation.”⁴³ Table VII-13 presents data on Canadian exports of biodiesel.

⁴⁰ *Mittal Steel Point Lisas Ltd. v. United States*, Slip Op. 2007-1552 at 17 (Fed. Cir. Sept. 18, 2008), quoting from Statement of Administrative Action on Uruguay Round Agreements Act, H.R. Rep. 103-316, Vol. I at 851-52; see also *Bratsk Aluminum Smelter v. United States*, 44 F. 3d 1369 (Fed. Cir. 2006).

⁴¹ Biodiesel Magazine, “U.S. & Canada Biodiesel Map 2017,” November 16, 2017.

⁴² ***.

⁴³ ***.

Table VII-13
Biodiesel: Canada exports by destination market, 2014-16

Destination market	Calendar year		
	2014	2015	2016
	Quantity (1,000 gallons)		
Canada exports to the United States	75,925	62,516	110,878
Canada exports to other major destination markets.--			
Germany	25	13	523
Norway	189	305	101
Australia	---	0	---
Japan	0	---	---
Sweden	0	---	---
Total Canada exports	76,140	62,834	111,502
	Value (1,000 dollars)		
Canada exports to the United States	241,239	157,277	334,155
Canada exports to other major destination markets.--			
Germany	79	27	1,073
Norway	492	437	143
Australia	---	3	---
Japan	1	---	---
Sweden	0	---	---
Total Canada exports	241,812	157,743	335,370

Table continued on next page.

Table VII-13--Continued
Biodiesel: Canada exports by destination market, 2014-16

Destination market	Calendar year		
	2014	2015	2016
	Unit value (dollars per gallon)		
Canada exports to the United States	3.18	2.52	3.01
Canada exports to other major destination markets.--			
Germany	3.16	2.12	2.05
Norway	2.60	1.43	1.41
Australia	---	57.16	---
Japan	43.45	---	---
Sweden	71.01	---	---
Total Canada exports	3.18	2.51	3.01
	Share of quantity (percent)		
Canada exports to the United States	99.7	99.5	99.4
Canada exports to other major destination markets.--			
Germany	0.0	0.0	0.5
Norway	0.2	0.5	0.1
Australia	---	0.0	---
Japan	0.0	---	---
Sweden	0.0	---	---
Total Canada exports	100.0	100.0	100.0

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

Source: Official Canadian export statistics under HS subheading 3826.00 as reported by Statistics Canada in the IHS/GTA database, accessed October 4, 2017.

Other nonsubject countries

As of December 2014, Germany⁴⁴ had *** biodiesel production facilities with a production capacity of approximately *** gallons, and Korea had *** production facilities with a production capacity of *** gallons.⁴⁵ Table VII-14 presents data on global exports of biodiesel.

⁴⁴ The majority of German biodiesel exports went to the EU market.

⁴⁵ ***.

Table VII-14
Biodiesel: Global exports by exporter, 2014-16

Exporter	Calendar year		
	2014	2015	2016
	Value (1,000 dollars)		
United States	303,667	263,224	262,330
Argentina	1,302,725	505,609	1,239,560
Indonesia	1,141,338	195,163	287,247
Subject exporters	2,444,063	700,772	1,526,807
All other major reporting exporters.--			
Netherlands	2,337,621	1,503,955	1,813,902
Germany	1,838,219	1,277,373	1,434,724
Spain	684,624	609,063	1,084,906
Belgium	1,121,593	938,907	899,199
Poland	266,841	331,217	599,445
Canada	241,812	157,743	335,370
Bulgaria	23,808	46,535	275,678
Italy	183,882	149,925	247,239
Austria	158,619	196,021	222,541
All other exporters	1,186,039	907,985	1,118,533
Total global exports	10,790,788	7,082,720	9,820,676
	Share of value (percent)		
United States	2.8	3.7	2.7
Argentina	12.1	7.1	12.6
Indonesia	10.6	2.8	2.9
Subject exporters	22.6	9.9	15.5
All other major reporting exporters.--			
Netherlands	21.7	21.2	18.5
Germany	17.0	18.0	14.6
Spain	6.3	8.6	11.0
Belgium	10.4	13.3	9.2
Poland	2.5	4.7	6.1
Canada	2.2	2.2	3.4
Bulgaria	0.2	0.7	2.8
Italy	1.7	2.1	2.5
Austria	1.5	2.8	2.3
All other exporters	11.0	12.8	11.4
Total global exports	100.0	100.0	100.0

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

Source: Official exports statistics under HS subheading 3826.00 as reported by multiple statistical authorities in the GTA database, accessed October 4, 2017.

