

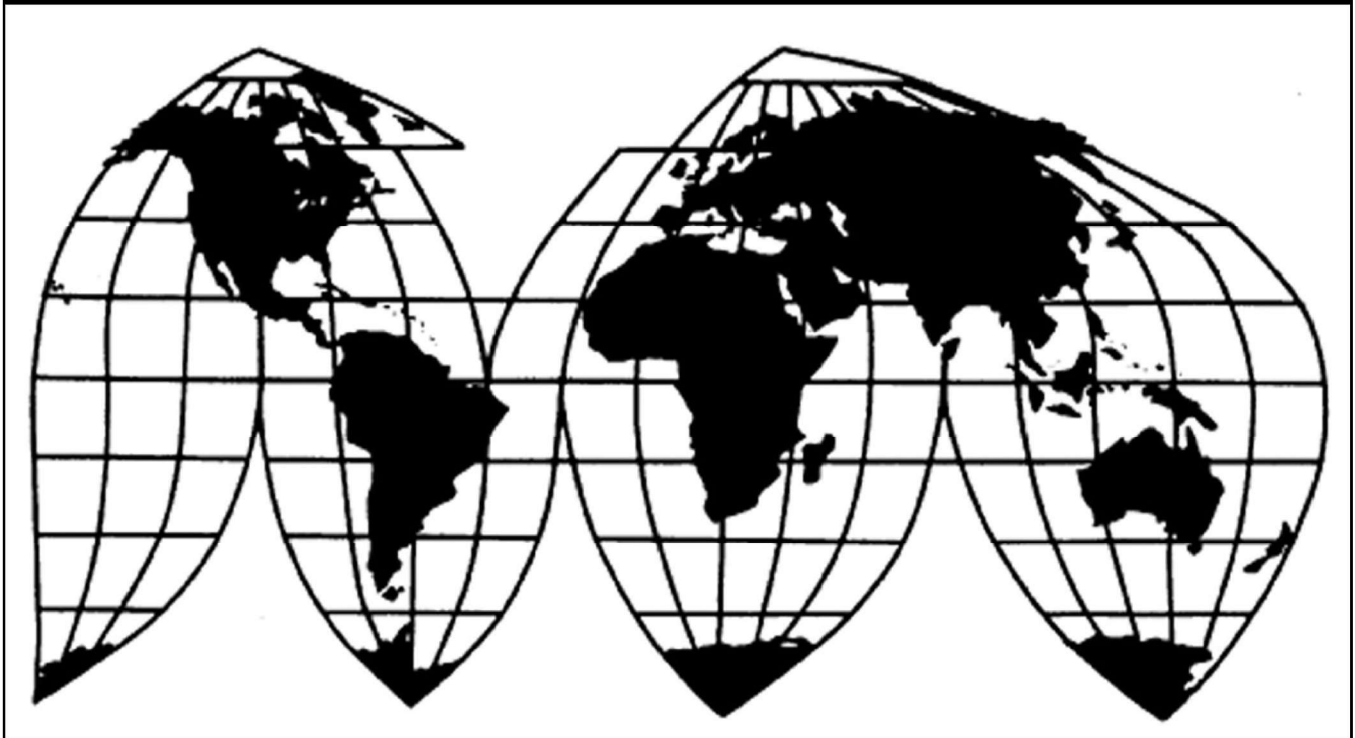
Gas Powered Pressure Washers from Vietnam

Investigation No. 731-TA-1598 (Final)

Publication 5465

October 2023

U.S. International Trade Commission



Washington, DC 20436

U.S. International Trade Commission

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Note.—Information that would reveal confidential operations of individual concerns may not be published.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

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation No. 731-TA-1598 (Final)

Gas Powered Pressure Washers from Vietnam

DETERMINATIONS

On the basis of the record¹ developed in the subject investigation, 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 gas powered pressure washers from Vietnam, provided for in subheadings 8424.30.90 and 8424.90.90 of the Harmonized Tariff Schedule of the United States, that have been found by the U.S. Department of Commerce (“Commerce”) to be sold in the United States at less than fair value (“LTFV”).^{2 3 4}

BACKGROUND

The Commission instituted this investigation effective December 30, 2022, following receipt of a petitions filed with the Commission and Commerce by FNA Group, Inc., Pleasant Prairie, Wisconsin. The Commission scheduled the final phase of the investigation following notification of a preliminary determination by Commerce that imports of gas powered pressure washers from Vietnam were being sold at LTFV within the meaning of section 733(b) of the Act (19 U.S.C. 1673b(b)). Notice of the scheduling of the final phase of the Commission’s investigation 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 June 22, 2023 (88 FR

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

² 88 FR 59503 (August 29, 2023).

³ Commissioner Randolph J. Stayin not participating.

⁴ The Commission also finds that imports subject to Commerce's affirmative critical circumstances determination are not likely to undermine seriously the remedial effect of the antidumping duty order on Vietnam.

40865). The Commission conducted its hearing on August 24, 2023. All persons who requested the opportunity were permitted to participate.

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 gas powered pressure washers (“GPPWs”) from Vietnam found by the U.S. Department of Commerce (“Commerce”) to be sold in the United States at less than fair value.¹ We also find that critical circumstances do not exist with respect to imports of GPPWs from Vietnam that are subject to Commerce’s final affirmative critical circumstances determination.

I. Background

A. Schedule of the Investigations

Although the antidumping and countervailing duty petitions regarding GPPWs from China and Vietnam were filed on the same day, December 30, 2022, the investigation schedules became staggered when Commerce did not postpone the final determination for its antidumping duty investigation regarding GPPWs from Vietnam, while it did postpone the final determinations for its antidumping and countervailing duty investigations regarding GPPWs from China. This necessitates an earlier Commission determination in the final phase of the antidumping duty investigation regarding GPPWs from Vietnam (the “leading investigation”) than in the final phase of the antidumping and countervailing duty investigations on GPPWs from China (the “trailing investigations”). Specifically, under the statute, the Commission must make its final determination in the leading investigation no later than October 13, 2023,² and the Commission must make its final determinations in the trailing investigations within 45 days of Commerce’s final determinations in the trailing investigations, or no later than November 27, 2023.³ Pursuant to the relevant statutory provision, the record for the trailing investigations will be the same as the leading investigation, except that the Commission shall include in the

¹ Commissioner Stayin did not participate.

² Commerce made its final affirmative determination in the leading Vietnam investigation on August 29, 2023. *Gas Powered Pressure Washers from the Socialist Republic of Vietnam: Final Affirmative Determination of Sales at Less Than Fair Value and Final Affirmative Determination of Critical Circumstances*, 88 Fed. Reg. 59503 (Aug. 29, 2023).

³ Commerce has postponed making its final determinations in the trailing China investigations to no later than October 11, 2023. *Gas Powered Pressure Washers From the People’s Republic of China: Preliminary Affirmative Determination of Sales at Less-Than-Fair-Value, Preliminary Affirmative Critical Circumstances Determination, in Part, Postponement of Final Determination, and Extension of Provisional Measures*, 88 Fed. Reg. 51279 (Aug. 3, 2023); *Decision Memorandum for the Preliminary Determination in the Countervailing Duty Investigation of Gas Powered Pressure Washers from the People’s Republic of China*, EDIS Doc. 804401 (May 30, 2023) at 4. As Commerce’s preliminary determinations in the trailing investigations were affirmative, the Commission’s final determinations in the trailing investigations must be made within 45 days after Commerce’s final determinations in the China investigations. 19 U.S.C. § 1673d(b)(2).

record Commerce’s final dumping and subsidy determinations and the parties’ final comments concerning the determinations.⁴

B. Parties to the Investigations

The petitions in these investigations were filed on December 30, 2022, by FNA Group, Inc. (“FNA”), a U.S. producer of GPPWs.⁵ Petitioner submitted prehearing and posthearing briefs, and representatives for Petitioner submitted testimony and appeared at the hearing accompanied by counsel.

Respondents actively participating in these investigations include MWE Investments, LLC DBA Westinghouse Outdoor Power Equipment (“MWE”) and Harbor Freight Tools USA, Inc. (“Harbor Freight”), U.S. importers of subject merchandise. Respondents submitted prehearing and posthearing briefs, and representatives for Respondents submitted testimony and appeared at the hearing accompanied by counsel.

C. Data Coverage

U.S. industry data are based on the questionnaire responses of four firms, FNA, Generac Power System Inc (“Generac”), Northern Tool + Equipment (“Northern Tool”), and TTI Outdoor Power Equipment Manufacturing, Inc. (“TTI”), that accounted for*** of U.S. production of GPPWs in 2022.⁶ U.S. import data are based on the questionnaire responses of nine firms that, in 2022, accounted for*** percent of subject imports, by value, from China and Vietnam.⁷ Foreign industry data are based on the questionnaire responses of three producers of GPPWs in China that accounted for*** percent of U.S. imports of GPPWs from China, and three producers in Vietnam that accounted for*** percent of U.S. imports of GPPWs from Vietnam, in 2022.⁸

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

⁴ 19 U.S.C. § 1677(7)(G)(iii).

⁵ Confidential Report, Memorandum INV-VV-073 (Sept. 14, 2023) (“CR”); Public Report, *Gas Powered Pressure Washers from China and Vietnam*, Inv. Nos. 701-TA-684 and 731-TA-1597-1598 (Final), USITC Pub. 5465 (October 2023) (“PR”) at I-1.

⁶ CR/PR at III-1.

⁷ CR/PR at IV-1. These import coverage percentages are based on U.S. imports under Harmonized Tariff Schedule (“HTS”) statistical reporting numbers 8424.30.9000 and 8424.90.9040, but probably understate responding U.S. importers’ actual coverage of subject imports during the period of investigation (“POI”) because out-of-scope merchandise constituted*** U.S. imports under these HTS categories during the POI. *Id.* at IV-1, n.3.

⁸ CR/PR at VII-3.

first defines the “domestic like product” and the “industry.”⁹ 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.”¹⁰ 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.”¹¹

By statute, the Commission’s “domestic like product” analysis begins with the “article subject to an investigation,” *i.e.*, the subject merchandise as determined by Commerce.¹² Therefore, Commerce’s determination as to the scope of the imported merchandise that is subsidized and/or sold at less than fair value is “necessarily the starting point of the Commission’s like product analysis.”¹³ The Commission then defines the domestic like product in light of the imported articles Commerce has identified.¹⁴ The decision regarding the appropriate domestic like product(s) 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.¹⁵ No single factor is dispositive, and the Commission may

⁹ 19 U.S.C. § 1677(4)(A).

¹⁰ 19 U.S.C. § 1677(4)(A).

¹¹ 19 U.S.C. § 1677(10).

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

¹³ *Cleo Inc. v. United States*, 501 F.3d 1291, 1298 (Fed. Cir. 2007); *see also Hitachi Metals, Ltd. v. United States*, Case No. 19-1289, slip op. at 8-9 (Fed. Circ. Feb. 7, 2020) (the statute requires the Commission to start with Commerce’s subject merchandise in reaching its own like product determination).

¹⁴ *Cleo*, 501 F.3d at 1298 n.1 (“Commerce’s {scope} finding does not control the Commission’s {like product} determination.”); *Hosiden Corp. v. Advanced Display Mfrs.*, 85 F.3d 1561, 1568 (Fed. Cir. 1996) (the Commission may find a single like product corresponding to several different classes or kinds defined by Commerce); *Torrington Co. v. United States*, 747 F. Supp. 744, 748–52 (Ct. Int’l Trade 1990), *aff’d*, 938 F.2d 1278 (Fed. Cir. 1991) (affirming the Commission’s determination defining six like products in investigations where Commerce found five classes or kinds).

¹⁵ *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).

consider other factors it deems relevant based on the facts of a particular investigation.¹⁶ The Commission looks for clear dividing lines among possible like products and disregards minor variations.¹⁷

B. Product Description

Commerce defined the scope of the imported merchandise under investigation as follows:

. . . {C}old water gas powered pressure washers (also commonly known as power washers), which are machines that clean surfaces using water pressure that are powered by an internal combustion engine, air-cooled with a power take-off shaft, in combination with a positive displacement pump. This combination of components (*i.e.*, the internal combustion engine, the power take-off shaft, and the positive displacement pump) is defined as the “power unit.” The scope of the investigation covers cold water gas powered pressure washers, whether finished or unfinished, whether assembled or unassembled, and whether or not containing any additional parts or accessories to assist in the function of the “power unit,” including, but not limited to, spray guns, hoses, lances, and nozzles. The scope of the investigation covers cold water gas powered pressure washers, whether or not assembled or packaged with a frame, cart, or trolley, with or without wheels attached.

For purposes of this investigation, an unfinished and/or unassembled cold water gas powered pressure washer consists of, at a minimum, the power unit or components of the power unit, packaged or imported together. Importation of the power unit whether or not accompanied by, or attached to, additional components including, but not limited to a frame, spray guns, hoses, lances, and nozzles constitutes an unfinished cold water gas powered pressure washer for purposes of this scope. The inclusion in a third country of any components other than the power unit does not remove the cold water gas powered pressure washer from the scope. A cold water gas powered pressure washer is within the scope of this investigation regardless of the origin of its engine. Subject merchandise also includes finished and unfinished cold water gas powered pressure washers that are further processed in a third country or in the United States, including, but not limited to, assembly or any other processing that would not otherwise remove the merchandise from the scope of this investigation if

¹⁶ See, *e.g.*, S. Rep. No. 96-249 at 90-91 (1979).

¹⁷ *Nippon*, 19 CIT at 455; *Torrington*, 747 F. Supp. at 748-49; see also S. Rep. No. 96-249 at 90-91 (Congress has indicated that the like product standard should not be interpreted in “such a narrow fashion as to permit minor differences in physical characteristics or uses to lead to the conclusion that the product and article are not ‘like’ each other, nor should the definition of ‘like product’ be interpreted in such a fashion as to prevent consideration of an industry adversely affected by the imports under consideration.”).

performed in the country of manufacture of the in-scope cold water gas powered pressure washers.

The scope excludes hot water gas powered pressure washers, which are pressure washers that include a heating element used to heat the water sprayed from the machine.

Also specifically excluded from the scope of this investigation is merchandise covered by the scope of the antidumping and countervailing duty orders on certain vertical shaft engines between 99cc and up to 225cc, and parts thereof from the People's Republic of China. *See Certain Vertical Shaft Engines Between 99 cc and up to 225cc, and Parts Thereof from the People's Republic of China: Antidumping and Countervailing Duty Orders*, 86 FR 023675 (May 4, 2021).¹⁸

The scope is unchanged from the preliminary phase of these investigations.¹⁹

GPPWs are machines that use a pressurized stream of water to clean off dirt, grime, and mud from surfaces such as decks, driveways, siding, and cars.²⁰ GPPWs have three main components: an internal combustion engine, a power take-off shaft, and a positive displacement pump.²¹ Together, these components are known as the "power unit."²² Commerce's scope includes both finished and unfinished GPPW, which are generally considered more powerful, faster, and better suited for larger surface areas and tougher stains than out-of-scope electric powered pressure washers ("EPPW").²³ Unfinished GPPWs include the power unit or components of the power unit. In addition to the power unit, finished GPPWs include the frame and may include wheels and accessories such as spray guns, nozzles, and hoses. The manufacturing process for GPPWs consists of fabricating, assembling, and finishing the frame of the pressure washer, mounting the pump to the engine on the frame, testing and calibrating the cleaning unit, and packaging the unit with accessories, if included, for shipment.²⁴

¹⁸ *Gas Powered Pressure Washers from the Socialist Republic of Vietnam: Final Affirmative Determination of Sales at Less Than Fair Value and Final Affirmative Determination of Critical Circumstances*, 88 Fed. Reg. 59503 (Aug. 29, 2023).

¹⁹ *Gas Powered Pressure Washers from China and Vietnam*, Inv. Nos. 701-TA-684 and 731-TA-1597-1598 (Preliminary), USITC Pub. 5409 (Feb. 2023) ("*Preliminary Determinations*") at 6-7.

²⁰ CR/PR at I-9.

²¹ CR/PR at I-8.

²² CR/PR at I-8.

²³ CR/PR at I-8-9.

²⁴ CR/PR at I-12.

C. Arguments of the Parties

Petitioner argues that the Commission should define a single domestic like product, coextensive with Commerce's scope, as it did in its preliminary determinations.²⁵ Respondents do not contest the definition of the domestic like product from the Commission's preliminary determinations.²⁶

D. Analysis

In the preliminary phase of these investigations, the Commission analyzed three domestic like product issues. The Commission first found that its traditional domestic like product factors generally supported defining a single domestic like product consisting of all GPPWs within the scope.²⁷ It also found that it was not appropriate to include out-of-scope EPPWs in the definition of the domestic like product.²⁸ Finally, applying a semi-finished products analysis,²⁹ the Commission found that the record supported finding that GPPW subassemblies belong in the same domestic like product as finished GPPWs.³⁰

²⁵ Petitioner's Prehr'g Br., EDIS Doc. 802708 (Aug. 8, 2023) at 8.