APPENDIX A
FEDERAL REGISTER NOTICES

The Commission makes available notices relevant to its investigations and reviews on its website, www.usitc.gov. In addition, the following tabulation presents, in chronological order, *Federal Register* notices issued by the Commission and Commerce during the current proceeding.

Citation	Title	Link
82 FR 15541, March 29, 2017	<i>Biodiesel From Argentina and Indonesia: Institution of Antidumping and Countervailing Duty Investigations and Scheduling of Preliminary Phase Investigations</i>	https://www.gpo.gov/fdsys/pkg/FR-2017-03-29/pdf/2017-06151.pdf
82 FR 18423, April 19, 2017	<i>Biodiesel From Argentina and Indonesia: Initiation of Countervailing Duty Investigations</i>	https://www.gpo.gov/fdsys/pkg/FR-2017-04-19/pdf/2017-07901.pdf
82 FR 18428, April 19, 2017	<i>Biodiesel From Argentina and Indonesia: Initiation of Less-Than-Fair-Value Investigations</i>	https://www.gpo.gov/fdsys/pkg/FR-2017-04-19/pdf/2017-07900.pdf
82 FR 43999, August 28, 2017	<i>Biodiesel From Argentina and Indonesia; Scheduling of the Final Phase of Countervailing Duty and Antidumping Duty Investigations</i>	https://www.gpo.gov/fdsys/pkg/FR-2017-09-20/pdf/2017-20020.pdf
82 FR 50379, October 31, 2017	<i>Biodiesel From Indonesia: Preliminary Affirmative Determination of Sales at Less Than Fair Value</i>	https://www.gpo.gov/fdsys/pkg/FR-2017-10-31/pdf/2017-23602.pdf
82 FR 50391 October 31, 2017	<i>Biodiesel From Argentina: Preliminary Affirmative Determination of Sales at Less Than Fair Value, Preliminary Affirmative Determination of Critical Circumstances, in Part</i>	https://www.gpo.gov/fdsys/pkg/FR-2017-10-31/pdf/2017-23601.pdf
82 FR 53471 November 16, 2017	<i>Biodiesel From the Republic of Indonesia: Final Affirmative Countervailing Duty Determination</i>	https://www.gpo.gov/fdsys/pkg/FR-2017-11-16/pdf/2017-24858.pdf
82 FR 53477 November 16, 2017	<i>Biodiesel From the Republic of Argentina: Final Affirmative Countervailing Duty Determination</i>	https://www.gpo.gov/fdsys/pkg/FR-2017-11-16/pdf/2017-24857.pdf

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: Biodiesel from Argentina and Indonesia
Inv. Nos.: 701-TA-571-572 and 731-TA-1347-1348 (Final)
Date and Time: November 9, 2017 - 9:40 a.m.

Sessions were held in connection with these investigations in the Main Hearing Room (Room 101), 500 E Street, SW., Washington, DC.

CONGRESSIONAL APPEARANCES:

The Honorable Claire McCaskill, United States Senator, Missouri

The Honorable Heidi Heitkamp, United States Senator, North Dakota

EMBASSY APPEARANCE:

**The Embassy of the Republic of Argentina
Washington, DC**

Minister Pablo Rodriguez Brizuela, Head of Economic and Commercial Section

**The Embassy of the Republic of Indonesia
Washington, DC**

Reza Pahlevi Chairul, Commercial Attaché

OPENING REMARKS:

Petitioner (**Myles S. Getlan**, Cassidy Levy Kent (USA) LLP)
Respondents (**Daniel L. Porter**, Curtis, Mallet-Prevost, Colt & Mosle LLP)

**In Support of the Imposition of
Antidumping and Countervailing Duty Orders:**

Cassidy Levy Kent (USA) LLP
Washington, DC
on behalf of

The National Biodiesel Board Fair Trade Coalition

Donnell Rehagen, Chief Executive Officer, National Biodiesel Board

Chad Stone, Chief Financial Officer, Renewable
Energy Group, Inc.

Paul Soanes, President and Chief Executive Officer,
RBF Port Neches LLC

Jonathan Phillips, Chief Operating Officer and General Counsel,
RBF Port Neches LLC

Wayne Presby, Managing Member, White Mountain Biodiesel LLC

Elias Petersen, Staff Attorney, Kolmar Americas, Inc./American
Greenfuels, LLC

Myles S. Getlan)
) – OF COUNSEL
Jack Levy)

**In Opposition to the Imposition of
Antidumping and Countervailing Duty Orders:**

Akin Gump Strauss Hauer & Feld LLP
Washington, DC
on behalf of

PT Wilmar Bioenergi Indonesia
Wilmag Oleo North America LLC
(collectively “Wilmar”)

John Cummings, Director of Biodiesel, Wilmag Oleo
North America LLC

Andrew Szamoszegi, Principal, Capital Trade Incorporated

**In Opposition to the Imposition of
Antidumping and Countervailing Duty Orders (continued):**

Travis Pope, Associate, Capital Trade Incorporated

Bernd G. Janzen) – OF COUNSEL

Greenberg Traurig LLP
Washington, DC
on behalf of

BioSphere Fuels, LLC (“BioSphere”)

Taylor Dawson, Director of Renewable Fuels, BioSphere

Chris Vergona, Supervisor, Fuel Programs Compliance, BioSphere

Irwin P. Altschuler)
) – OF COUNSEL
Rosa S. Jeong)

White & Case LLP
Washington, DC
on behalf of

Louis Dreyfus Company Claypool Holdings (“LDC Claypool”)
Louis Dreyfus Company Agricultural Industries LLC (“LDCAI”)

Leonard Federico, Vice President, LDC Claypool

Kristina Zissis) – OF COUNSEL

Appleton Luff
Washington, DC
on behalf of

PT Musim Mas

Douglas Leong, General Counsel, PT Musim Mas

Sandra Dunphy, Director, Energy Compliance Services,
Weaver Tidwell, LLP

Edmund Sim)
) – OF COUNSEL
Kelly Slater)

In Opposition to the Imposition of

Antidumping and Countervailing Duty Orders (continued):

Curtis, Mallet-Prevost, Colt & Mosle LLP
Washington, DC

APPENDIX C
SUMMARY DATA

All U.S. producers

Table C-1

Biodiesel: Summary data concerning the U.S. market, 2014-16, January to June 2016, and January to June 2017