²⁶ Respondents' Prehr'g Br., EDIS Doc. 803064 (Aug. 23, 2023) at 3. Respondents claim that Petitioner purposefully crafted the scope definition to include the components of the power unit when shipped together but not when shipped separately because FNA imported massive quantities of separately shipped power unit components from China during the POI. *Id.* at 3-4.

²⁷ *Preliminary Determinations*, USITC Pub. 5409 at 8-10. Applying the traditional six domestic like product factors, the Commission found that all domestically produced GPPWs within the scope were made primarily from steel and shared other physical characteristics, including a gas-powered engine, a power take-off shaft, a positive displacement pump, a frame, and wheels. It also found that domestically produced GPPWs within the scope were produced through the same production processes, generally interchangeable, and sold overwhelmingly to retailers, albeit at appreciably varying prices. Lastly, the Commission noted that, according to petitioner, all domestically produced GPPWs were perceived to be a single product category by market participants. *Id.*

²⁸ *Preliminary Determinations*, USITC Pub. 5409 at 8-10. The Commission found that the limited information on the record indicated that in-scope GPPWs and out-of-scope EPPWs generally differed in terms of physical characteristics and uses; manufacturing facilities, production processes, and production employees; interchangeability; producer and customer perceptions; and price. It also found that both types of pressure washers were similar in using a pressurized stream of water to clean surfaces and being sold overwhelmingly to retailers. Based on the preponderance of differences between GPPWs and EPPWs, the Commission determined that a clear dividing line appeared to separate the two products. *Id.*

²⁹ In a semi-finished products analysis, the Commission examines the following: (1) the significance and extent of the processes used to transform the upstream into the downstream articles; (2) whether the upstream article is dedicated to the production of the downstream article or has independent uses; (3) differences in the physical characteristics and functions of the upstream and downstream articles; (4) whether there are perceived to be separate markets for the upstream and downstream articles; and (5) differences in the costs or value of the vertically differentiated articles. *See, e.g., Glycine from India, Japan, and Korea*, Inv. Nos. 731-TA-1111-1113 (Preliminary), USITC Pub. No. 3921 at 7 (May 2007); *Artists' Canvas from China*, Inv. No. 731-TA-1091 (Final), USITC Pub. No. 3853 at 6 (Continued...)

In the final phase of these investigations, there is no new information or argument on the record that would warrant the Commission's reconsideration of the Commission's definition of the domestic like product from its preliminary determinations. Accordingly, we again define a single domestic like product consisting of all GPPWs, coextensive with the scope of the investigations.

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."³¹ 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.

A. Sufficient Production-Related Activities

In deciding whether a firm qualifies as a domestic producer of the domestic like product, the Commission generally analyzes the overall nature of a firm's U.S. production-related activities; production-related activity at minimum levels could be insufficient to constitute domestic production.³² No party raised this issue during the preliminary phase of these investigations.³³

(...Continued)

(May 2006); *Live Swine from Canada*, Inv. No. 731-TA-1076 (Final), USITC Pub. 3766 at 8 n.40 (Apr. 2005); *Certain Frozen Fish Fillets from Vietnam*, Inv. No. 731-TA-1012 (Preliminary), USITC Pub. No. 3533 at 7 (Aug. 2002).

³⁰ *Preliminary Determinations*, USITC Pub. 5409 at 10-12. In determining that GPPW subassemblies belonged in the same domestic like product as finished GPPWs, the Commission found that there was not a separate market for GPPW subassemblies, the process for transforming GPPW subassemblies into finished GPPWs was not labor or capital intensive, and the GPPW subassemblies were dedicated to the production of finished GPPWs. The Commission also found that GPPW subassemblies imparted essential physical characteristics and functions to finished GPPWs, despite market participants being evenly divided on their differences in physical characteristics and functions. Although both responding producers and most responding importers reported that there was a significant difference in the cost or value between GPPW subassemblies and finished GPPWs, Petitioner estimated that GPPW subassemblies account for nearly*** of the cost of finished GPPWs. *Preliminary Determinations*, USITC Pub. 5409 at 10-12; *Confidential Preliminary Determinations*, EDIS Doc. 790753 (Feb. 21, 2023) at 16.

³¹ 19 U.S.C. § 1677(4)(A).

³² The Commission generally considers six factors: (1) source and extent of the firm's capital investment; (2) technical expertise involved in U.S. production activities; (3) value added to the product in the United States; (4) employment levels; (5) quantity and type of parts sourced in the United States; and (6) any other costs and activities in the United States directly leading to production of the like product. No single factor is determinative and the Commission may consider any other factors it deems (Continued...)

1. Arguments of the Parties

Petitioner's Arguments. Petitioner, employing the Commission's six factor analysis for determining sufficient production related activity, argues that FNA's operations, spread out over four facilities in four U.S. states, constitute substantial production related activity.³⁴ It admits that FNA*** but contends that the Commission's analysis does not require a firm to produce or make capital investments into the core components of a product to be deemed a producer of such a product.³⁵

Respondents Arguments. Respondents argue that*** are mere assemblers of GPPWs and should therefore be excluded from the domestic industry, resulting in no domestic industry.³⁶ They specifically contend that a firm must be engaged in the production of the components of the power unit to be engaged in sufficient production related activities to qualify as a domestic producer of GPPWs, as any other activity would be inconsequential to the value of finished GPPWs.³⁷

(...Continued)

relevant in light of the specific facts of any investigation. *Crystalline Silica Photovoltaic Cells and Modules from China*, Inv. Nos. 701-TA-481 and 731-TA-1190 (Final), USITC Pub. 4360 at 12-13 (Nov. 2012).

³³ This issue was first raised by Respondents in their prehearing brief, dated August 18, 2023, which prompted the Commission to issue supplemental questionnaires to the four responding U.S. producers shortly thereafter on August 21, 2023.

³⁴ Petitioner's Posthr'g Br., EDIS Doc. 803714 (Sept. 1, 2023) at 4-5. Petitioner argues that FNA's capital investments are significant and meaningful, emphasizing that FNA has made extensive capital investments over the years to support its production of GPPWs at all four locations in the United States,***. It also argues that the expertise needed to produce FNA's GPPWs is meaningful, highlighting the roughly thirty mechanical, design, product, and electrical engineers, as well as technicians, it employs for its hose manufacturing operation and maintenance of its processes and equipment. Next, Petitioner claims that FNA's value added is meaningful. It describes its valued added activities as bending, fabricating, and painting frames; manufacturing high-pressure hoses; and inspecting, lubricating, assembling, and testing the power unit and its components. Petitioner further claims that final assembly, inspection, and packaging are important activities. *Id.*, Exh. 1 at 2-5. Petitioner also claims that FNA employs*** for the production of its GPPWs. Petitioner's Suppl. Questionnaire, EDIS Doc. 803637 (Aug. 31, 2023), Att. S-1 at 1. It submits that FNA's employment includes lower skilled workers responsible for basic assembly and packaging; higher skilled workers responsible for the complex processes of manufacturing hoses and the power unit; and thirty trained engineers (mechanical, electrical and manufacturing) responsible for ensuring the entire manufacturing process operates as efficiently and effectively as possible. Petitioner's Posthr'g Br., Exh. 1 at 5. Lastly, Petitioner claims that, by value, the***. Petitioner's Posthr'g Br., Exh. 1 at 10; Petitioner's Suppl. Questionnaire, Att. S-2 at 2-3.

³⁵ Petitioner's Posthr'g Br., Exh. 1 at 7-9.

³⁶ Respondents' Posthr'g Br., EDIS Doc. 803723 (Sept. 1, 2023), Annex B at 10-11, 18.

³⁷ Hr'g Tr., EDIS Doc. 803246 (Aug. 24, 2023) at 156, 168 (Ellis).

Respondents employed the Commission's six factor analysis for determining sufficient production related activity in arguing for FNA's exclusion from the domestic industry as an assembler of finished GPPWs using components sourced from China.³⁸

Respondents do not dispute that FNA is involved in the production of frames and hoses to some degree,³⁹ but argue that these activities are inconsequential to the value and operation of the finished product, comparing the smaller share of the total cost of finished GPPWs that frames and hoses comprise to the larger share that engines and pumps comprise.⁴⁰ Respondents also argue that FNA's value added calculations***.⁴¹

While conceding that FNA manufactures industrial GPPWs domestically, Respondents claim that there is a difference between FNA's manufacturing operations for industrial and residential GPPW.⁴² They therefore argue that the information in FNA's U.S. producer supplemental questionnaire response is misleading because FNA***, implying that the operations described are performed on all of its GPPW units.⁴³

Respondents argue that the***.⁴⁴

2. Analysis and Conclusion

We find that FNA, Generac, Northern Tool, and TTI engage in sufficient production-related activities to qualify as domestic producers, based on the following analysis.

Source and Extent of Firms' Capital Investment. FNA, Generac, Northern Tool, and TTI each reported capital investments in their GPPW production facilities during the POI. FNA

³⁸ Respondents' Prehr'g Br. at 12-21. Respondents acknowledge that FNA***, but claim that***. They therefore argue that FNA's***. Respondents also argue that the technical expertise involved in FNA's U.S. production activities is limited. They contend that assembly of the components into the power unit, and then assembly of the power unit with other components into a completed GPPWs are not technically sophisticated activities. Respondents claim that the limited technical expertise involved in FNA's operations becomes apparent when compared to the expertise involved in developing and producing the engines that FNA purchases from China and Vietnam. *Id.* at 13-14. They also claim that***. Respondents' Posthr'g Br., Annex B at 10-11, 15. Respondents argue that the quantity of GPPW parts FNA sourced from the United States is insignificant compared to the overwhelming quantity of GPPW parts that FNA sourced from China and Vietnam. Respondents' Prehr'g Br. at 17.

³⁹ Respondents contend that evidence on the record suggests that***. Respondents' Posthr'g Br. at 8, Annex B at 1, 3.

⁴⁰ Respondents' Posthr'g Br. at 6-7, Annex C at 9. Respondents argue that the share of total raw material costs represented by the frame includes***, the cost of imported wheels, and the cost of imported or purchased steel stampings, and therefore the raw material cost share of the frames is so high that the overall average value of the frames does not reflect the value of the frame production performed by FNA. *Id.* Annex B at 2.

⁴¹ Respondents' Posthr'g Br., Annex B at 13-14.

⁴² Hr'g Tr. at 160 (Barleycorn).

⁴³ Respondents' Posthr'g Br., Annex B at 4. During a virtual facility tour with Commission staff, FNA***. FNA Group Virtual Staff Site Visit, EDIS Doc. 804290 (Sept. 14, 2023) at 4.

⁴⁴ Respondents' Posthr'g Br. at 7-8, Annex B at 14.

reported between \$*** and \$*** in capital expenditures from 2020 to 2022,⁴⁵ and estimated the greenfield investment costs for replicating their current domestic production capacities for GPPWs to be \$***.⁴⁶ FNA is planning a 200,000 sq. ft. expansion to its Mesquite, Texas facility,***.⁴⁷ Generac reported*** from 2020 to 2022, but estimated the greenfield investment costs for replicating their current domestic production capacities for GPPWs to be \$***.⁴⁸ Northern Tool reported \$*** to \$*** in annual capital expenditures from 2020 to 2022, and estimated the greenfield investment costs for replicating their current domestic production capacities for GPPWs to be \$***.⁴⁹ TTI reported between \$*** and \$*** in annual capital expenditures from 2020 to 2022, and estimated the greenfield investment costs for replicating their current domestic production capacities for GPPWs to be \$***.⁵⁰

Technical Expertise. FNA, Northern Tool, and TTI reported expenditures on research & development (R&D) during the POI, which generally requires a high degree of technical expertise, and all four firms rated the complexity, intensity, and importance of their manufacturing activities as a 3 or 4 on a scale of 1 to 5.⁵¹ FNA reported aggregate annual R&D expenses of between \$*** and \$*** during the 2020-2022 period.⁵² ⁵³ During the same period, Northern Tool reported aggregate annual R&D expenses ranging from \$*** to \$***,⁵⁴ and TTI reported aggregate annual R&D expenses of between \$*** and \$***.⁵⁵

Value Added. As calculated by the aggregate annual total conversion costs divided by total COGS, the value added annually during the 2020-2022 period was*** percent for FNA,*** percent for Generac,*** percent for Northern Tool, and*** percent for TTI.⁵⁶

Employment Levels. The average number of production related workers (“PRWs”) involved in the production of GPPWs annually ranged from*** for FNA,*** for Generac,*** for Northern Tool, and*** for TTI.⁵⁷ FNA***.⁵⁸

⁴⁵ CR/PR at Table III-4. ***. *Id.* at VI-17, n.20.

⁴⁶ Question S-5 of the Commission’s U.S. producer supplemental questionnaire asked FNA to report its estimated greenfield investment costs as a value in 1,000 dollars; FNA estimated its greenfield investment costs to be \$***, which was then included in the CR. CR at Table III-4, D-9; Petitioner’s Suppl. Questionnaire at question S-5. However, Petitioner notes that FNA inadvertently reported its estimated greenfield investment costs as a whole dollar amount rather than an amount in 1,000 dollars. Petitioner’s Posthr’g Br., Exh. 1 at 3, n.3. We therefore record FNA’s estimated greenfield investment costs as \$*** instead of \$***.

⁴⁷ FNA Group Virtual Staff Site Visit at 3.

⁴⁸ CR/PR at Table III-4.

⁴⁹ CR/PR at Table III-4.

⁵⁰ CR/PR at Table III-4. ***. *Id.* at Table VI-6. ***. *Id.* at VI-17, n.21.

⁵¹ CR/PR at III-4.

⁵² CR/PR at Table III-4. ***. *Id.* at Table VI-8.

⁵³ Petitioner submits that FNA has over 90 U.S. patents related to the production of GPPW. Hr’g Tr. at 15 (G. Alexander); Petitioner’s Posthr’g Br., Exh. 2 at Att. B.

⁵⁴ CR/PR at Table III-4. ***. *Id.* at Table VI-8.

⁵⁵ CR/PR at Table III-4. ***. *Id.* at Table IV-8. Generac reported*** R&D expenses from 2020 to 2022. *Id.*

⁵⁶ CR/PR at Table III-4.

⁵⁷ CR/PR at Table III-4.

Quantity and Type of Parts Sourced in United States. As calculated by dividing aggregate domestically sourced inputs by total raw materials in each year of the 2020-2022 period, the percentage of domestically sourced GPPW parts during the 2020-2022 period ranged from*** for FNA,*** percent for Generac,*** percent for Northern Tool, and*** percent for TTI.^{59 60}

Conclusion. Between the production of components and the assembly of finished GPPWs, the value added by the production-related activities of FNA, Generac, and Northern Tool was notable, ranging from*** to*** percent during the 2020-2022.⁶¹ Furthermore, FNA and Northern Tool made significant capital investments in their domestic operations, highlighted by FNA's construction of a new state of the art facility in Mesquite, Texas where***.⁶² All three firms made substantial R&D expenditures during the 2020-2022 period and rated the complexity of their production-related activities as a 3 or 4 on a scale from 1 to 5, reflecting that their operations required a considerable degree of technical expertise; FNA reported that its manufacturing locations have a team of manufacturing engineers working on the GPPW manufacturing process, including mechanical, electrical, and industrial engineers.⁶³ All three firms also employed a substantial number of production-related workers, ranging from*** to*** PRWs, and FNA and Generac sourced a significant share of their GPPW inputs domestically, ranging from*** to*** percent of their total raw material costs, during the 2020-2022 period.

Furthermore, the record indicates that FNA, Generac, and Northern Tool do not merely assemble GPPW components into finished GPPWs in the United States, but also manufacture frames and hoses for the finished GPPWs they produce.⁶⁴ Although engines and pumps are considered major components of GPPWs, accounting for*** percent and*** percent, respectively, of total COGS in 2022, the shares held by frames and other material inputs, a category that includes hoses, accounted for a notable*** percent and*** percent, respectively.^{65 66} Moreover, engines and pumps are not suitable for use as GPPWs until

(...Continued)

⁵⁸ FNA Group Virtual Staff Site Visit at 4.

⁵⁹ CR/PR at Table III-4.

⁶⁰ Petitioner and Respondents agree that there are no longer any domestic manufacturers of horizontal shaft engines in the United States. Petitioner's Suppl. Questionnaire, Att. S-4 at 1; Hr'g Tr. at 151 (Cline); Respondents' Posthr'g Br., Annex B at 19. In addition to sourcing engines from the United States,***. CR/PR at Table D-2. Further, Respondents submit that there are no pumps produced in the United States. Hr'g Tr. at 151 (Lutz).

⁶¹ Even when considering that FNA***, their value add ranged between roughly*** of the total COGS of a GPPW unit.

⁶² CR/PR at Table III-3; Hr'g Tr. at 7 (McConkey); FNA Group Virtual Staff Site Visit at 3-4.

⁶³ CR/PR at III-4; Hr'g Tr. At 44-45 (Alexander). ***. *Id.* at Table D-2.

⁶⁴ CR/PR at Table D-2.