(Quantity=1,000 gallons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per gallon; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	2014	Calendar year 2015	2016	January to June 2016	2017	2014-16	Calendar year 2014-15	2015-16	Jan-Jun 2016-17
U.S. consumption quantity:									
Amount.....	1,391,848	1,509,173	2,199,330	875,675	844,071	58.0	8.4	45.7	(3.6)
Producers' share (fn1).....	86.2	76.7	67.9	76.6	75.9	(18.3)	(9.5)	(8.8)	(0.7)
Importers' share (fn1):									
Argentina.....	3.4	13.0	20.0	12.1	20.2	16.7	9.7	7.0	8.2
Indonesia.....	3.7	4.7	5.0	4.9	---	1.4	1.0	0.3	(4.9)
Subject sources.....	7.0	17.7	25.0	17.0	20.2	18.0	10.7	7.3	3.2
Canada.....	5.3	3.9	4.9	5.3	3.8	(0.5)	(1.4)	1.0	(1.5)
All other sources.....	1.4	1.7	2.2	1.1	0.0	0.8	0.3	0.5	(1.1)
Nonsubject sources.....	6.8	5.6	7.1	6.4	3.9	0.3	(1.2)	1.5	(2.6)
All import sources.....	13.8	23.3	32.1	23.4	24.1	18.3	9.5	8.8	0.7
U.S. consumption value:									
Amount.....	4,625,072	4,070,002	5,699,211	2,089,245	2,299,958	23.2	(12.0)	40.0	10.1
Producers' share (fn1).....	66.3	76.9	62.9	71.6	74.8	(23.4)	(9.3)	(14.1)	3.1
Importers' share (fn1):									
Argentina.....	3.2	12.9	23.1	14.4	21.2	19.8	9.6	10.2	6.8
Indonesia.....	3.4	4.5	5.3	5.6	---	1.9	1.0	0.8	(5.6)
Subject sources.....	6.7	17.3	28.4	20.0	21.2	21.7	10.7	11.1	1.2
Canada.....	5.3	3.9	6.0	7.1	3.9	0.6	(1.4)	2.0	(3.2)
All other sources.....	1.7	1.8	2.7	1.2	0.1	1.0	0.0	1.0	(1.1)
Nonsubject sources.....	7.1	5.7	8.7	8.3	4.0	1.6	(1.4)	3.0	(4.3)
All import sources.....	13.7	23.1	37.1	28.4	25.2	23.4	9.3	14.1	(3.1)
U.S. imports from:									
Argentina:									
Quantity.....	46,719	196,930	440,346	105,541	170,697	842.5	321.5	123.6	61.7
Value.....	149,116	523,190	1,314,492	300,977	488,542	781.5	250.9	151.2	62.3
Unit value.....	\$3.19	\$2.66	\$2.99	\$2.85	\$2.86	(6.5)	(16.8)	12.4	0.4
Ending inventory quantity.....	---	---	---	---	---	---	---	---	---
Indonesia:									
Quantity.....	51,038	70,702	110,360	43,193	---	116.2	38.5	56.1	(100.0)
Value.....	159,371	182,913	304,319	117,274	---	91.0	14.8	66.4	(100.0)
Unit value.....	\$3.12	\$2.59	\$2.76	\$2.72	---	(11.7)	(17.1)	6.6	(100.0)
Ending inventory quantity.....	---	---	---	---	---	---	---	---	---
Subject sources:									
Quantity.....	97,757	267,632	550,706	148,734	170,697	463.3	173.8	105.8	14.8
Value.....	308,487	706,102	1,618,811	418,250	488,542	424.8	128.9	129.3	16.8
Unit value.....	\$3.16	\$2.64	\$2.94	\$2.81	\$2.86	(6.8)	(16.4)	11.4	1.8
Ending inventory quantity.....	---	---	---	---	---	---	---	---	---
Canada:									
Quantity.....	74,051	58,422	107,046	46,746	32,328	44.6	(21.1)	83.2	(30.8)
Value.....	246,745	160,681	340,618	149,370	90,286	38.0	(34.9)	112.0	(39.6)
Unit value.....	\$3.33	\$2.75	\$3.18	\$3.20	\$2.79	(4.5)	(17.5)	15.7	(12.6)
Ending inventory quantity.....	---	---	---	---	---	---	---	---	---
All other sources:									
Quantity.....	19,948	25,941	48,443	9,696	332	142.8	30.0	86.7	(96.6)
Value.....	80,659	71,677	155,726	24,852	1,647	93.1	(11.1)	117.3	(93.4)
Unit value.....	\$4.04	\$2.76	\$3.21	\$2.56	\$4.96	(20.5)	(31.7)	16.3	93.5
Ending inventory quantity.....	---	---	---	---	---	---	---	---	---
Nonsubject sources:									
Quantity.....	93,999	84,363	155,489	56,443	32,660	65.4	(10.3)	84.3	(42.1)
Value.....	327,404	232,357	496,344	174,223	91,932	51.6	(29.0)	113.6	(47.2)
Unit value.....	\$3.48	\$2.75	\$3.19	\$3.09	\$2.81	(8.4)	(20.9)	15.9	(8.8)
Ending inventory quantity.....	---	---	---	---	---	---	---	---	---
All import sources:									
Quantity.....	191,756	351,995	706,194	205,177	203,357	268.3	83.6	100.6	(0.9)
Value.....	635,890	938,460	2,115,155	592,473	580,475	232.6	47.6	125.4	(2.0)
Unit value.....	\$3.32	\$2.67	\$3.00	\$2.89	\$2.85	(9.7)	(19.6)	12.3	(1.1)
Ending inventory quantity.....	---	---	---	---	---	---	---	---	---
U.S. producers:									
Average capacity quantity.....	1,386,348	1,456,279	1,782,010	885,026	893,364	28.5	5.0	22.4	0.9
Production quantity.....	1,041,720	1,071,007	1,384,998	636,354	609,286	33.0	2.8	29.3	(4.3)
Capacity utilization (fn1).....	75.1	73.5	77.7	71.9	68.2	2.6	(1.6)	4.2	(3.7)
U.S. shipments:									
Quantity.....	1,200,092	1,157,178	1,493,136	670,498	640,714	24.4	(3.6)	29.0	(4.4)
Value.....	3,989,182	3,131,542	3,584,056	1,496,772	1,719,483	(10.2)	(21.5)	14.5	14.9
Unit value.....	\$3.32	\$2.71	\$2.40	\$2.23	\$2.68	(27.8)	(18.6)	(11.3)	20.2
Export shipments:									
Quantity.....	34,713	18,462	33,399	19,681	14,444	(3.8)	(46.8)	80.9	(26.6)
Value.....	124,995	55,769	68,101	38,451	44,502	(45.5)	(55.4)	22.1	15.7
Unit value.....	\$3.60	\$3.02	\$2.04	\$1.95	\$3.08	(43.4)	(16.1)	(32.5)	57.7
Ending inventory quantity.....	31,096	51,901	39,357	54,824	54,594	26.6	66.9	(24.2)	(0.4)
Inventories/total shipments (fn1) (fn3).....	2.9	4.9	2.8	4.3	4.6	(0.2)	1.9	(2.1)	0.3
Production workers.....	960	1,045	1,215	1,128	1,277	26.6	8.9	16.3	13.2
Hours worked (1,000s).....	2,086	2,207	2,582	1,182	1,330	23.8	5.8	17.0	12.5
Wages paid (\$1,000).....	60,435	66,504	74,803	35,424	41,562	23.8	10.0	12.5	17.3
Hourly wages (dollars).....	\$28.97	\$30.13	\$28.97	\$29.97	\$31.25	(0.0)	4.0	(3.9)	4.3
Productivity (gallons per hour).....	499.4	485.3	536.4	538.4	458.1	7.4	(2.8)	10.5	(14.9)
Unit labor costs.....	\$0.06	\$0.06	\$0.05	\$0.06	\$0.07	(6.9)	7.0	(13.0)	22.5
Net sales:									
Quantity.....	1,061,627	1,068,014	1,424,831	641,478	601,755	34.2	0.6	33.4	(6.2)
Value.....	3,874,002	3,330,023	4,328,873	1,829,719	1,634,468	11.7	(14.0)	30.0	(10.7)
Unit value.....	\$3.65	\$3.12	\$3.04	\$2.85	\$2.72	(16.7)	(14.6)	(2.6)	(4.8)
Cost of goods sold (COGS).....	3,517,439	2,917,967	3,872,504	1,721,597	1,672,580	10.1	(17.0)	32.7	(2.8)
Gross profit or (loss).....	356,563	412,056	456,369	108,122	(38,112)	28.0	15.6	10.8	[Fn2]
SG&A expenses.....	147,505	157,423	184,574	79,789	87,867	25.1	6.7	17.2	10.1
Operating income or (loss).....	209,058	254,633	271,795	28,333	(125,979)	30.0	21.8	6.7	[Fn2]
Net income or (loss).....	215,692	192,853	233,844	9,607	(117,388)	8.4	(10.6)	21.3	[Fn2]
Capital expenditures.....	116,179	99,424	89,609	56,885	30,692	(22.9)	(14.4)	(9.9)	(46.0)
Unit COGS.....	\$3.31	\$2.73	\$2.72	\$2.68	\$2.78	(18.0)	(17.5)	(0.5)	3.6
Unit SG&A expenses.....	\$0.14	\$0.15	\$0.13	\$0.12	\$0.15	(6.8)	6.1	(12.1)	17.4
Unit operating income or (loss).....	\$0.20	\$0.24	\$0.19	\$0.04	\$(0.21)	(3.1)	21.1	(20.0)	[Fn2]
Unit net income or (loss).....	\$0.20	\$0.18	\$0.16	\$0.01	\$(0.20)	(19.2)	(11.1)	(9.1)	[Fn2]
COGS/sales (fn1).....	90.8	87.6	89.5	94.1	102.3	(1.3)	(3.2)	1.8	[Fn2]
Operating income or (loss)/sales (fn1).....	5.4	7.6	6.3	1.5	(7.7)	0.9	2.3	(1.4)	(9.3)
Net income or (loss)/sales (fn1).....	5.6	5.8	5.4	0.5	(7.2)	(0.2)	0.2	(0.4)	(7.7)