⁶⁵ CR/PR at VI-12, Table IV-4. These calculations are based on raw material costs accounting for*** percent total COGS in 2022, and engines, pumps, frames, and other material inputs accounting for*** percent,*** percent,*** percent, and*** percent, respectively, of raw material costs in 2022. *Id.*

assembled with other components, including frames and hoses, into finished GPPW, so this is not a case in which domestic firms are merely adding components to functional finished products.

In light of the foregoing, we find that FNA, Generac, and Northern Tool engaged in sufficient production related activities in the United States to qualify as domestic producers of GPPW.⁶⁷

TTI indicated that***. Accordingly, TTI's value-added was around*** that of the other domestic producers, at*** to*** percent, and its capital expenditures were also lower, at \$***, during the 2020-2022 period.⁶⁸ Nevertheless, it was the*** largest employer among the four firms during the 2020-2022 period, with*** to*** PRWs, and sourced a higher share of its inputs domestically than any other firm, at*** to*** percent during the 2020-2022 period. Furthermore, TTI reported the complexity of its production-related activities as a 3 out of 5, reflecting a considerable degree of technical expertise.⁶⁹ On balance, we find that TTI engaged in sufficient production related activities in the United States to qualify as a domestic producer of GPPWs.

B. Related Parties

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

(...Continued)

⁶⁶ CR/PR at VI-12, Table IV-4. We recognize that hoses account for only a small share of other material inputs. Respondents estimate that the hose represents*** percent of the total per-unit cost of production. Respondents' Posthr'g Br. at 3.

⁶⁷ We are unpersuaded by Respondents' comparison of module assembly in *DRAMs from Taiwan* to FNA's production-related activities in these investigations. Respondents' Prehr'g Br. at 30; Respondents' Posthr'g Br., Annex C at 3-4. In *DRAMs from Taiwan*, the parties agreed that module assembly involved a lesser capital investment than DRAM assembly, and that the degree of technical expertise involved in module production was less than that involved in either fabrication or assembly of DRAMs. Further, it was inferred that module assembly involved limited value added because the DRAM chip accounted for 90-95 percent of the module's value. *Dynamic Random Access Memory Semiconductors of One Megabit and Above from Taiwan*, Inv. No. 731-TA-811 (Final), USITC Pub. 3256 (Dec. 1999) at 7-11. Therefore, unlike the facts in these investigations, the production-related activities for module assembly were relatively unsophisticated, added little value to the finished product, and involved a relatively small amount of capital investment. Moreover, because each Commission investigation is *sui generis*, even as to the same products and countries, the Commission is not bound by its analyses from previous investigations, particularly as to very different products.

⁶⁸ CR/PR at Table VI-5.

⁶⁹ CR/PR at III-4.

or which are themselves importers.⁷⁰ Exclusion of such a producer is within the Commission's discretion based upon the facts presented in each investigation.⁷¹

In these final phase investigations,*** are subject to possible exclusion under the related party provision as importers of subject merchandise during the POI, and*** also qualifies as a related party based on its affiliation with subject foreign producers and exporters and U.S. importers of subject merchandise.⁷² We discuss below whether appropriate circumstances exist to exclude each of them from the domestic industry.

1. Arguments of the Parties

Petitioner's Arguments. Petitioner argues that*** should not be excluded from the domestic industry as a related party.⁷³ While recognizing that*** was a*** importer during the POI, Petitioner argues that*** primary interest remains in domestic production given that*** was a significant domestic producer for all but three months of the POI,*** the petition,***.⁷⁴

Respondents Arguments. Respondents argue that*** should be excluded from the domestic industry because it is related to an exporter of subject merchandise and an importer of subject merchandise.⁷⁵ They contend that*** primary interest was importation because*** had*** U.S. production during POI, accounted for*** of subject imports, and imported subject merchandise as a business necessity to continue its participation in the U.S. market.⁷⁶

⁷⁰ 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).

⁷¹ The primary factors the Commission has examined in deciding whether appropriate circumstances exist to exclude a related party include the following:

- (1) the percentage of domestic production attributable to the importing producer;
- (2) the reason the U.S. producer has decided to import the product subject to investigation (whether the firm benefits from the LTFV sales or subsidies or whether the firm must import in order to enable it to continue production and compete in the U.S. market);
- (3) whether inclusion or exclusion of the related party will skew the data for the rest of the industry;
- (4) the ratio of import shipments to U.S. production for the imported product; and
- (5) whether the primary interest of the importing producer lies in domestic production or importation. *Changzhou Trina Solar Energy Co. v. USITC*, 100 F. Supp.3d 1314, 1326-31 (Ct. Int'l. Trade 2015); see also *Torrington Co. v. United States*, 790 F. Supp. at 1168.

⁷² CR/PR at Tables III-2, 11-14.***. It indicated that it is related to***. *Id.* at Table III-2. The record does not contain data regarding*** purchases from its*** U.S. importers. However, no responding U.S. producer reported purchases of GPPWs (i.e., aside from direct imports by the producer) during the POI. *Id.* at III-15.

⁷³ Petitioner's Posthr'g Br. at 4.

⁷⁴ Petitioner's Posthr'g Br. at 2-4.

⁷⁵ Respondents' Prehr'g Br. at 4.

⁷⁶ Respondents' Prehr'g Br. at 6-9. *** reported reason for importing is that***. CR/PR at Table III-15.

Respondents further argue that inclusion of***, which is so heavily dependent on subject imports, would skew data concerning the domestic industry, specifically production and capacity utilization.⁷⁷

Respondents also argue that*** should be excluded from the domestic industry because it was an importer of subject merchandise with a substantial ratio of subject imports to U.S. production, indicating that its primary interest was importation.⁷⁸ Lastly, they claim that the Commission could exclude*** from the domestic industry on the basis of the*** quantity of out-of-scope imports of GPPW components*** imported during the POI, particularly in 2021 and 2022.⁷⁹

2. Analysis and Conclusion

We find that appropriate circumstances do not exist to exclude*** from the domestic industry based on the following analysis.

. *** was the domestic producer in 2022, accounting for*** percent of domestic industry production.⁸⁰ It imported subject GPPWs from China***.⁸¹ *** ratio of subject imports to domestic production was*** percent in*** and*** percent in***.⁸² *** stated that it began importing subject GPPWs***.⁸³

In view of the fact that*** importation of subject merchandise was small in relation to its domestic production, occurred only in***, and was reportedly***, its principal interest appears to be in domestic production. Furthermore,***, and there is no indication on the record that its inclusion would skew the data for the domestic industry. We therefore find that appropriate circumstances do not exist to exclude*** from the domestic industry under the related parties provision.

. *** was the domestic producer in 2022, accounting for*** percent of domestic industry production that year.⁸⁴ It*** the petitions.⁸⁵ It imported subject GPPWs from China in*** and from Vietnam in***.⁸⁶ Specifically,*** imported*** units of subject GPPWs in*** (the equivalent of*** percent of its domestic production) and*** units of subject GPPWs in***

⁷⁷ Respondents' Prehr'g Br. at 7-8; Respondents' Posthr'g Br. at 4-5

⁷⁸ Respondents' Prehr'g Br. at 10; Respondents' Posthr'g Br. at 1.

⁷⁹ Respondents' Prehr'g Br. at 18-19, 21. Respondents acknowledge that their argument relies on imports of out-of-scope GPPW components that are excluded from the scope, which are not relevant to the Commission's traditional analysis of whether appropriate circumstances exist to exclude a producer from the domestic industry.

⁸⁰ CR/PR at Table III-1.

⁸¹ CR/PR at Table III-11.

⁸² CR/PR at Table III-11. *** domestic production was*** units in 2020 and*** units in 2022. *Id.*

⁸³ CR/PR at Table III-15.

⁸⁴ CR/PR at Table III-1.

⁸⁵ CR/PR at Table III-1.

⁸⁶ CR/PR at Table III-12.

(the equivalent of*** percent of its domestic production).⁸⁷ *** stated that it began importing subject GPPWs***.⁸⁸

*** imported subject merchandise only in***, and its ratio of subject imports to domestic production was*** only in interim 2023, reportedly due to***. Given this, *** primary interest appears to be in domestic production. Furthermore, the record provides no indication that its inclusion would skew the data for the domestic industry. We therefore find that appropriate circumstances do not exist to exclude*** from the domestic industry under the related parties provision.

. *** was the domestic producer in 2022, accounting for*** percent of domestic industry production.⁸⁹ It*** the petitions.⁹⁰ It imported subject GPPWs from China and Vietnam***.⁹¹ Specifically, *** imported*** units of subject GPPWs in*** (the equivalent of*** percent of its domestic production), *** units of subject GPPWs in*** (the equivalent of*** percent of its domestic production), *** units of subject GPPWs in*** (the equivalent of*** percent of its domestic production), *** units of subject GPPWs in*** (the equivalent of*** percent of its domestic production), and*** units of subject GPPWs in*** (the equivalent of*** percent of its domestic production).⁹² *** stated that it***.⁹³ *** made capital expenditures of \$*** during the POI.⁹⁴

*** ratio of subject imports to domestic production was high throughout the POI, but declined irregularly during the period as it reduced its subject imports and increased its domestic production irregularly. Given this, and its not insignificant capital expenditures relative to its*** size, *** principal interest appears to be in domestic production, at least recently. Furthermore, the record provides no indication that its inclusion would skew the data for the domestic industry. We therefore find that appropriate circumstances do not exist to exclude*** from the domestic industry under the related parties provision.

. *** was the domestic producer in 2022, accounting for*** percent of domestic industry production that year.⁹⁵ ***,⁹⁶***.⁹⁷ ⁹⁸ It*** the petitions.⁹⁹ *** imported*** units of

⁸⁷ CR/PR at Table III-12. *** domestic production was*** units in 2020 and*** units in interim 2023. *Id.*

⁸⁸ CR/PR at Table III-15.

⁸⁹ CR/PR at Table III-1.

⁹⁰ CR/PR at Table III-1.

⁹¹ CR/PR at Table III-13.

⁹² CR/PR at Table III-13. *** domestic production was*** units in 2020,*** units in 2021,*** units in 2022,*** units in interim 2022, and*** units in interim 2023. *Id.*

⁹³ CR/PR at Table III-15.

⁹⁴ CR/PR at Table VI-5.

⁹⁵ CR/PR at Table III-1.

⁹⁶ CR/PR at III-13 and VI-1.

⁹⁷ CR/PR at III-7, n.5 and VI-1, n.5; Petitioner's Posthr'g Br. at 2, citing*** on August 1, 2023.

⁹⁸ Given that***, its related party analysis specifically focuses on the 2020-2022 time period.

⁹⁹ CR/PR at Table III-1.

subject GPPWs in***,*** units of subject GPPWs in***,*** units of subject GPPWs in***.¹⁰⁰ The ratio of its subject imports to U.S. production increased from*** percent in 2020 to*** percent in 2021, and then declined to*** percent in 2022.¹⁰¹ *** reported that “***” to import GPPWs from China and Vietnam.¹⁰² It reported capital expenditures of \$*** during the POI.¹⁰³

During the POI,*** ratio of subject imports to domestic production increased from 2020 to 2021 to a high level before declining in 2022 to a level lower than in 2020. Although***. Furthermore,*** reported making substantial capital investments of \$*** in 2022, accounting for*** percent of the domestic industry’s reported capital investments that year.¹⁰⁴ Based on these factors, TTI’s principal interest appears to be in domestic production, at least in the most recent full year of the POI.

The record shows that*** domestic production was not shielded from competition with subject imports during the POI and that its exclusion, as the second largest domestic producer in 2022, would skew the domestic industry data.¹⁰⁵ The pricing product data indicate that there

¹⁰⁰ CR/PR at Table III-14. *** domestic production was*** units in 2020,*** units in 2021, and*** units in 2022. *Id.*

¹⁰¹ CR/PR at Table III-14.

¹⁰² CR/PR at Table III-15.

¹⁰³ CR/PR at Table VI-5.

¹⁰⁴ CR/PR at Table VI-5.

¹⁰⁵ We recognize that*** accounted for*** percent of subject imports from Vietnam in 2022. CR/PR at Table IV-1. In considering whether appropriate circumstances exist to warrant exclusion of a given domestic producer, whether their primary interest lies in domestic production or importation is only one factor. Thus, even if a U.S. producer’s current primary interest is not in domestic production, that alone is not dispositive in the Commission’s related party analysis, for example, when the record shows the related party is not shielded from subject import competition and its exclusion from the industry would mask the effects of subject imports on the industry. *See, e.g., Large Residential Washers from Korea and Mexico*, Inv. Nos. 701-TA-488 and 731-TA-1199-1200 (Final) USITC Pub. 4378 (Feb. 2013) at 12-13 (“that {firm’s} current interest is not in domestic production is an insufficient basis by itself to warrant exclusion as a related party in these investigations”); *LG Electronics, Inc. v. U.S. Intern. Trade Comm’n*, 26 F. Supp. 3d 1338, 1344-47 (Ct. Int’l Trade 2014) (affirming Commission decision not to exclude domestic producer, over respondents’ objection, when the firm did not appear to benefit from subject imports and exclusion would mask declines in domestic industry during the POI); *see also See Certain Tissue Paper from China*, Inv. No. 731-TA-1070B (Final), USITC Pub. 3758 (Mar. 2005) at 11-12 (“{E}xclusion may not be warranted simply because a large producer (that was also a related party) has shifted to become a substantial importer of such merchandise during the period of investigation. A significant factor is whether the firm’s domestic production operations significantly benefitted financially from its relationship to subject imports or from its import activities. Such benefits create the sort of data distorting effect that the exercise of discretion to exclude under the related party provision seeks to overcome.”). The legislative history of the related party provision in the Trade Agreements Act of 1979 emphasizes that a producer should be excluded when it is shielded from the effects of the subject imports: “where a U.S. producer is related to a foreign exporter and the foreign exporter directs his exports to the United States so as not to compete with his related U.S. producer, this should be a case where the ITC would not consider the related U.S. producer to be a part of the domestic industry.” S. Rep. No. 96-249, at 83 (1979) (emphasis added). The Statement of Administrative Action (SAA) to the (Continued...)

was a substantial volume of subject imports similar to*** domestically produced GPPWs, and that the sales prices of*** subject imports were consistently lower than the sales prices of its domestically produced GPPWs.¹⁰⁶ As*** faced low-priced subject import competition, its ratio of COGS to net sales increased from*** percent in 2020 to*** percent in 2022 and its ratio of operating income to net sales declined from*** percent in 2020 to*** percent in 2022.¹⁰⁷ The intense competition that*** faced from low-priced subject imports during the 2020-2022 period contributed to*** by importing GPPWs from Vietnam. Thus, even though*** reported importing subject merchandise***,¹⁰⁸ the record does not indicate that*** domestic production operations benefited from these imports, or were otherwise shielded from subject import competition. To the contrary, under the circumstances here, since***, excluding*** from the domestic industry because it imported subject GPPW would invite the paradoxical effect of obscuring injury caused to the domestic industry by those same subject GPPW imports.

Similarly,*** exclusion from the domestic industry would skew the data for the domestic industry. *** is the*** producer accounting for*** percent of domestic production. As*** reported, it imported subject merchandise to lower costs in the face of low-priced subject imports. Thus, excluding*** would have the effect of masking subject imports' impact on the domestic industry's production, employment, and market share, as well as financial performance. For all the foregoing reasons, we find that appropriate circumstances do not exist to exclude*** from the domestic industry as a related party.

In sum, consistent with our definition of the domestic like product, we define a single domestic industry consisting of all U.S. producers of GPPW.

(...Continued)

Uruguay Round Agreements Act likewise explains that the purpose of the related party provision is "to reduce any distortion in industry data caused by the inclusion in the domestic industry of a related producer who is being shielded from the effects of the subject imports." SAA at 858.

¹⁰⁶ Compare U.S. Importers' Questionnaire Response of*** at Questions III-2a with Domestic Producers' Questionnaire Response of*** at Question IV-2b.

¹⁰⁷ CR/PR at Table IV-3.

¹⁰⁸ U.S. Importers' Questionnaire Response of*** at Question II-4.

IV. Cumulation¹⁰⁹

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.¹¹⁰

¹⁰⁹ 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).

During December 2021 – November 2022, the 12-month period preceding the filing of the petitions, subject imports from China (for both the antidumping and countervailing duty investigations) accounted for*** percent of total U.S. imports of GPPW, and subject imports from Vietnam accounted for*** percent of total U.S. imports of GPPW. CR/PR at Table IV-5. As imports from each subject country are clearly above negligible levels, we find that imports from China subject to the antidumping and countervailing duty investigations, and that imports from Vietnam subject to the antidumping duty investigation, are not negligible.

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.¹¹¹ Only a “reasonable overlap” of competition is required.¹¹²

A. Arguments of the Parties

Petitioner argues that the Commission should cumulatively assess imports from both subject countries. It submits that the petitions for both subject countries were filed on the same day and that subject imports from China and Vietnam meet all other criteria to be cumulated.¹¹³ Specifically, Petitioner contends that subject imports were fungible with the domestic like product, present in the market on a national level, sold to***, and imported to the United States consistently throughout the POI.¹¹⁴ Respondents do not contest the cumulation of imports from China and Vietnam for purposes of present material injury.¹¹⁵

B. Analysis and Conclusion

The statutory threshold for cumulation is satisfied in these investigations because Petitioners filed the antidumping and countervailing duty petitions with respect to both subject countries on the same day, December 30, 2022.^{116 117}

(...Continued)

¹¹⁰ 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).

¹¹¹ See, e.g., *Wieland Werke, AG v. United States*, 718 F. Supp. 50 (Ct. Int’l Trade 1989).

¹¹² 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.”)).

¹¹³ Petitioner’s Prehr’g Br. at 16-17.

¹¹⁴ Petitioner’s Prehr’g Br. at 20.

¹¹⁵ Respondents’ Prehr’g Br. at 22.

¹¹⁶ CR/PR at I-1.

¹¹⁷ None of the statutory exceptions to cumulation apply. We observe that these investigations involve dumping findings regarding GPPWs from China and Vietnam and subsidy findings regarding GPPWs from China. Consequently, any decision to cumulate imports from all subject sources in these investigations will involve “cross-cumulating” dumped imports with subsidized imports. We have previously explained that we are continuing our longstanding practice of cross-cumulating. See *Polyethylene Terephthalate (PET) Resin from Canada, China, India, and Oman*, Inv. Nos. 701-TA-531-532 and 731-TA-1270-1273 (Final), USITC Pub. 4604 at 9-11 (April 2016).

The record also indicates that there is a reasonable overlap of competition between subject imports from both countries, and between subject imports from each source and the domestic like product, for the reasons discussed below.

Fungibility. The record indicates that domestically produced GPPWs and imports of GPPWs from each subject country are generally fungible. All three responding U.S. producers, nearly all responding importers, and most purchasers reported that subject imports from each subject country were always interchangeable with each other as well as with domestically produced GPPWs.¹¹⁸ Furthermore, U.S. producers and importers reported usable data for domestic shipments and shipments of imports from each subject country for three of the four pricing products.¹¹⁹ Moreover there is substantial overlap between shipments of the domestic like product and subject imports, and between shipments of imports of GPPWs from each subject country, in terms of product type.¹²⁰

In response to questions concerning how often differences other than price were significant in sales of GPPWs from different sources, all responding domestic producers reported that such differences were only “sometimes” or “never” significant between the domestic like product and subject imports from China and Vietnam, and between subject imports from both subject countries.¹²¹ Similarly, the vast majority of responding U.S. importers indicated that such differences were only “sometimes” or “never” significant in comparisons between the domestic like product and subject imports from China and Vietnam, while all reported that such differences were only “sometimes” or “never” significant in comparisons between subject imports from both subject countries.¹²² On the other hand, most responding purchasers reported that differences other than price were “always” or “frequently” significant in sales of GPPWs from the three sources.¹²³

Channels of Distribution. During the POI, the domestic like product and imports from both subject countries were sold primarily to retailers other than online retailers, but also to online retailers, distributors, and end users.¹²⁴ The domestic like product was sold almost exclusively to retailers, particularly retailers other than online retailers, with very small

¹¹⁸ CR/PR at II-21. Factors reported by importers that limited interchangeability include quality, fuel type, operating pressure, flow rate, compatible accessories, and regulatory concerns. *Id.* at II-21-22.

¹¹⁹ CR/PR at Tables V-3-6.

¹²⁰ CR/PR at Table IV-10. In 2022, full completed units of GPPWs accounted for*** percent of U.S. producers’ U.S. shipments of the domestic like product,*** percent of U.S. importers’ U.S. shipments of subject imports from Vietnam, and*** percent of U.S. importers’ U.S. shipments of subject imports from China. *Id.* The majority (*** percent) of U.S. producers’ U.S. shipments were of residential grade, with substantial quantities of U.S. producers’ U.S. shipments (*** percent) being of commercial grade in 2022. *Id.* U.S. importers’ U.S. shipments of subject merchandise from Vietnam were*** percent residential grade while*** percent of U.S. importers’ U.S. shipments of subject merchandise from China were residential grade in 2022. *Id.*

¹²¹ CR/PR at Table II-14.

¹²² CR/PR at Table II-15.

¹²³ CR/PR at Table II-16.

¹²⁴ CR/PR at Table II-1.

quantities sold to distributors and other end users.¹²⁵ Subject imports from China were also sold overwhelmingly to retailers, almost exclusively to retailers other than online retailers, with very small quantities sold to distributors and other end users.¹²⁶ The majority of subject imports from Vietnam were sold to retailers, mostly retailers other than online retailers, with appreciable volumes sold to distributors and end users.¹²⁷

Geographic Overlap. Domestic producers reported shipping the domestic like product to all six regions of the contiguous United States.¹²⁸ Responding importers reported shipping imports from each subject country to all six regions as well.¹²⁹ The majority of subject imports from China entered through ports located in the East and West, while substantial quantities of subject imports from China also entered through ports located in the South and appreciable quantities of subject imports from China entered through ports located in the North.¹³⁰ The majority of subject imports from Vietnam entered through ports located in the East, while substantial quantities also entered through ports located in the West and appreciable quantities entered through ports located in the North and South.¹³¹

Simultaneous Presence in Market. Domestically produced GPPWs and imports from each subject country were present in the U.S. market throughout the POI.¹³²

Conclusion. The record indicates that subject imports from China and Vietnam are generally fungible with the domestic like product and each other. It also shows that subject imports from both countries and the domestic like product were sold in similar channels of distribution and geographic markets, and were simultaneously present in the U.S. market. In light of the foregoing, and in the absence of any contrary argument, we find that there is a reasonable overlap of competition between and among subject imports from China and Vietnam and the domestic like product. Therefore, we cumulate subject imports from China and Vietnam for purposes of our material injury analysis.

V. Material Injury by Reason of Subject Imports

Based on the record in the final phase of this investigation, we find that an industry in the United States is materially injured by reason of imports of GPPWs from Vietnam that Commerce has found to be sold in the United States at less than fair value.

¹²⁵ CR/PR at Table II-1.

¹²⁶ CR/PR at Table II-1.

¹²⁷ CR/PR at Table II-1.

¹²⁸ CR/PR at Table II-2.

¹²⁹ CR/PR at Table II-2.

¹³⁰ CR/PR at Table IV-11.

¹³¹ CR/PR at Table IV-11.

¹³² CR/PR at Table IV-12. Subject imports from Vietnam were not present in the U.S. market for one month of the POI, January 2020. *Id.*

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.¹³³ In making this determination, the Commission must consider the volume of subject imports, their effect on prices for the domestic like product, and their impact on domestic producers of the domestic like product, but only in the context of U.S. production operations.¹³⁴ The statute defines “material injury” as “harm which is not inconsequential, immaterial, or unimportant.”¹³⁵ 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.¹³⁶ 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.”¹³⁷

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,¹³⁸ 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.¹³⁹ 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.¹⁴⁰

¹³³ 19 U.S.C. §§ 1671d(b), 1673d(b).

¹³⁴ 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).

¹³⁵ 19 U.S.C. § 1677(7)(A).

¹³⁶ 19 U.S.C. § 1677(7)(C)(iii).

¹³⁷ 19 U.S.C. § 1677(7)(C)(iii).

¹³⁸ 19 U.S.C. §§ 1671d(b), 1673d(b).

¹³⁹ *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’d*, 944 F. Supp. 943, 951 (Ct. Int’l Trade 1996).

¹⁴⁰ 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).

In many investigations, there are other economic factors at work, some or all of which may also be having adverse effects on the domestic industry. Such economic factors might include nonsubject imports; changes in technology, demand, or consumer tastes; competition among domestic producers; or management decisions by domestic producers. The legislative history explains that the Commission must examine factors other than subject imports to ensure that it is not attributing injury from other factors to the subject imports, thereby inflating an otherwise tangential cause of injury into one that satisfies the statutory material injury threshold.¹⁴¹ In performing its examination, however, the Commission need not isolate the injury caused by other factors from injury caused by unfairly traded imports.¹⁴² 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.¹⁴³ It is clear that the existence of injury caused by other factors does not compel a negative determination.¹⁴⁴

¹⁴¹ 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.

¹⁴² 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.”).

¹⁴³ S. Rep. 96-249 at 74-75; H.R. Rep. 96-317 at 47.

¹⁴⁴ *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.”).

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.”¹⁴⁵ The Commission ensures that it has “evidence in the record” to “show that the harm occurred ‘by reason of’ the LTFV imports,” and that it is “not attributing injury from other sources to the subject imports.”¹⁴⁶ The Federal Circuit has examined and affirmed various Commission methodologies and has disavowed “rigid adherence to a specific formula.”¹⁴⁷

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.¹⁴⁸ Congress has delegated this factual finding to the Commission because of the agency’s institutional expertise in resolving injury issues.¹⁴⁹

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. Demand Considerations

U.S. demand for GPPWs is driven by final consumer demand for power washing, especially power washing that requires a GPPW (as opposed to less powerful options, such as

¹⁴⁵ *Mittal Steel*, 542 F.3d at 876 & 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 comporting with the Court’s guidance in *Mittal*.

¹⁴⁶ *Mittal Steel*, 542 F.3d at 873 (quoting from *Gerald Metals*, 132 F.3d at 722), 877-79. We note that one relevant “other factor” may involve the presence of significant volumes of price-competitive nonsubject imports in the U.S. market, particularly when a commodity product is at issue. In appropriate cases, the Commission collects information regarding nonsubject imports and producers in nonsubject countries in order to conduct its analysis.

¹⁴⁷ *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.”).

¹⁴⁸ We provide in our discussion below a full analysis of other factors alleged to have caused any material injury experienced by the domestic industry.

¹⁴⁹ *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.”).

EPPWs).¹⁵⁰ The parties generally agree that sales of GPPWs are seasonal with sales increasing in the beginning of each new year to build inventories for the spring and summer months.¹⁵¹

The responses of reporting firms regarding demand trends in the POI varied.¹⁵² Two of four responding U.S. producers reported that U.S. demand for GPPWs steadily increased since January 1, 2020, while the other two reported that it fluctuated downwards.¹⁵³ Five of 11 responding U.S. importers reported that U.S. demand for GPPWs had not changed since January 1, 2020, while two reported that it steadily increased, one reported that it fluctuated upwards, two reported that it fluctuated downwards, and one reported that it steadily decreased.¹⁵⁴ Three of seven purchasers reported that U.S. demand for GPPWs fluctuated downwards since January 1, 2020, while one reported that it steadily decreased, two reported that it fluctuated upwards, and one reported that it steadily increased.¹⁵⁵ Reasons cited for increased demand during the POI include the COVID-19 pandemic economic stimulus checks and lockdowns, which increased interest in home improvement and do-it-yourself (“DIY”) projects, and government subsidies distributed to construction companies for infrastructure projects and municipality upgrades.¹⁵⁶ Reasons cited for decreased demand during the POI include a return to historic norms in 2022 after the effects of the COVID-19 pandemic dissipated and a shift from GPPWs to EPPWs.¹⁵⁷

Substitutes for GPPWs are mainly EPPWs and, to a lesser extent, battery powered pressure washers (“BPPWs”). All responding U.S. producers and purchasers and almost all responding U.S. importers reported that EPPWs were a substitute for GPPWs, while one responding U.S. importer and two responding purchasers reported that BPPWs were a substitute for GPPWs.¹⁵⁸ Almost all responding U.S. producers and purchasers reported that changes in EPPW demand impacted GPPW demand, most responding U.S. importers disagreed.¹⁵⁹ U.S. producer*** reported that EPPW demand has a greater impact on demand for lower PSI rated GPPWs.¹⁶⁰ Responding purchasers reported that demand particularly shifted from GPPWs to EPPWs for DIY and residential uses,¹⁶¹ that entry level consumers can be

¹⁵⁰ CR/PR at II-10.

¹⁵¹ CR/PR at II-10; Petitioner’s Prehr’g Br. at 10; Respondents’ Prehr’g Br. at 35-37.

¹⁵² CR/PR at II-10-11, Table II-4.

¹⁵³ CR/PR at Table II-4.

¹⁵⁴ CR/PR at Table II-4.

¹⁵⁵ CR/PR at Table II-4.

¹⁵⁶ CR/PR at II-10-11; Petitioner’s Prehr’g Br. at 10; Respondents’ Prehr’g Br. at 41-42.

¹⁵⁷ CR/PR at II-11; Petitioner’s Prehr’g Br. at 10; Respondents’ Prehr’g Br. at 38-42.

¹⁵⁸ CR/PR at II-11. As noted above in Section II.B., GPPWs are better suited for larger surface areas and tougher stains than EPPWs because they are generally considered more powerful and faster. CR/PR at I-8-9.

¹⁵⁹ CR/PR at II-11.

¹⁶⁰ CR/PR at II-11.

¹⁶¹ CR/PR at II-11. Respondents similarly argued that EPPWs represent a large and growing share of the U.S. pressure washer market, particularly the residential market. Respondents’ Prehr’g Br. at 38-40.

intimidated by GPPWs and therefore opt for EPPWs, and that short supplies of pressure washers using one fuel source can force customers to turn to alternative options.¹⁶²

Apparent U.S. consumption of GPPWs increased from*** units in 2020 to*** units in 2021, before decreasing to*** units in 2022, a level*** percent lower than in 2020.¹⁶³

Apparent U.S. consumption of GPPWs was also*** percent lower in interim 2023, at*** units, than in interim 2022, at*** units.¹⁶⁴

2. Supply Considerations

During the POI, the U.S. market for GPPWs was exclusively supplied by the domestic industry and subject imports from China and Vietnam,¹⁶⁵ as there were no reported imports from nonsubject sources.¹⁶⁶

The domestic industry was the largest supply source to the U.S. market throughout the POI, though its share of apparent U.S. consumption decreased from*** percent in 2020 to*** percent in 2021 and*** percent in 2022; it was higher in interim 2023, at*** percent, than in interim 2022, at*** percent.¹⁶⁷ Although*** responding U.S. producers reported the ability to shift production from other products,¹⁶⁸*** of the production during the POI by U.S. producers was GPPWs.¹⁶⁹ The domestic industry's practical GPPWs capacity increased from*** units in 2020 to*** units in 2021 and 2022; it was lower in interim 2023, at*** units, than in interim 2022, at*** units.¹⁷⁰ The domestic industry's practical capacity utilization for GPPWs increased from*** percent in 2020 to*** percent in 2021, before decreasing to*** percent in 2022; it was lower in interim 2023, at*** percent, than in interim 2022, at*** percent.¹⁷¹

As discussed above, reported changes to the domestic industry during the POI include***.¹⁷² In addition, FNA expanded its GPPW production capacity from*** units per year to*** units per year in 2020 with the opening of its new production facility in Mesquite, Texas.¹⁷³

¹⁶² CR/PR at II-11.

¹⁶³ CR/PR at IV-26, Table IV-15.

¹⁶⁴ CR/PR at IV-26, Table IV-15.

¹⁶⁵ CR/PR at Tables IV-15 and C-1.

¹⁶⁶ CR/PR at II-8, Tables IV-15 and C-1.

¹⁶⁷ CR/PR at Tables IV-15 and C-1.

¹⁶⁸ CR/PR at Table II-3.

¹⁶⁹ CR/PR at III-9, Table III-8.

¹⁷⁰ CR/PR at Table III-5. The domestic industry's practical overall capacity increased from*** units in 2020 to*** units in 2021 and 2022; it was lower in interim 2023, at*** units, than in interim 2022, at*** units. *Id.*

¹⁷¹ CR/PR at Table III-5. The domestic industry's practical overall capacity utilization increased from*** percent in 2020 to*** percent in 2021, before decreasing to*** percent in 2022; it was lower in interim 2023, at*** percent, than in interim 2022, at*** percent. *Id.*

¹⁷² CR/PR at III-3, III-7, n.5.

¹⁷³ CR/PR at III-3; Petitioner's Prehr'g Br. at 11.

Subject imports' share of apparent U.S. consumption increased from*** percent in 2020 to*** percent in 2021 and*** percent in 2022; it was lower in interim 2023, at*** percent, than in interim 2022, at*** percent.^{174 175}

When asked if they had experienced any supply constraints between January 1, 2020, and December 30, 2022, half of responding U.S. producers and U.S. importers and a plurality of responding purchasers reported that they did not.¹⁷⁶ The firms that reported supply constraints for this period, including*** U.S. producers,*** U.S. importers, and*** purchasers, cited Honda's exit from the domestic engine market and the limited availability of domestic engines that resulted,¹⁷⁷ the COVID-19 pandemic,¹⁷⁸ supply chain challenges, shipping delays, and increased freight costs.¹⁷⁹ Responding U.S. importer***, which accounted for*** percent

¹⁷⁴ CR/PR at Tables IV-15 and C-1.

¹⁷⁵ U.S. importer***. Commission staff followed up with***, but*** was ultimately unable to provide these data because the data were***. CR/PR at IV-1, n.4. Because*** did not complete a foreign producers' questionnaire response, data on GPPWs exported from*** are also unavailable.