Notes:

fn1.--Reported data are in percent and period changes are in percentage points.

fn2.--Undefined.

fn3.--Calculated from submitted questionnaire data (not the EIA data reported for shipments).

Source: Compiled from data submitted in response to Commission questionnaires, U.S. Energy Information Administration Monthly Biodiesel Production Report, and official import statistics using HTS statistical reporting numbers, 3826.00.1000 and 3826.00.3000, accessed October 3, 2017.

APPENDIX D

MONTHLY APPARENT U.S. CONSUMPTION AND U.S. MARKET SHARES

Table D-1 presents monthly apparent consumption data for biodiesel in the United States from January 2014 through July 2017.

Table D-1

Biodiesel: Monthly apparent U.S. consumption, January 2014 through December 2016

Item	U.S. producers' U.S. shipments	U.S. imports from			Apparent U.S. consumption
		Subject	Nonsubject	All import sources	
Quantity (1,000 gallons)					
2014.--					
January	60,372	---	9,637	9,637	70,009
February	66,078	3,580	3,903	7,483	73,561
March	94,178	---	9,950	9,950	104,128
April	80,038	---	6,563	6,563	86,601
May	100,264	---	4,617	4,617	104,881
June	99,954	4,474	3,744	8,218	108,172
July	108,560	12,616	8,130	20,746	129,306
August	114,912	13,508	10,599	24,107	139,019
September	112,288	10,486	4,346	14,832	127,120
October	119,320	16,816	8,960	25,776	145,096
November	98,270	21,638	15,492	37,130	135,400
December	145,858	14,639	8,057	22,695	168,553
2015.--					
January	60,076	12,681	1,867	14,548	74,624
February	69,034	15,776	4,888	20,664	89,698
March	83,978	12,148	5,685	17,833	101,811
April	96,920	11,961	4,178	16,139	113,059
May	110,290	3,300	11,861	15,161	125,451
June	114,080	21,598	6,778	28,376	142,456
July	115,290	33,786	15,845	49,631	164,921
August	109,450	31,619	7,807	39,426	148,876
September	104,600	34,469	4,557	39,026	143,626
October	97,238	27,895	8,431	36,327	133,565
November	88,808	22,507	7,016	29,523	118,331
December	107,414	39,891	5,450	45,341	152,755
2016.--					
January	89,236	2,041	6,780	8,821	98,057
February	97,690	5,956	3,154	9,110	106,800
March	116,172	16,012	11,257	27,270	143,442
April	115,668	31,014	14,755	45,769	161,437
May	120,972	41,434	8,465	49,899	170,871
June	130,760	52,277	12,032	64,308	195,068
July	128,500	59,504	11,343	70,847	199,347
August	140,172	61,126	15,981	77,108	217,280
September	132,700	60,242	14,229	74,471	207,171
October	136,010	64,359	11,557	75,916	211,926
November	129,616	75,995	15,836	91,831	221,447
December	155,640	80,745	30,100	110,845	266,485
2017.--					
January	70,236	---	4,179	4,179	74,415
February	80,606	18,316	5,386	23,701	104,307
March	106,288	28,276	4,249	32,524	138,812
April	110,114	22,747	6,337	29,085	139,199
May	137,962	32,558	7,394	39,951	177,913
June	135,508	68,801	5,115	73,916	209,424
July	130,890	64,072	7,038	71,109	201,999

Source: EIA and official U.S. import statistics.

Table D-2 and figure D-1 present monthly U.S. market shares from January 2014 through July 2017.

Table D-2

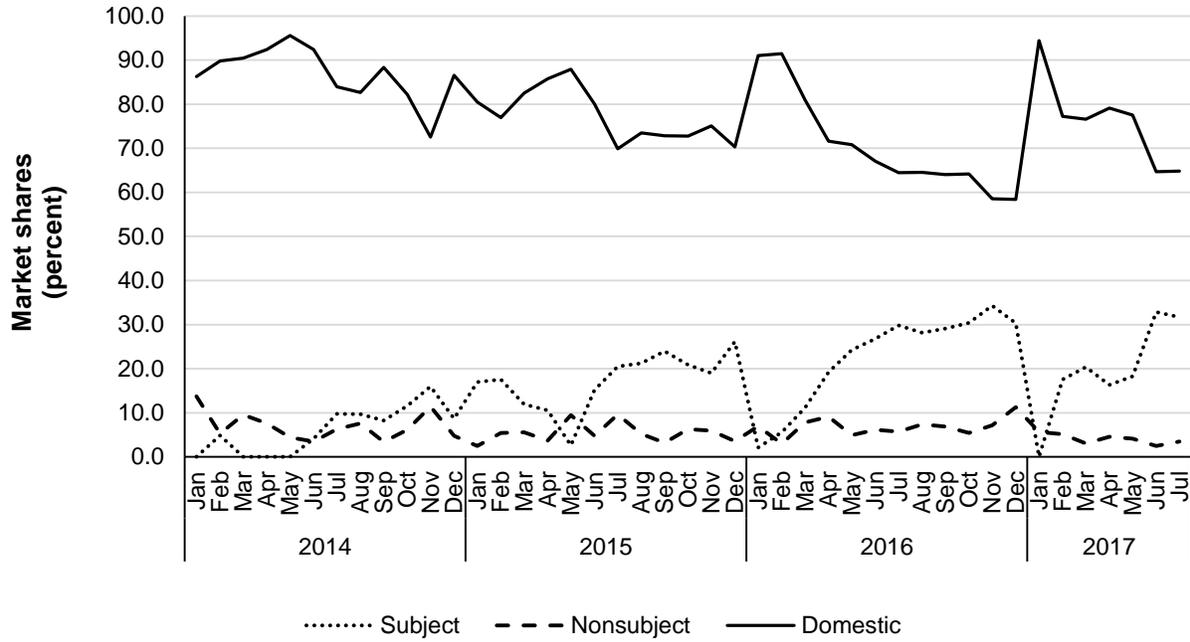
Biodiesel: Monthly market shares, January 2014 through December 2016

Item	U.S. producers' U.S. shipments	U.S. imports from			Apparent U.S. consumption
		Subject	Nonsubject	All import sources	
Share of quantity (percent)					
2014.--					
January	86.2	---	13.8	13.8	100.0
February	89.8	4.9	5.3	10.2	100.0
March	90.4	---	9.6	9.6	100.0
April	92.4	---	7.6	7.6	100.0
May	95.6	---	4.4	4.4	100.0
June	92.4	4.1	3.5	7.6	100.0
July	84.0	9.8	6.3	16.0	100.0
August	82.7	9.7	7.6	17.3	100.0
September	88.3	8.2	3.4	11.7	100.0
October	82.2	11.6	6.2	17.8	100.0
November	72.6	16.0	11.4	27.4	100.0
December	86.5	8.7	4.8	13.5	100.0
2015.--					
January	80.5	17.0	2.5	19.5	100.0
February	77.0	17.6	5.4	23.0	100.0
March	82.5	11.9	5.6	17.5	100.0
April	85.7	10.6	3.7	14.3	100.0
May	87.9	2.6	9.5	12.1	100.0
June	80.1	15.2	4.8	19.9	100.0
July	69.9	20.5	9.6	30.1	100.0
August	73.5	21.2	5.2	26.5	100.0
September	72.8	24.0	3.2	27.2	100.0
October	72.8	20.9	6.3	27.2	100.0
November	75.1	19.0	5.9	24.9	100.0
December	70.3	26.1	3.6	29.7	100.0
2016.--					
January	91.0	2.1	6.9	9.0	100.0
February	91.5	5.6	3.0	8.5	100.0
March	81.0	11.2	7.8	19.0	100.0
April	71.6	19.2	9.1	28.4	100.0
May	70.8	24.2	5.0	29.2	100.0
June	67.0	26.8	6.2	33.0	100.0
July	64.5	29.8	5.7	35.5	100.0
August	64.5	28.1	7.4	35.5	100.0
September	64.1	29.1	6.9	35.9	100.0
October	64.2	30.4	5.5	35.8	100.0
November	58.5	34.3	7.2	41.5	100.0
December	58.4	30.3	11.3	41.6	100.0
2017.--					
January	94.4	---	5.6	5.6	100.0
February	77.3	17.6	5.2	22.7	100.0
March	76.6	20.4	3.1	23.4	100.0
April	79.1	16.3	4.6	20.9	100.0
May	77.5	18.3	4.2	22.5	100.0
June	64.7	32.9	2.4	35.3	100.0
July	64.8	31.7	3.5	35.2	100.0

Source: Derived from table D-1.

Figure D-1

Biodiesel: Monthly U.S. imports by source, January 2014 through December 2016



Source: Table D-2.

APPENDIX E

NONSUBJECT COUNTRY PRICE DATA

Four importers reported price data for imports from Canada for products 1-4. Price data reported by these firms accounted for all of U.S. commercial shipments of imports from Canada. These price items and accompanying data are comparable to those presented in tables V-5 to V-8. Price and quantity data for Canada are shown in tables E-1 to E-4 and in figure E-1 to E-4 (with domestic and subject sources).

In comparing nonsubject country pricing data with U.S. producer pricing data, prices for product imported from Canada were lower than prices for U.S.-produced product in 12 instances and higher in 44 instances. In comparing nonsubject country pricing data with subject country pricing data, prices for product imported from Canada were lower than prices for product imported from Argentina in 11 instances and higher in 39 instances and lower than prices for product imported from Indonesia in 4 instances and higher in 30 instances. A summary of price differentials is presented in table E-5.

Petitioners stated that a significant portion of biodiesel imports from Canada were sold in California and qualify for credits under LCFS program and therefore sell at a price premium relative to biodiesel that does not qualify for these credits.¹

¹ Hearing transcript, p. 127 (Getlan); petitioners' posthearing brief, p. II-21.

Table E-1

Biodiesel: Weighted-average f.o.b. prices and quantities of imported product 1,¹ by quarters, January 2014-June 2017

Period	United States		Canada	
	Net invoice price (dollars per gallon)	Quantity (gallons)	Net invoice price (dollars per gallon)	Quantity (gallons)
2014:				
Jan.-Mar.	3.47	89,345,827	***	***
Apr.-Jun.	3.52	119,497,551	***	***
Jul.-Sep.	3.64	138,223,511	***	***
Oct.-Dec.	3.37	96,707,864	***	***
2015:				
Jan.-Mar.	2.71	81,107,501	***	***
Apr.-Jun.	3.03	124,859,194	***	***
Jul.-Sep.	2.87	123,068,435	***	***
Oct.-Dec.	2.66	88,441,680	***	***
2016:				
Jan.-Mar.	2.57	87,672,917	***	***
Apr.-Jun.	2.96	114,365,357	***	***
Jul.-Sep.	2.97	107,672,491	***	***
Oct.-Dec.	3.21	95,644,138	***	***
2017:				
Jan.-Mar.	3.33	29,419,852	***	***
Apr.-Jun.	3.19	55,735,000	***	***

¹ Product 1: B100 (pure biodiesel), including RIN value when sold as 1.5 RINs per gallon.