Respondents contend that the inclusion of*** is distortive because it creates the appearance of***. They therefore argue that the Commission should rely on***. Respondents' Final Comments, EDIS Doc. 804572 (Sept. 20, 2023) at 14. We disagree. While we recognize that the*** may overstate the market share shift from 2020 to 2021, we include*** import data in our analysis for the following reasons. As an initial matter, even if*** data were excluded, the record would show that there was a significant market share shift of nearly*** percent overall between 2020 and 2022, with the domestic industry share declining from*** percent to*** percent from 2020 to 2021, and subject imports increasing from*** percent in 2020 to*** percent in 2021. Thus, inclusion of Briggs & Stratton's data only emphasizes the continuation of a market share shift from 2021 to 2022. *Calculated from* U.S. Importers' Questionnaire Response of*** at Questions at II-5a and II-6a *and* CR/PR at Tables IV-15 and C-1. Second, notwithstanding the absence of 2020 data,*** was one of the*** U.S. importers of subject GPPWs, accounting for the*** share of subject imports in 2022, at*** percent, and thus exclusion of these data would substantially distort the data concerning subject import volume from 2021 to 2022 for which we have complete data. *Id.* at I-3, IV-1, Table IV-1. Thus, we believe that*** data has probative value in this case.

¹⁷⁶ CR/PR at II-8-9. Although*** reported that it did not experience supply constraints during this period, at the hearing Petitioner's economist stated, ". . . if you think back to that period, {2020 to 2021,} there were significant supply constraints everywhere and supply chain disruptions everywhere. . . . {I}n other words, it wasn't just U.S. producers having trouble getting inputs. It was also the foreign producers who were also having trouble getting things here." Hr'g Tr. at 56 (Szamosszegi).

¹⁷⁷ CR/PR at II-8-9. U.S. producer*** and U.S. importer*** reported supply constraints related to*** exit from the U.S. engine market and a limited availability of engines. *Id.* Respondents similarly contend that Honda's decision to discontinue domestic production of GPPW engines hindered the operations of U.S. producers and their ability to source GPPW engines domestically, particularly FNA and***. Respondents' Prehr'g Br. at 29-30. However, Petitioner claims that Honda's exit from the domestic engine market did not negatively impact FNA nor cause any meaningful engine shortage for***, given that Honda gave ample notice to FNA,***, and other domestic producers of its impending exit from the U.S. engine market and continued to produce and sell engines in the U.S. market well into 2022, particularly for its GPPW customers. Petitioner's Posthr'g Br. at 12.

¹⁷⁸ CR/PR at II-9; Respondents' Prehr'g Br. at 30-33.

¹⁷⁹ CR/PR at II-9; Respondents' Prehr'g Br. at 30-33.

of subject imports in 2022, reported that the COVID-19 pandemic caused shortages, disruptions, delays, space constraints, and changes to container rates.¹⁸⁰ A majority of responding U.S. producers reported supply constraints following the filing of the petitions on December 30, 2022, including freight delays, price increases, and engine supply delays.¹⁸¹

3. Substitutability and Other Conditions

We find that there is a high degree of substitutability between domestically produced GPPWs and subject imports.¹⁸² As noted above in Section IV.B., most responding firms reported that subject imports from each subject country were always interchangeable with domestically produced GPPWs.¹⁸³ When asked to compare domestically produced GPPWs with subject imports from each subject country based on 16 purchasing factors, majorities of responding purchasers rated domestically produced GPPWs as either superior or comparable to subject imports from China for all factors and to subject imports from Vietnam for all but one factor.¹⁸⁴ The other factors contributing to this high level of substitutability include similar quality, availability, and U.S. producers' and importers' responses regarding the limited significance of factors other than price in purchasing decisions.¹⁸⁵ Factors that may have reduced the substitutability of domestic and subject GPPWs include differences in customers' preferences for engine brands,¹⁸⁶ varying lead times from domestic and subject sources, especially for importers' produced-to-order GPPWs, and the preference of some purchasers for GPPWs from particular producers.¹⁸⁷

¹⁸⁰ U.S. Importers' Questionnaire Response of*** at Question II-2b; CR/PR at Table IV-1. Responding U.S. importers*** also reported that COVID-19 pandemic related factory shutdowns led to longer lead times and manufacturing/shipment delays. *** added that the COVID-19 pandemic caused shutdowns for manufacturers of components and GPPWs and disrupted international shipping due to a shipping container shortage. CR/PR at II-9.

¹⁸¹ CR/PR at II-9.

¹⁸² CR/PR at II-12.

¹⁸³ CR/PR at Tables II-11-13.

¹⁸⁴ CR/PR at Table II-10. Responding purchasers were divided between the reliability of supply being superior or inferior (two each) when comparing domestically produced GPPWs to subject imports from Vietnam. *Id.*

¹⁸⁵ CR/PR at II-12.

¹⁸⁶ Respondents argue that that engine brand was an important purchasing factor, with Honda being the preferred brand and the reason that FNA was able to charge premium prices for its GPPWs. Respondents' Prehr'g Br. at 30, 61-62; Respondents' Posthr'g Br. at 14, Annex G at 4-5. Although a majority of responding purchasers reported that their customers prefer GPPWs made with a particular engine brand, including Honda (all four purchasers) and Briggs and Stratton (one purchaser), a majority of responding purchasers also reported they have no preference for any particular engine brand. CR/PR at II-13. Further, all responding purchasers rated engine brand as only somewhat important. *Id.* at Table II-7. Lastly, almost all responding purchasers reported the engine brand of domestically produced GPPWs as comparable to that of subject imports from each subject country. *Id.* at Table II-10.

¹⁸⁷ CR/PR at II-12.

We also find that price is an important factor in purchasing decisions for GPPWs. Responding U.S. purchasers most often cited price, as well as quality, as among their top three purchasing factors (six each), followed by availability/capacity to supply (five) and brand (four).¹⁸⁸ Additionally, five of seven responding purchasers reported that price was a very important purchasing factor, although a greater number of responding purchasers identified availability, product consistency, quality meets industry standards, and reliability of supply as very important purchasing factors.¹⁸⁹ All responding U.S. producers and most responding U.S. importers reported that differences other than price were only sometimes or never significant in their sales of GPPWs.¹⁹⁰ Responding purchasers' responses varied, but all reported that non-price differences were either always, frequently, or sometimes significant.¹⁹¹ All responding purchasers also reported that they sometimes purchase the lowest-priced product.¹⁹²

Pressure washers may be categorized as either commercial or residential models, with commercial models generally offering higher performance metrics than residential models.¹⁹³ The majority of both U.S. producers' and U.S. importers' U.S. shipments of GPPWs consisted of residential grade models.¹⁹⁴ U.S. producers' share of total U.S. shipments of complete residential units from all sources decreased from*** percent in 2020 to*** percent in 2021 and*** percent in 2022; concomitantly, U.S. importers' share of total U.S. shipments of complete residential units from all sources increased from*** percent in 2020 to*** percent in 2021, and to*** percent in 2022.¹⁹⁵ U.S. producers accounted for most U.S. shipments of

¹⁸⁸ CR/PR at Table II-6.

¹⁸⁹ CR/PR at Table II-7. Respondents argue that responding purchasers reported that non-price factors were at least as important if not more important than price in driving purchasing decisions of GPPWs. Respondents' Prehr'g Br. at 61-62; Respondents' Posthr'g Br. at 10, Annex G at 1-3. However, the fact that responding purchasers reported that certain non-price factors were very important to their purchasing decisions does not negate the other evidence indicating that price was also an important purchasing factor. Moreover, majorities of responding purchasers rated domestically produced GPPWs as either superior or comparable to subject imports from each subject country for all but one of the factors rated as very important by over five responding purchasers.

¹⁹⁰ CR/PR at Tables II-14-15.

¹⁹¹ CR/PR at Table II-16. An equal number of purchasers reported non-price factors as always, frequently, and sometimes important when comparing domestically produced GPPWs with subject imports from China, and a slight plurality of purchasers reported non-price factors as frequently important when comparing domestically produced GPPWs with subject imports from Vietnam. *Id.*

¹⁹² CR/PR at II-14.

¹⁹³ CR/PR at I-12. We note that even though these are the generally accepted categories of power washer models, there is no bright-line distinction between commercial and residential grade power washers and products within the two categories may overlap in terms of end use applications. *Id.*

¹⁹⁴ CR/PR at Tables E-1-2. As a share of U.S. producers' and U.S. importers' total U.S. shipments, complete residential units were*** percent and*** percent, respectively, in 2020,*** percent and*** percent, respectively, in 2021, and*** percent and*** percent, respectively, in 2022; they were*** percent and*** percent, respectively, in interim 2022, and*** percent and*** percent, respectively, in interim 2023. *Id.*

¹⁹⁵ CR/PR at Table IV-17. U.S. producers' share of total shipments of complete residential units from all sources was higher in interim 2023, at*** percent, than in interim 2022, at*** percent. U.S. (Continued...)

complete commercial units during the POI.¹⁹⁶ However, U.S. importers of subject GPPWs increased their share of total U.S. shipments of complete commercial units from*** percent in 2020 to*** percent in 2021 and*** percent in 2022; it was*** percent in interim 2023 compared to*** percent in 2022.¹⁹⁷

During the POI, U.S. producers primarily sold GPPWs using annual contracts, with lesser but substantial quantities sold on the spot market, and a very small portion sold via short-term contracts.¹⁹⁸ U.S. importers sold subject imported GPPWs almost entirely on the spot market, with a very small quantity sold using annual contracts.¹⁹⁹ Most responding purchasers reported a preference for contracts, citing reasons such as ensured availability and stability, maintaining relationships and access to support, and company policy.²⁰⁰

During the POI, the vast majority of domestically produced GPPWs (*** percent) were sold primarily from inventory with lead times averaging*** days, and the remainder were produced to order with lead times averaging*** days.²⁰¹

Raw materials account for a large share of the costs of producing GPPWs.²⁰² GPPWs are comprised of an internal combustion engine with a power take-off shaft, pumps, hoses, nozzles, and spray gun, with all these parts mounted on a (usually wheeled) steel frame.²⁰³ GPPW producers (both domestic and foreign) may manufacture some of these components or may purchase them from other suppliers.²⁰⁴ All responding U.S. producers and most responding U.S. importers reported that raw material prices had generally increased during the POI.²⁰⁵

(...Continued)

importers' share of total U.S. shipments of complete residential units from all sources was lower in interim 2023, at*** percent, than in interim 2022, at*** percent. *Id.*

¹⁹⁶ CR/PR at Table IV-17. U.S. producers' share of U.S. shipments of complete commercial units was*** percent in 2021, *** percent in 2021, and*** percent in 2022; it was*** percent in interim 2022, and*** percent in interim 2023. *Id.*

¹⁹⁷ CR/PR at Table IV-18.

¹⁹⁸ CR/PR Table V-2. U.S. producer*** was the only firm to report***. *Id.* at V-4, n.15. It reported that its***. *Id.* at V-4, n.16. Petitioner claims that the domestic industry's annual contracts operate*** in practice. Petitioner's Postthr'g Br., Exh. 2 at 1-2. U.S. producer*** was the only firm to report***. CR/PR at V-4, n.15.

¹⁹⁹ CR/PR at Table V-2.

²⁰⁰ CR/PR at V-4.

²⁰¹ CR/PR at II-15. Slightly more than half of cumulated subject imports (*** percent) were sold from inventories, split between U.S. inventories, accounting for*** percent of sales with lead times averaging*** days, and foreign inventories, accounting for*** percent of sales with lead times averaging*** days. The remainder were produced to order with lead times averaging*** days. *Id.*

²⁰² CR/PR at V-1. As a share of the domestic industry's COGS, raw materials decreased from*** percent in 2020 to*** percent in 2021 and*** percent in 2022; it was*** percent lower in interim 2023, at*** percent, compared with interim 2022, at*** percent. *Id.* at V-1, Table VI-1.

. Petitioner classified. CR/PR at VI-12, n.11. Petitioner provided a calculation that reclassified***. See Petitioner's Postthr'g Br., Exh. 1 at 12-14, Exh. 4.

²⁰³ CR/PR at V-1.

²⁰⁴ CR/PR at V-1.

²⁰⁵ CR/PR at V-1.

Most of the responding purchasers familiar with GPPW raw materials (three of four) reported that raw material prices impacted their negotiations or contracts to purchase GPPWs.²⁰⁶

Subject merchandise from China classified under HTS subheading 99.03.88.03 became subject to additional tariffs of 25 percent *ad valorem* pursuant to Section 301 of the Tariff Act of 1974²⁰⁷ (“Section 301”), effective May 10, 2019.²⁰⁸ All responding U.S. producers and majorities of responding U.S. importers and purchasers reported that the Section 301 tariffs impacted the GPPW market.²⁰⁹ Impacts of these tariffs cited by responding firms include increased costs and retail prices, production and supply chains moving from China to Vietnam, and smaller margins for suppliers.²¹⁰

Subject merchandise is not subject to additional duties pursuant to Section 232 of the Trade Expansion Act of 1962 (“Section 232”).^{211 212} However, certain steel and aluminum inputs that are used in the production of GPPWs may be subject to additional Section 232 tariffs.²¹³

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.”²¹⁴

The volume of cumulated subject imports increased from*** units in 2020 to*** units in 2021, before declining to*** units in 2022, for an overall increase of*** percent from 2020 to 2022.^{215 216}

²⁰⁶ CR/PR at V-1-2.

²⁰⁷ 19 U.S.C. § 2411.

²⁰⁸ CR/PR at I-8. Some exclusions were granted effective September 28, 2018, for certain components imported from China that may be used in the production of GPPWs, but these exclusions expired as of August 7, 2020. *Id.*

²⁰⁹ CR/PR at II-4.

²¹⁰ CR/PR at II-4.

²¹¹ 19 U.S.C § 1862.

²¹² CR/PR at I-8.

²¹³ CR/PR at I-8.

²¹⁴ 19 U.S.C. § 1677(7)(C)(i).

²¹⁵ CR/PR at Tables IV-2-3. The volume of cumulated subject imports was*** units in interim 2023, compared to*** units in interim 2022. *Id.* at Tables IV-2-3.

²¹⁶ The petitions in these investigations were filed on December 30, 2022. Respondents argue that the significant decline in subject import volume and market share in interim 2023 compared to interim 2022 was unrelated to the pendency of the investigations because the long lead times reported by responding importers mean that subject imports delivered in interim 2023 would have been ordered before the filing of the petitions. Respondents’ Posthr’g Br., Annex K at 1-2, Annex L at 6-7. Petitioner does not address the issue.

Cumulated subject import market share was*** percentage points lower in interim 2023, after the filing of the petitions, than in interim 2022. CR/PR at Tables IV-15 and C-1. While we recognize that (Continued...)

Cumulated subject imports' share of apparent U.S. consumption increased from*** percent in 2020 to*** percent in 2021 and*** percent in 2022.^{217 218}

We find that the volume of cumulated subject imports and the increase in that volume are significant, both 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.²¹⁹

As discussed in Section V.B.3. above, we have found that there is high degree of substitutability between the domestic like product and cumulated subject imports, and that price is an important factor in purchasing decisions.

The Commission collected quarterly pricing data from U.S. producers and importers for the total quantity and f.o.b. values of four pricing products shipped to unrelated U.S. customers during the POI.²²⁰ Two U.S. producers and four importers provided usable pricing data for sales

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just over*** of subject imports are sold from inventory (*** percent from U.S. inventories;*** percent from foreign inventories), with lead times averaging*** to*** days, apparent U.S. consumption was*** percent lower in interim 2023 than in interim 2022 while the volume of U.S. importers' U.S. shipments of subject imports was*** percent lower. *Id.* at II-15, IV-26, Tables IV-15 and C-1. Given this, and because interim 2023 encompasses only three months of data, we attach reduced weight to interim 2023 data for purposes of our analysis of subject import volume and market share.

²¹⁷ CR/PR at Table IV-15. Cumulated subject imports' share of apparent U.S. consumption was lower in interim 2023, at*** percent, than in interim 2022, at*** percent. *Id.*

²¹⁸ U.S. shipments of cumulated subject imports increased from*** units in 2020 to*** units in 2021, before decreasing to*** units in 2022, for an overall increase of*** percent over this period; they were lower in interim 2023, at*** units, than in interim 2022, at*** units. CR/PR at Tables IV-15 and C-1.

The ratio of cumulated subject imports to domestic production increased from*** percent in 2020 to*** percent in 2021, before declining to*** percent in 2022; it was lower in interim 2023, at*** percent, than in interim 2022, at*** percent. *Id.* at Table IV-2.

²¹⁹ 19 U.S.C. § 1677(7)(C)(ii).

²²⁰ CR/PR at V-6. The full definitions of the pricing products are as follows:

Product 1.-- Consumer grade gas powered pressure washer with an axial pump and a pressure rating of 2700 psi up to and including 3100 psi, with a flow of 2.3 or 2.4 gallons per minute ("GPM").

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of the requested products, although not all firms reported pricing for all products for all quarters.²²¹ Pricing data reported by these firms accounted for approximately*** percent of U.S. producers' commercial U.S. shipments,*** percent of commercial U.S. shipments of subject imports from China, and*** percent of commercial U.S. shipments of subject imports from Vietnam in 2022.²²²

The pricing data show near-universal underselling of the domestic like product by cumulated subject imports. Specifically, cumulated subject imports undersold the domestic like product in 60 of 63 quarterly comparisons, involving 1.1 million units of cumulated subject imports, at underselling margins that ranged from 6.8 to 51.1 percent and averaged 22.1 percent.²²³ Cumulated subject imports oversold the domestic like product in the remaining

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Product 2.-- Consumer grade gas powered pressure washer with an axial pump and a pressure rating of 3200 psi up to and including 3600 psi, with a flow of 2.3 GPM up to and including 2.8 GPM.

Product 3.-- Professional grade gas powered pressure washer with a triplex pump and a pressure rating of 3000 psi up to and including 3700 psi, with a flow of 2.3 GPM up to and including 3.0 GPM.

Product 4.-- Professional grade gas powered pressure washer with a triplex pump and a pressure rating of 3800 psi up to and including 4400 psi, with a flow of 2.5 GPM up to and including 4.0 GPM. *Id.*

²²¹ Respondents argue that the Commission should disregard the pricing data reported by*** because*** reported*** and because the distinction between residential and commercial products in the pricing data is not, in their view, clearly defined. Respondents' Posthr'g Br., Annex E at 6–9. We decline to do so for several reasons. First, the variance between FNA's reported sales volumes of commercial and residential pricing products and its reported U.S. shipments of commercial and residential GPPWs is explained by the different definitions used to collect these data. Whereas professional or commercial grade units were defined in Question II-10 of the Domestic Producers' Questionnaire as beginning at 3,400 PSI, for purposes of collecting U.S. shipment data, the pricing products defined professional grade units as beginning at 3,000 PSI. *Compare* Domestic Producers' Questionnaire at Question II-10 *with* CR at V-6, (product 3); *see* CR/PR at V-7, n.25. Second, FNA's reported U.S. shipments of consumer and professional grade GPPWs reconcile with its total U.S. shipments or fall within the normal bounds of pricing as a subset of total U.S. shipments. *Compare**** U.S. Producers' Questionnaire at question II-10 *with* question IV-2b.; *Compare**** U.S. Importers' Questionnaire at question II-5c. *with* question III-2a. *and* question II-6c. *with* question III-2c. Finally, we note that Respondents did not comment on the definitions of commercial or professional grade GPPWs used in the draft questionnaires to collect U.S. shipment and pricing data. In any event, the record indicates that there is no generally accepted PSI at which GPPW are considered commercial or professional grade, and that more powerful residential-grade GPPW may overlap with less-powerful commercial-grade GPPW in terms of performance. CR/PR at I-12; Conference Tr. at 20–21 (Alexander); Hr'g Tr. at 89–91 (Alexander), 129 (Lutz) (stating “. . . the distinction between residential and commercial GPPWs is not well defined.”).

²²² CR/PR at V-7. No importers reported usable pricing data for pricing product 4. *Id.*

²²³ CR/PR at Tables V-9 and V-10. Respondents argue that a portion of the underselling by subject imports from China was due to***. Respondents' Prehr'g Br. at 50–51. As an initial matter,*** reported that they had***, reinforcing that subject imports were available at relatively low prices. *See* CR/PR at Table III-15. Moreover, even excluding*** pricing data, cumulated subject imports undersold the domestic like product in*** of*** quarterly comparisons, involving*** units of cumulated subject imports, at margins ranging from*** to*** percent and averaging*** percent; cumulated subject

(Continued...)

three quarterly price comparisons, involving 41,083 units of cumulated subject imports, at overselling margins that ranged from 7.3 to 11.7 percent and averaged 9.3 percent.²²⁴ Thus, cumulated subject imports undersold the domestic like product in 95.2 percent of quarterly comparisons corresponding to 96.5 percent of the volume of reported sales of cumulated subject imports.²²⁵

We have also considered U.S. purchaser responses regarding lost sales. Four of seven purchasers reported purchasing cumulated subject imports instead of the domestic like product during the POI.²²⁶ All four of these purchasers reported that the cumulated subject imports were priced lower than the domestic like product and three reported that they had purchased*** units of subject imports in lieu of the domestic like product primarily due to price.²²⁷ This volume of confirmed lost sales since January 1, 2020, was equivalent to*** percent of purchasers' reported purchases and imports of subject imports and*** percent of reported U.S. shipments of subject imports during the 2020-2022 period.²²⁸ Responding purchaser***, the second-largest reported purchaser of GPPW in the U.S. market, accounted for the vast majority (*** percent) of the volume of confirmed lost sales.²²⁹

Based on the high degree of substitutability between domestically produced GPPWs and cumulated subject imports, the importance of price in purchasing decisions, the near-universal underselling by cumulated subject imports, and the significant volume of confirmed lost sales,

(...Continued)

imports oversold the domestic like product in the remaining*** quarterly comparisons, associated with*** units of subject imports, at margins ranging from*** to*** percent and averaging*** percent. *Derived from*** U.S. Importers' Questionnaire at Question III-2(a-c) and CR/PR at Table V-8-9.* Furthermore, even when removing imports reported by all*** that provided usable pricing data from the quarterly price comparisons, subject imports still undersold the domestic industry in*** of*** available quarterly comparisons, involving*** units of cumulated subject imports, at margins that ranged from*** to*** percent and averaging*** percent; cumulated subject imports oversold the domestic like product in the remaining*** quarterly comparisons, associated with*** units of subject imports, at margins ranging from*** to*** percent and averaging*** percent. *Derived from*** U.S. Importers' Questionnaires at Question III-2(a-c) and CR/PR at Table V-8-9.*

²²⁴ CR/PR at Tables V-8 and V-9.

²²⁵ *Calculated from* CR/PR at Table V-9.

²²⁶ CR/PR at Table V-11.

²²⁷ CR/PR at Table V-11.

²²⁸ *Compare* CR/PR at Table V-11 *with* Table IV-15.

²²⁹ *Calculated from* CR/PR at Table V-11. Respondents argue that the confirmed volume of lost sales reported by***, which solely purchased from*** during the POI, cannot be attributed to cumulated subject imports because***. Respondents' Prehr'g Br. at 58–60. We are unpersuaded by this argument. As an initial matter,*** and thus supplied domestically produced GPPW for*** of the January 2020-March 2023 period for which lost sales information was collected. CR/PR at II-25, n.54 and VI-16, n.19. Furthermore, as discussed in section III.A.2. above,*** reported that*** reinforcing that*** decision to replace domestic production with subject imports was driven by the lower cost of subject imports. CR/PR at Table III-15. *** reason for importing subject GPPWs is also consistent with the only reason given by*** for its purchases of subject imports in lieu of the domestic like product, which was the lower price of subject imports. CR/PR at Table V-11.

we find that underselling by cumulated subject imports was significant. The underselling by cumulated subject imports led to a shift in market share of*** percentage points from the domestic industry to cumulated subject imports from 2020 to 2022, as the domestic industry lost a substantial volume of sales to lower-priced subject imports.^{230 231}

We have also considered price trends. Domestic prices fluctuated over the POI but ended the period higher for three of four pricing products. Between the first quarter of 2020 and the first quarter of 2023, prices for domestically produced product 1 declined irregularly by*** percent,²³² prices for domestically produced product 2 increased irregularly by*** percent,²³³ prices for domestically produced product 3 increased irregularly by*** percent,²³⁴ and prices for domestically produced product 4 increased irregularly by*** percent.²³⁵ Product 2 imported from China, the only product for which subject import pricing data are available for the entire POI, increased irregularly from the first quarter of 2020 through the fourth quarter of 2021 before declining irregularly through the first quarter of 2023 to a level*** percent lower than in January 2020.²³⁶

We have also considered whether subject imports prevented price increases for the domestic like product that would otherwise have occurred to a significant degree. The domestic industry's COGS to-net-sales ratio increased from*** percent in 2020, to*** percent in 2021, and*** percent in 2022; it was higher in interim 2023, at*** percent, compared to

²³⁰ CR/PR at Table IV-15. We note that U.S. producers uniformly reported that*** or*** were the reasons for their importation of subject merchandise. CR/PR at Table III-15. Specifically,*** reported that it***." CR/PR at Table III-15. Similarly,*** reported that it imported due to "****",*** reported that it "****," and*** reported that it "****." *Id.* That responding U.S. producers were compelled to import subject GPPW due to*** lends further support to our finding that subject import underselling led to a shift in market share from the domestic industry to cumulated subject imports.

²³¹ We recognize that the domestic industry's market share in interim 2023 of*** percent was significantly higher than its share in interim 2022 of*** percent, while the market share of subject imports was significantly lower, at*** percent in interim 2023 compared to*** percent in interim 2022. CR/PR at Table C-1. This partial reversal of the 2020-2022 trend suggests that the market share shift from 2020 to 2022 abated at the end of the POI. *Id.* Yet, the market shares of both the domestic industry and subject imports for 2022 as a whole were nearly the same as their respective shares in interim 2022, so only in interim 2023 does the record establish that the domestic industry regained market share. As discussed above, we accord diminished weight to volume trends in the interim 2023 period because it is only three months, and the filing of the petitions may have affected subject import volumes and the volume and price of U.S. shipments of subject imports during this time. We do not find, therefore, that the shift in market shares observed at the very end of the POI outweighs the significance of subject imports' price effects over the previous three years.

²³² CR/PR at Table V-7 and Figure V-1. Domestic prices for product 1 increased irregularly from the first quarter of 2020 through the fourth quarter of 2022 before declining in the first quarter of 2023 to a level*** percent lower than in the first quarter of 2020. *Id.*

²³³ CR/PR at Table V-7 and Figure V-2.

²³⁴ CR/PR at Table V-7 and Figure V-3.

²³⁵ CR/PR at Table V-7 and Figure V-4.

²³⁶ CR/PR at Table V-7 and Figure V-2.

interim 2022, at*** percent.²³⁷ The increase in the domestic industry's COGS-to-net-sales ratio was driven by its average net sales unit value increasing to a lesser degree than its unit COGS from 2020 to 2022.²³⁸ The domestic industry's unit COGS increased from \$*** per unit in 2020, to \$*** per unit in 2021, and to \$*** per unit in 2022; it was higher in interim 2023, at \$*** per unit, compared to interim 2022, at \$*** per unit.²³⁹ Its net sales average unit values ("AUVs") increased from \$*** per unit in 2020, to \$*** per unit in 2021, and to \$*** per unit in 2022; it was higher in interim 2023, at \$*** per unit, compared to interim 2022, at \$*** per unit.²⁴⁰ The record indicates that the domestic industry experienced a rise in the COGS to net sales ratio of*** percentage points from 2020 to 2022 as demand increased by*** percent.²⁴¹ The majority of the increase (2.9 percentage points) in the domestic industry's ratio of COGS to net sales occurred between 2021 and 2022, when there was a*** percent decline in apparent U.S. consumption, but the minority of the rise in COGS to net sales (1.9 percentage points) occurred between 2020 to 2021, when there was a*** percent increase in apparent U.S. consumption.²⁴² The significant year to year fluctuations in demand makes it difficult to determine whether the domestic industry would have been able to increase prices (raise its unit sales value) more than the industry already did.^{243 244}

²³⁷ CR/PR at Table VI-1.

²³⁸ CR/PR at Table C-1. From 2020 to 2021, the domestic industry's unit COGS increased by*** percent while its net sales unit value increased by*** percent. From 2021 to 2022, the domestic industry's unit COGS increased by*** percent while its net sales unit value increased by*** percent. *Id.*

²³⁹ CR/PR at Table VI-3.

²⁴⁰ CR/PR at Table C-1. We are unpersuaded by respondents' argument that cumulated subject imports could not have impacted domestic prices for industrial (or commercial/professional) GPPWs because they allegedly accounted for a relatively small share of industrial GPPW sales during the POI. Respondents' Prehr'g Br. at 56. Although U.S. shipments of both domestic and subject GPPWs consisted primarily of*** GPPWs, subject imports competed with the domestic industry for sales of*** GPPWs as well and gained market share from the domestic industry in this segment. CR/PR at Tables IV-12, V-8.

²⁴¹ CR/PR at Table C-1.

²⁴² CR/PR at Table IV-16. Respondents argue that***, allegedly resulting in a higher COGS-to-net-sales ratio. Respondents' Prehr'g Br. at 56–57. In response,*** argues that the availability of low-priced subject imports***. Petitioner's Posthr'g Br. at 9. We also note that***, which primarily sold GPPW on the spot market, also experienced increasing COGS-to-net-sales ratios from 2020 to 2022. CR/PR at V-4, n.16, Table VI-3.

²⁴³ The domestic industry's unit net sales unit value increased by*** per unit between 2020 to 2021 and increased by*** per unit between 2021 and 2022. CR/PR at Table C-1.

²⁴⁴ The Commission also notes that in the final phase of these investigations, of the three responding U.S. producers,*** was the***. In addition, of seven responding purchasers, only***, reported that U.S. producers had reduced prices in order to compete with lower-priced imports from China. *** estimated a price reduction of*** and that the reduction "just occurred in the gas powered pressure washers for entry-level consumer models. It's a very small proportion." *** reported U.S. producers did not reduce prices to compete with purchases from Vietnam. Five responding purchasers reported they did not know if domestic producers had reduced prices to compete with imports from either subject source, and*** reported that domestic purchasers did not reduce prices to compete with imports from either subject source. CR/PR at V-18-19 and n.30.

In sum, we find that cumulated subject imports significantly undersold the domestic like product, causing the domestic industry to lose sales and leading to a shift in market share from the domestic industry to subject imports during the 2020-2022 period. We accordingly conclude that cumulated subject imports had significant price effects.

E. Impact of the Subject Imports²⁴⁵

Section 771(7)(C)(iii) of the Tariff Act provides that examining the impact of subject imports, the Commission “shall evaluate all relevant economic factors which have a bearing on the state of the industry.”²⁴⁶ 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.”²⁴⁷

²⁴⁵ The statute instructs the Commission to consider the “magnitude of the dumping margin” in an antidumping proceeding as part of its consideration of the impact of imports. 19 U.S.C. § 1677(7)(C)(iii)(V). In its final determination of sales at less-than-fair-value, Commerce found a dumping margin of 225.65 percent for the Vietnam-Wide Entity. *Gas Powered Pressure Washers From the Socialist Republic of Vietnam: Final Affirmative Determination of Sales at Less Than Fair Value and Final Affirmative Determination of Critical Circumstances*, 88 Fed. Reg. 59503, 59504 (Aug. 29, 2023). In its preliminary determinations, Commerce found a dumping margin of 263.83 percent for all producers or exporters from China as well as for the China-Wide Entity and a subsidy rate of 206.57 percent for all named firms except, Jiangsu Jianghuai Engine Co., Ltd.; for this firm and for “all others,” it calculated a subsidy rate of 11.19 percent. *Gas Powered Pressure Washers From the People's Republic of China: Preliminary Affirmative Determination of Sales at Less-Than-Fair-Value, Preliminary Affirmative Critical Circumstances Determination, in Part, Postponement of Final Determination, and Extension of Provisional Measures*, 88 Fed. Reg. 51279, 51280 (Aug. 3, 2023); *Gas Powered Pressure Washers From the People's Republic of China: Preliminary Affirmative Countervailing Duty Determination, Preliminary Affirmative Critical Circumstances Determination, in Part, and Alignment of Final Determination With Final Antidumping Duty Determination*, 88 Fed. Reg. 36531, 36532 (June 5, 2023). We take into account in our analysis the fact that Commerce has made preliminary or final findings that all subject producers in China and Vietnam are selling subject merchandise in the United States at less than fair value, at margins of 225.65 percent for Vietnam and estimated margins of up to 263.83 percent for China. In addition to this consideration, our impact analysis has considered other factors affecting the domestic industry. Our analysis of the significant underselling of cumulated subject imports, described in both the price effects discussion and below, is particularly probative to an assessment of the impact of the subject imports.

²⁴⁶ 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.”).