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

Table E-2

Biodiesel: Weighted-average f.o.b. prices and quantities of imported product 2,¹ by quarters, January 2014-June 2017

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Table E-3

Biodiesel: Weighted-average f.o.b. prices and quantities of imported product 3,¹ by quarters, January 2014-June 2017

Period	United States		Canada	
	Net invoice price (dollars per gallon)	Quantity (gallons)	Net invoice price (dollars per gallon)	Quantity (gallons)
2014:				
Jan.-Mar.	3.37	63,508,122	***	***
Apr.-Jun.	3.48	71,188,732	***	***
Jul.-Sep.	3.53	90,683,979	***	***
Oct.-Dec.	2.98	137,783,756	***	***
2015:				
Jan.-Mar.	2.66	58,796,583	***	***
Apr.-Jun.	2.87	114,534,282	***	***
Jul.-Sep.	2.76	111,619,286	***	***
Oct.-Dec.	2.34	110,465,847	***	***
2016:				
Jan.-Mar.	2.04	116,029,401	***	***
Apr.-Jun.	2.11	152,942,247	***	***
Jul.-Sep.	2.24	177,410,641	***	***
Oct.-Dec.	2.35	183,308,267	***	***
2017:				
Jan.-Mar.	2.83	87,609,728	***	***
Apr.-Jun.	2.86	167,057,861	***	***

¹ Product 3: B99 (biodiesel blend containing 99.0% - 99.9% biodiesel), including RIN value when sold as 1.5 RINs per gallon.

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

Table E-4

Biodiesel: Weighted-average f.o.b. prices and quantities of imported product 4,¹ by quarters, January 2014-June 2017

Period	United States		Canada	
	Net invoice price (dollars per gallon)	Quantity (gallons)	Net invoice price (dollars per gallon)	Quantity (gallons)
2014:				
Jan.-Mar.	***	***	***	***
Apr.-Jun.	2.65	40,697,498	***	***
Jul.-Sep.	2.72	47,098,657	***	***
Oct.-Dec.	2.07	39,299,254	***	***
2015:				
Jan.-Mar.	***	***	***	***
Apr.-Jun.	1.81	43,826,849	***	***
Jul.-Sep.	1.50	58,171,539	***	***
Oct.-Dec.	1.52	43,405,805	***	***
2016:				
Jan.-Mar.	0.76	38,388,348	***	***
Apr.-Jun.	1.13	65,472,330	***	***
Jul.-Sep.	0.94	68,635,356	***	***
Oct.-Dec.	0.99	60,688,964	***	***
2017:				
Jan.-Mar.	1.59	60,595,145	***	***
Apr.-Jun.	1.30	83,757,080	***	***

¹ Product 4: B99 (biodiesel blend containing 99.0% - 99.9% biodiesel), sold without RINs.

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

Figure E-1

Biodiesel: Weighted-average f.o.b. prices and quantities of domestic and imported product 1,¹ by quarters, January 2014-June 2017

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Figure E-2

Biodiesel: Weighted-average f.o.b. prices and quantities of domestic and imported product 2,¹ by quarters, January 2014-June 2017

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Figure E-3

Biodiesel: Weighted-average f.o.b. prices and quantities of domestic and imported product 3,¹ by quarters, January 2014-June 2017

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Figure E-4

Biodiesel: Weighted-average f.o.b. prices and quantities of domestic and imported product 4,¹ by quarters, January 2014-June 2017

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Table E-5

Biodiesel: Summary of underselling/(overselling), by country, January 2014-June 2017

Comparison	Total number of comparisons	Nonsubject lower than the comparison source		Nonsubject higher than the comparison source	
		Number of quarters	Quantity (gallons)	Number of quarters	Quantity (gallons)
Nonsubject vs United States:					
Canada vs. United States	56	12	***	44	***
Nonsubject vs subject countries:					
Canada vs. Argentina	50	11	***	39	***
Canada vs. Indonesia	34	4	***	30	***

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