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

The majority of the domestic industry's trade and financial indicators declined during the POI, as discussed below. These declines were largely driven by declines in the domestic industry's sales volume and market share, both when apparent U.S. consumption increased from 2020 to 2021 and when it declined from 2021 to 2022.²⁴⁸ Throughout the 2020-2022 period, the domestic industry lost market share to subject imports.²⁴⁹

The domestic industry's trade indicators all declined over the POI with the exception of its production capacity, which increased from*** units in 2020 to*** units in 2021 and 2022; it was lower in interim 2023, at*** units, compared to interim 2022, at*** units.²⁵⁰ The industry's production increased from*** units in 2020, to*** units in 2021, before decreasing to*** units in 2022, for an overall decrease of*** percent from 2020 to 2022; it was lower in interim 2023, at*** units, than in interim 2022, at*** units.²⁵¹ The domestic industry's capacity utilization initially increased from*** percent in 2020, to*** percent in 2021, before decreasing to*** percent in 2022, for an overall decrease of*** percentage points from 2020 to 2022; it was lower in interim 2023, at*** percent, than in interim 2022, at*** percent.²⁵²

The domestic industry's employment indicators generally declined irregularly during the POI, with the exception of metrics relating to wages. Specifically, the domestic industry's number of production-related workers ("PRWs") increased from*** PRWs in 2020, to*** PRWs in 2021, before declining to*** PRWs in 2022, for an overall decline of*** PRWs; its number of PRWs was lower in interim 2023, at*** PRWs, than in interim 2022, at*** PRWs.²⁵³ Its total hours worked increased from*** hours in 2020, to*** hours in 2021, before decreasing to*** hours in 2022, for an overall decrease of*** hours; it was lower in interim 2023, at*** hours, than in interim 2022, at*** hours.²⁵⁴ Its wages paid increased from \$*** in 2020, to \$*** in 2021, before decreasing to \$*** in 2022; it was lower in interim 2023, at \$*** million, than in interim 2022, at \$***.²⁵⁵ Its productivity per hour decreased from*** units per 1,000 hours in 2020, to*** units per 1,000 hours in 2021, and to*** units per 1,000 hours in 2022; it was lower in interim 2023, at*** units per 1,00 hours, than in interim 2022, at*** units per 1,000 hours.²⁵⁶

²⁴⁸ Calculated from CR/PR at Table IV-15.

²⁴⁹ Calculated from CR/PR at Table IV-15. While the domestic industry's market share was higher in interim 2023 than in interim 2022, as discussed *supra* in Section V.C., we find that the reduction in subject import volume was likely due, in part, to the pendency of the investigations. *Id.*

²⁵⁰ CR/PR at Table III-7.

²⁵¹ CR/PR at Table III-7.

²⁵² CR/PR at Table III-7.

²⁵³ CR/PR at Table III-16.

²⁵⁴ CR/PR at Table III-16.

²⁵⁵ CR/PR at Table III-16. The domestic industry's hourly wages increased from*** per hour in 2020, to*** per hours in 2021, and to*** per hours in 2022; it was slightly lower in interim 2023, at*** per hour, than in interim 2022, at*** per hour. *Id.* Its unit labor costs increased from*** per unit in 2020, to*** per unit in 2021, and to*** per unit in 2022; it was higher in interim 2023, at*** per unit, than in interim 2022, at*** per unit. *Id.*

²⁵⁶ CR/PR at Table III-16.

The domestic industry's quantity of U.S. shipments was relatively flat at*** units in 2020 and 2021, before decreasing to*** units in 2022; it was lower in interim 2023, at*** units, than in interim 2022, at*** units.²⁵⁷ The industry's share of apparent U.S. consumption declined from*** percent in 2020, to*** percent in 2021, and to*** percent in 2022; it was higher in interim 2023, at*** percent, than in interim 2022, at*** percent.²⁵⁸

The domestic industry's inventories increased during the POI in absolute terms and relative to its U.S. shipments, from*** units (equivalent to*** percent of its U.S. shipments) in 2020, to*** units (equivalent to*** percent of its U.S. shipments) in 2021, and to*** units (equivalent to*** percent of its U.S. shipments) in 2023. The industry's inventories were higher in interim 2023, at*** units (equivalent to*** percent of its U.S. shipments), than in interim 2022, at*** units (equivalent to*** percent of its U.S. shipments).²⁵⁹

The domestic industry's financial indicators also deteriorated over the POI. Its net sales revenue increased from \$*** in 2020, to \$*** in 2021, before decreasing sharply to \$*** in 2022; it was lower in interim 2023, at \$***, than in interim 2022, at \$***.²⁶⁰ The industry's gross profits decreased from \$*** in 2020, to \$*** in 2021, and to \$*** in 2022; it was lower in interim 2023, at \$***, than in interim 2022, at \$***.²⁶¹ The industry's operating income declined from \$*** in 2020, to \$*** in 2021, and to \$*** in 2022; it was lower in interim 2023, at \$***, than in interim 2022, at \$***.²⁶² Its net income increased*** from*** in 2020, to \$*** in 2021, before decreasing to \$*** in 2022; it was lower in interim 2023, at \$***, than in interim 2022, at \$***.²⁶³ Its operating-income-to-net-sales ratio decreased from*** percent in 2020, to*** percent in 2021, and*** percent in 2022; it was lower in interim 2023, at*** percent, than in interim 2022, at*** percent.²⁶⁴ The domestic industry's net-income-to-net-sales ratio was flat at*** percent in 2020 and 2021, before decreasing to*** percent in 2023; it was lower in interim 2024, at*** percent, than in interim 2022, at*** percent.²⁶⁵

The domestic industry's capital expenditures, research and development expenses ("R&D expenses"), and return on assets all declined during the POI while its net assets increased. Specifically, its capital expenditures decreased from \$*** in 2020, to \$*** in 2021, and to \$*** in 2022; it was lower in interim 2023, at \$***, than in interim 2022, at \$***.²⁶⁶ Its

²⁵⁷ CR/PR at Table III-9.

²⁵⁸ CR/PR at Table IV-15.

²⁵⁹ CR/PR at Table III-10.

²⁶⁰ CR/PR at Table VI-1.

²⁶¹ CR/PR at Table VI-1.

²⁶² CR/PR at Table VI-1.

²⁶³ CR/PR at Table VI-1.

²⁶⁴ CR/PR at Table VI-1.

²⁶⁵ CR/PR at Table VI-1.

²⁶⁶ CR/PR at Table VI-5. While Respondents acknowledge that the domestic industry's capital expenditures decreased, they claim that this decrease was due to***. Respondents' Posthr'g Br., Annex D at 17–18. Petitioner acknowledges that its capital expenditures declined as the Mesquite plant assembly and warehousing projects in Phase I were completed but contends that it has been unable to fully capitalize on this investment and that its Phase II expansion has been delayed due to the negative effects of subject imports. CR/PR at Table III-2 and at VI-17, n.20; Petitioner's Prehr'g Br. at 32.

R&D expenses declined from \$*** in 2020, to \$*** in 2021, and to \$*** in 2022; it was higher in interim 2023, at \$***, than in interim 2022, at \$***.²⁶⁷ Its total net assets increased from \$*** in 2020, to \$*** in 2021, and to \$*** in 2022, while its return on assets decreased from*** percent in 2020, to*** percent in 2021, and to*** percent in 2022.²⁶⁸

We find a causal nexus between cumulated subject imports and the domestic industry's declining performance during the POI. The significant increase in cumulated subject import volume from 2020 to 2022, which undersold the domestic like product to a significant degree, captured*** percentage points of market share from the domestic industry and caused the industry to lose a significant volume of sales. As the domestic industry lost sales and market share to cumulated subject imports, the industry's production, capacity utilization, employment, U.S. shipments, and net sales revenue declined, and the industry's financial performance deteriorated.

We have also considered other factors to ensure that we are not attributing injury from other factors to the subject imports.²⁶⁹

We find that declining apparent U.S. consumption from 2021 to 2022 cannot fully explain the domestic industry's deteriorating performance over the POI, notwithstanding respondents' argument to the contrary.²⁷⁰ When apparent U.S. consumption increased*** percent from 2020 to 2021, many of the domestic industry's trade and financial performance metrics declined – including the***, along with a decline in the*** ratio – as the industry lost*** percentage points of market share to cumulated subject imports.²⁷¹ As apparent U.S. consumption declined by*** percent from 2021 to 2022, the domestic industry's U.S. shipments declined by a greater percentage,*** percent, so that the domestic industry lost*** percentage points of market share to cumulated subject imports.²⁷²

We are unpersuaded by Respondents' argument that the domestic industry lacked sufficient capacity to supply additional volumes of GPPWs during the POI, pulling subject

²⁶⁷ CR/PR at Table VI-7.

²⁶⁸ CR/PR at Table VI-9 and IV-10.

²⁶⁹ There were no reported nonsubject imports in the U.S. market during the POI. See CR/PR at Table IV-15.

²⁷⁰ Respondents' Prehr'g Br. at 64–66.

²⁷¹ CR/PR at Table VI-15. Respondents argue that intra-industry competition between*** prevented*** from supplying additional volumes of GPPW to the U.S. market, as*** allegedly captured market share from*** between 2021 and 2022. Respondents' Posthr'g Br., Annex D at 8–9. This argument cannot explain the domestic industry's declining market share during the POI because market share shifts between domestic producers would not have contributed to the decline of the industry as a whole. We are also unpersuaded by Respondents' argument that the domestic industry's declining performance during the POI was caused by customers' increasing preference for EPPWs. Any increased consumer preference for EPPWs could not explain the domestic industry's loss of market share to cumulated subject imports in the U.S. GPPW market, or the significant volume of confirmed lost sales during the POI.

²⁷² CR/PR at Table VI-15.

imports into the U.S. market.²⁷³ The domestic industry had ample excess capacity with which it could have increased production and U.S. shipments of GPPWs, with a capacity utilization rate that never exceeded*** percent from 2020 to 2022.²⁷⁴ Even when the domestic industry's capacity utilization peaked in 2021, at*** percent, the industry had sufficient excess capacity to supply an additional*** percent of apparent U.S. consumption that year.²⁷⁵ Moreover, while half of responding U.S. producers and importers reported supply constraints relating to both domestic and subject GPPWs, only three of seven responding purchasers reported supply constraints prior to the filing of the petitions and only one reported supply constraints following the filing of the petitions.²⁷⁶ Furthermore, while some responding firms reported supply constraints resulting from the COVID-19 pandemic, the largest importer of subject merchandise in 2022,***, reported that the pandemic had caused “***,” indicating that subject imports were no less impacted by such supply constraints.²⁷⁷ Finally, the domestic industry’s increasing end-of-period inventories during the POI would have bolstered its ability to supply additional GPPW units to the U.S. market.²⁷⁸

We are also unpersuaded by Respondent’s argument that*** accounted for the domestic industry’s declining market share, and was unrelated to subject imports.²⁷⁹ While*** reported that it had***, both Honda and TTI continued domestic production through the end of 2022.²⁸⁰ Accordingly, both firms were still engaged in domestic production as the domestic industry lost*** points of market share to cumulated subject imports from 2020 to 2022. Furthermore, as discussed in Section V.D. above,*** reported that***, rather than inability to

²⁷³ Respondents’ Posthr’g Br., Annex D at 4–7. Respondents claim that***. *Id.* at 4. The relevant question that was asked of U.S. producers, however, was the ‘amount of time it would take . . . for your firm to be able to fully utilize the reported *installed overall production capacity*,’ not reported practical capacity. See U.S. Producers’ Questionnaire at question II-3e (emphasis added). Accordingly,*** response does not suggest that it overreported its practical capacity. Even assuming, arguendo, that*** was capacity constrained, the other three domestic producers had*** excess capacity with which they could have increased production. See CR/PR at Table III-7.

²⁷⁴ CR/PR at Table III-7.

²⁷⁵ Compare CR/PR at Table III-7 with Table IV-16.

²⁷⁶ CR/PR at II-9. Notably, three U.S. purchasers rated the domestic like product as superior in terms of availability compared to subject imports from China, three reported the domestic like product was comparable, and none reported it was inferior. CR/PR at Table II-10. In comparisons to subject imports from Vietnam on availability, one purchaser reported the domestic like product was superior, three reported it was comparable, and none reported it was inferior. *Id.*

²⁷⁷*** U.S. Importer Questionnaire at question II-2b; CR/PR at II-9. Additionally, a representative for Harbor Freight added the COVID-19 pandemic impacted the GPPW market as it caused shutdowns for manufacturers of components and GPPWs and disrupted international shipping due to a shipping container shortage. Hr’g Tr. at 121 (Sprong); CR/PR at II-9.

²⁷⁸ CR/PR at Table III-10. Between 2020 and 2022, the domestic industry’s ending inventory quantity*** units, or by*** percent. As a ratio to total shipments, the industry’s ending inventory quantity*** Over the interim periods, ending inventory quantity also increased (by*** percent), as did the ratio of inventories to shipments (from*** percent).

²⁷⁹ Respondents’ Posthr’g Br., Annex D at 2–4.

²⁸⁰ CR/PR at II-1, n.4; III-3.

source engines from Honda domestically.²⁸¹ Indeed,***, following the filing of the petitions, notwithstanding Honda's continued absence from the U.S. market.²⁸² The intense competition that*** faced from low-priced cumulated subject imports during the 2020-2022 period contributed to*** by importing GPPWs from China and Vietnam, and thus to the resulting loss of domestic industry market share.

Respondents argue that intra-industry competition between*** prevented*** from supplying additional volumes of GPPW to the U.S. market, as*** allegedly captured market share from*** between 2021 and 2022.²⁸³ This argument cannot explain the domestic industry's declining market share during the POI because market share shifts between domestic producers would not have contributed to the decline. We are also unpersuaded by Respondents' argument that the domestic industry's declining performance during the POI was caused by customers' increasing preference for EPPWs. Any increased consumer preference for EPPWs could not explain the domestic industry's loss of market share to cumulated subject imports in the U.S. GPPW market, or the significant volume of confirmed lost sales during the POI.

For the reasons discussed above, we conclude that the cumulated subject imports had a significant impact on the domestic industry.

VI. Critical Circumstances

A. Legal Standards

In its final antidumping duty determination for Vietnam, Commerce made an affirmative critical circumstances determination with respect to the Vietnam-Wide Entity.²⁸⁴ Because we have determined that the domestic industry is materially injured by reason of subject imports from Vietnam, we must further determine "whether the imports subject to the affirmative {Commerce critical circumstances} determination ... are likely to undermine seriously the remedial effect of the antidumping {and/or countervailing duty} order{s} to be issued."²⁸⁵

The SAA indicates that the Commission is to determine "whether, by massively increasing imports prior to the effective date of relief, the importers have seriously undermined the remedial effect of the order" and specifically "whether the surge in imports prior to the suspension of liquidation, rather than the failure to provide retroactive relief, is likely to seriously undermine the remedial effect of the order."²⁸⁶ The legislative history for the critical circumstances provision indicates that the provision was designed "to deter exporters whose merchandise is subject to an investigation from circumventing the intent of the law by

²⁸¹ CR/PR at Table III-15.

²⁸² CR/PR at III-7, n.5.

²⁸³ Respondents' Postthr'g Br., Annex D at 8–9.

²⁸⁴ *Gas Powered Pressure Washers from the Socialist Republic of Vietnam: Final Affirmative Determination of Sales at Less Than Fair Value and Final Affirmative Determination of Critical Circumstances*, 88 Fed. Reg. 59503 (Aug. 29, 2023).

²⁸⁵ 19 U.S.C. §§ 1671d(b)(4)(A)(ii), 1673d(b)(4)(A)(ii).

²⁸⁶ SAA at 877.

increasing their exports to the United States during the period between initiation of an investigation and a preliminary determination by {Commerce}." ²⁸⁷ An affirmative critical circumstances determination by the Commission, in conjunction with an affirmative determination of material injury by reason of subject imports, would normally result in the retroactive imposition of duties for those imports subject to the affirmative Commerce critical circumstances determination for a period 90 days prior to the suspension of liquidation.

The statute provides that, in making this determination, the Commission shall consider, among other factors it considers relevant,

(I) the timing and the volume of the imports,

(II) a rapid increase in inventories of the imports, and

(III) any other circumstances indicating that the remedial effect of the {order} will be seriously undermined. ²⁸⁸

In considering the timing and volume of subject imports, the Commission's practice is to consider import quantities prior to the filing of the petition with those subsequent to the filing of the petition using monthly statistics on the record regarding those firms for which Commerce has made an affirmative critical circumstances determination. ²⁸⁹

B. Party Arguments

Petitioner's Argument. Petitioner argues that the Commission must make an affirmative critical circumstances determination if it is to provide an effective remedy. ²⁹⁰ It contends that the volume of subject imports from Vietnam was*** percent*** during the (five month) January – May 2023 post-petition period compared to during the August – December 2022 pre-petition period. ²⁹¹ Furthermore, FNA maintains that the alleged*** in the ratio of inventories

²⁸⁷ *ICC Industries, Inc. v United States*, 812 F.2d 694, 700 (Fed. Cir. 1987), quoting H.R. Rep. No. 96-317 at 63 (1979), *aff'd* 632 F. Supp. 36 (Ct. Int'l Trade 1986). See 19 U.S.C. §§ 1671b(e)(2), 1673b(e)(2).

²⁸⁸ 19 U.S.C. §§ 1671d(b)(4)(A)(ii), 1673d(b)(4)(A)(ii).

²⁸⁹ See *Lined Paper School Supplies from China, India, and Indonesia*, Inv. Nos. 701-TA-442-43, 731-TA-1095-97, USITC Pub. 3884 at 46-48 (Sept. 2006); *Carbazole Violet Pigment from China and India*, Inv. Nos. 701-TA-437 and 731-TA-1060-61 (Final), USITC Pub. 3744 at 26 (Dec. 2004); *Certain Frozen Fish Fillets from Vietnam*, Inv. No. 731-TA-1012 (Final), USITC Pub. 3617 at 20-22 (Aug. 2003).

²⁹⁰ Petitioner's Prehr'g Br. at 43–49.

²⁹¹ Petitioner's Prehr'g Br. at 46; CR/PR at Table VI-10. FNA advocates for the assessment of critical circumstances based on five-month pre- and post-petition comparison periods because Commerce's applicable preliminary critical circumstance determination was within the six-month post-petition comparison period. Petitioner's Posthearing Brief, Exh. 2 at 4–5. Respondents claim that there is no basis to assess critical circumstances based on five-month comparison periods because Commerce's applicable preliminary critical circumstance determination was allegedly rendered in August 2023. Respondents' Posthr'g Br., Annex L at 1–2. Commerce's preliminary critical circumstance determination with respect to imports from Vietnam was rendered on June 15, 2023, while its final (Continued...)

to subject imports from Vietnam in interim 2023 reflect importers' efforts to stockpile subject imports prior to the imposition of the pertinent order.²⁹² It submits that the allegedly consistent underselling by subject imports further increases the potential for increased volumes and inventories of subject imports from Vietnam to undermine the remedial effects of the order.²⁹³

Respondents' Argument. Respondents argue that the record does not support an affirmative critical circumstances determination with respect to subject imports from Vietnam.²⁹⁴ They contend that the volume of subject imports from Vietnam was*** percent*** during the (six month) January – June 2023 post-petition period than in the July – December 2022 pre-petition period.²⁹⁵ Moreover, Respondents claim that subject import volume trends reflect the allegedly seasonal nature of the U.S. GPPW market, with seasonal increases in volume associated with the spring and summer months.²⁹⁶ They maintain that this alleged seasonality and the lack of any surge in subject import volume following the petitions' filing is confirmed by a*** percent*** in subject imports from Vietnam during January – June 2023 as compared to January – June 2022.²⁹⁷ Furthermore, Respondents assert that the record shows no “ramp up” of inventories of subject imports from Vietnam and therefore does not support a critical circumstance determination on this basis.²⁹⁸

C. Analysis

On August 29, 2023, Commerce issued its final determination in its antidumping duty investigation of GPPW from Vietnam.²⁹⁹ In its final antidumping duty determination,

(...Continued)

critical circumstances determination was rendered on August 29, 2023. *See Gas Powered Pressure Washers From the Socialist Republic of Vietnam: Preliminary Affirmative Determination of Sales at Less Than Fair Value and Preliminary Determination of Critical Circumstances*, 88 Fed. Reg. 39221 (June 15, 2023); *see also Gas Powered Pressure Washers From the Socialist Republic of Vietnam: Final Affirmative Determination of Sales at Less Than Fair Value and Final Affirmative Determination of Critical Circumstances*, 88 Fed. Reg. 59503 (Aug. 29, 2023).

²⁹² Petitioner's Prehr'g Br. at 47.

²⁹³ Petitioner's Prehr'g Br. at 48–49.

²⁹⁴ Respondents' Prehr'g Br. at 90–102.

²⁹⁵ Respondents' Prehr'g Br. at 95.

²⁹⁶ Respondents' Prehr'g Br. at 95; Respondents' Posthr'g Br., Annex L at 3. While Petitioner agrees that there is an element of seasonality in the U.S. GPPW market, it claims that questionnaire data do not reflect enough consistency in seasonal trends or “peaks” to allow the Commission to determine which months reflect seasonal volume trends. Petitioner's Posthr'g Br., Exh. 2 at 3–4.

²⁹⁷ Respondents' Prehr'g Br. at 95–97; Respondents' Posthr'g Br., Annex L at 2–4.

²⁹⁸ Respondents' Prehr'g Br. at 101–102.

²⁹⁹ *Gas Powered Pressure Washers from the Socialist Republic of Vietnam: Final Affirmative Determination of Sales at Less Than Fair Value and Final Affirmative Determination of Critical Circumstances*, 88 Fed. Reg. 59503 (Aug. 29, 2023).

Commerce made an affirmative critical circumstances determination with respect to the Vietnam-Wide Entity.³⁰⁰

We first consider the appropriate period for comparisons in our critical circumstances analysis. The Commission frequently relies on six-month comparison periods but has relied on shorter periods when Commerce's preliminary determination applicable to the country at issue fell within the six-month post-petition period the Commission typically considers.³⁰¹ Because Commerce's preliminary critical circumstance determination with respect to imports from Vietnam was rendered on June 15, 2023,³⁰² we have determined to compare the volume of subject imports in the five months prior to the filing of the petition (August 2020 – December 2022) with the volume of subject imports in the five months after the filing of the petition (January 2023 – May 2023).³⁰³

Subject imports from Vietnam subject to Commerce's affirmative critical circumstances determinations increased from*** units in the pre-petition period to*** units in the post-petition period, an increase of*** percent.³⁰⁴ End-of-period U.S. inventories of the relevant subject imports from Vietnam were*** units at the end of the pre-petition period and*** units at the end of the post-petition period.³⁰⁵

Although subject imports from Vietnam were higher in the post-petition period as compared to the pre-petition period, the volume of the increase,*** units, was relatively small in relation to the U.S. market, and equivalent to only*** percent of apparent U.S. consumption in 2022.³⁰⁶ Furthermore, end-of-period inventories of subject imports from Vietnam were***

³⁰⁰ *Gas Powered Pressure Washers from the Socialist Republic of Vietnam: Final Affirmative Determination of Sales at Less Than Fair Value and Final Affirmative Determination of Critical Circumstances*, 88 Fed. Reg. 59503 (Aug. 29, 2023).

³⁰¹ See *Certain Hot-Rolled Steel Flat Products from Australia, Brazil, Japan, Korea, the Netherlands, Turkey, and the United Kingdom*, Inv. Nos. 701-TA-545-547, 731-TA-1291-1297 (Final), USITC Pub. 4638 at 49-50 (Sept. 2016); *Certain Corrosion-Resistance Steel Products from China, India, Italy, Korea, and Taiwan*, Inv. No. 701-TA-534-537 and 731-TA-1274-1278 (Final), USITC Pub. 4630 at 35-40 (July 2016); *Carbon and Certain Steel Wire Rod from China*, Inv. Nos. 701-TA-512, 731-TA-1248 (Final), USITC Pub. 4509 at 25-26 (Jan. 2015) (using five-month periods because preliminary Commerce countervailing duty determination was during the sixth month after the petition).

We note that the Commission is not required to examine the same periods that Commerce examined in performing the critical circumstances analysis. See *Certain Polyester Staple Fiber from China*, Inv. No. 731-TA-1104 (Final), USITC Pub. 3922 at 35 (June 2007); *Steel Concrete Reinforcing Bars from Turkey*, Inv. No. 731-TA-745 (Final), USITC Pub. 3034 at 34 (Apr. 1997).

³⁰² See *Gas Powered Pressure Washers From the Socialist Republic of Vietnam: Preliminary Affirmative Determination of Sales at Less Than Fair Value and Preliminary Determination of Critical Circumstances*, 88 Fed. Reg. 39221 (June 15, 2023).

³⁰³ CR/PR at Table IV-10. Because the petition was filed on December 30, 2022, that month is included in the pre-petition period.

³⁰⁴ CR/PR at Table IV-10.

³⁰⁵ CR/PR at Table IV-11.

³⁰⁶ Compare Table IV-10 with Table IV-15. Both Petitioner and Respondents agree that there is an element of seasonality to the U.S. GPPW market. See Petitioner's Posthr'g Br., Exh. 2 at 3–4; Respondents' Prehr'g Br. at 95; Respondents' Posthr'g Br., Annex L at 3. We note that subject imports (Continued...)

percent lower in the post-petition period than in the pre-petition period, indicating that there was no stockpiling of subject imports after the filing of the petitions.³⁰⁷

Additionally, the available pricing data do not indicate a “rush” to beat the deposit requirement. The AUV of pricing product 1 from Vietnam³⁰⁸ for the first quarter of 2023 was*** per unit, which was slightly higher than the prior quarter (i.e., the fourth quarter of 2022, at*** per unit), and indeed was higher than any other quarter during the POI (except for the second quarter of 2022 at*** per unit). Furthermore, the margin of underselling for that product was at its lowest level of the POI during the first quarter of 2023. Moreover, the post-petition increase in subject imports from Vietnam did not prevent the domestic industry from gaining*** percentage points of market share in interim 2023 compared to interim 2022.³⁰⁹ Nor did it prevent the domestic industry from realizing higher AUVs on its U.S. shipments in interim 2023 compared to interim 2022 (similarly, the AUVs of subject imports from Vietnam were*** percent higher in the first quarter of 2023 than in the first quarter of 2022).³¹⁰

In light of these considerations, we do not find that the increase in subject imports from Vietnam in the post-petition period are of such a magnitude as to seriously undermine the remedial effect of the order. Consequently, we make a negative finding with respect to subject imports from Vietnam subject to Commerce’s affirmative determination of critical circumstances.

VII. Conclusion

For the reasons stated above, we determine that an industry in the United States is materially injured by reason of subject imports of GPPWs from Vietnam that are sold in the United States at less than fair value. We also find that critical circumstances do not exist with respect to imports of GPPWs from Vietnam that are subject to Commerce’s final affirmative critical circumstances determination.

(...Continued)

from Vietnam totaled*** units in the post-petition period of January-May 2023. This was*** percent lower than the volume of subject imports from Vietnam in January-May 2022 (*** units) and*** percent lower than the volume of subject imports in January-May 2021 (*** units). *Calculated from* CR/PR Table IV-14.

³⁰⁷ CR/PR at Table IV-11.

³⁰⁸ Pricing product 1 was the largest volume pricing product for that subject country, accounting for 60 percent of the total volume of Vietnamese imports over the POI encompassed by the pricing data. *Calculated from* CR/PR at Table V-7.

³⁰⁹ CR/PR Table IV-15.

³¹⁰ See CR/PR Table C-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 FNA Group, Inc., (“FNA”), Pleasant Prairie, Wisconsin, on December 30, 2022, alleging that an industry in the United States is materially injured and threatened with material injury by reason of subsidized imports of gas powered pressure washers (“GPPW”) from China and less-than-fair-value (“LTFV”) imports of GPPW¹ from China and Vietnam. Table I-1 presents information relating to the background of these investigations.^{2 3}

Table I-1
GPPW: Information relating to the background and schedule of these proceedings

Effective date	Action
December 30, 2022	Petitions filed with Commerce and the Commission; institution of the Commission investigations (88 FR 1093, January 6, 2023)
January 19, 2023	Commerce’s notice of initiation (88 FR 4807 and 88 FR 4812, January 25, 2023)
February 17, 2023	Commission’s preliminary determinations (88 FR 10378, February 17, 2023);
June 5, 2023	Commerce’s preliminary China CVD determination and alignment with final AD determination (88 FR 36531, June 5, 2023)
June 15, 2023	Commerce’s preliminary Vietnam AD determination (88 FR 39221, June 15, 2023); scheduling of final phase of Commission investigations (88 FR 40865, June 22, 2023)
August 3, 2023	Commerce’s preliminary China AD determination (88 FR 51279, August 3, 2023)
August 29, 2023	Commerce’s final Vietnam AD determination (88 FR 59503, August 29, 2023)
August 24, 2023	Commission’s hearing
September 25, 2023	Commission’s vote
December 18, 2023	Commission’s views

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

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

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

Effective date	Action
October 11, 2023	Scheduled date for Commerce's final China CVD and AD determinations

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--⁴

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

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

effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product, and (V) in {an antidumping investigation}, the magnitude of the margin of dumping.

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

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

Organization of report

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

Market summary

GPPW are generally used to produce a pressurized stream of water to clean off dirt, grease, grime, mold, and mud from surfaces such as decks, driveways, siding, and cars. The leading U.S. producers of GPPW are FNA Group, ***, and ***. Leading producers of GPPW outside the United States include *** of China and *** of Vietnam. The leading U.S. importers of GPPW from China are *** and ***, while the leading importer of GPPW from Vietnam is ***. U.S. purchasers of GPPW include national retail stores, usually with an online presence and brick-and-mortar stores, and locally owned independent dealers that sell to homeowners and other end users. Large purchasers of GPPW, in descending order of purchases and imports from 2020-March 2023, include ***.

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

Apparent U.S. consumption of GPPW totaled approximately *** in 2022. Currently, four firms are known to produce GPPW in the United States, ***. U.S. producers' U.S. shipments of GPPW totaled *** in 2022 and accounted for *** percent of apparent U.S. consumption by quantity (in units) and *** percent by value. U.S. importers' U.S. shipments from subject sources totaled *** in 2022 and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value. U.S. imports from nonsubject sources totaled *** in 2022.

Summary data and data sources

A summary of data collected in these investigations is presented in appendix C, tables C-1 and C-2. Except as noted, U.S. industry data are based on questionnaire responses of four firms that accounted for the majority of U.S. production of GPPW during 2022. U.S. imports are based on questionnaire responses from eleven firms and official U.S. import statistics from Commerce, based on landed duty paid value.⁶

Previous and related investigations

GPPW have not been the subject of prior countervailing and antidumping duty investigations in the United States.

Nature and extent of subsidies and sales at LTFV

Subsidies

On June 5, 2023, Commerce published a notice in the Federal Register of its preliminary affirmative determination of countervailable subsidies for producers and exporters of GPPW from China.⁷ Table I-2 presents Commerce preliminary subsidy determination of GPPW in China.

⁶ Nine firms provided complete U.S. importer questionnaires, while two firms provided responses to the questions regarding out-of-scope imports.

⁷ 88 FR 4812, January 25, 2023.

Table I-2**GPPW: Commerce's preliminary subsidy determination with respect to imports from China**

Entity	Preliminary countervailable subsidy rate (percent)
Jiangsu Jianghuai Engine Co., Ltd	11.19
Chongqing Sajiang Power Equipment Co., Ltd	206.57
China GTL Tools Group, Ltd	206.57
Loncin Motor Co., Ltd	206.57
Maxworld Home Co	206.57
Ningbo Jugang Machinery Manufacturing Co.,	206.57
Powerful Machinery & Electronics Technology	206.57
Pinghu Biyi Cleaning Equipment Co., Ltd	206.57
Senci Electric Machinery Co., Ltd	206.57
Taizhou Bison Machinery Co., Ltd	206.57
Taizhou Longfa Machinery Co., Ltd	206.57
Taizhou Newland Machinery Co., Ltd	206.57
Zhejiang Anlu Cleaning Machinery & Electronics Co., Ltd	206.57
Zhejiang Constant Power Machinery Co., Ltd	206.57
Zhejiang Lingben Machinery & Electronics Co., Ltd	206.57
Zhejiang Xinchang Bigyao Power Tool Co., Ltd	206.57
Zhejiang Zhinanche Cleaning Equipment Co., Ltd	206.57
All Others	11.19

Source: 88 FR 36531, June 5, 2023.

Note: For further information on programs determined to be countervailable, see Commerce's associated Issues and Decision Memorandum.

Sales at LTFV

On August 29, 2023, Commerce published a notice in the Federal Register of its preliminary determination of sales at LTFV with respects to imports from Vietnam,⁸ and on August 3, 2023, published a notice in the Federal Register of its preliminary determination of sales at LTFV with respect to imports from China.⁹ Tables I-3 and I-4 present Commerce's dumping margin with respect to imports of GPPW from China and Vietnam.

⁸ 88 FR 39221, June 15, 2023.

⁹ 88 FR 51279, August 3, 2023.

Table I-3

GPPW: Commerce’s preliminary weighted-average LTFV margins with respect to imports from China

Exporter/producer	Preliminary dumping margin (percent)
Jiangsu Jianghuai Engine Co., Ltd	263.25
Sumec Hardware and Tools Co., Ltd	263.25
Zhejiang Danau Machine Co., Ltd	263.25
China-Wide Entity	263.83

Source: 88 FR 51279, August 3, 2023.

Table I-4

GPPW: Commerce’s final weighted-average LTFV margins with respect to imports from Vietnam

Exporter/producer	Preliminary dumping margin (percent)
Vietnam-Wide Entity	225.65

Source: 88 FR 59503, August 29, 2023.

Note: Commerce did not select a mandatory respondent in its LTFV investigation and determined that no respondent producer qualified for a separate rate.

The subject merchandise

Commerce’s scope

In the current proceeding, Commerce has defined the scope as follows:¹⁰

The merchandise covered by this investigation is cold water gas powered pressure washers (also commonly known as power washers), which are machines that clean surfaces using water pressure that are powered by an internal combustion engine, air-cooled with a power take-off shaft, in combination with a positive displacement pump. This combination of components (i.e., the internal combustion engine, the power take-off shaft, and the positive displacement pump) is defined as the “power unit.” The scope of the investigation covers cold water gas powered pressure washers, whether finished or unfinished, whether assembled or unassembled, and whether or not containing any additional parts or accessories to assist in the function of the “power unit,” including, but not limited to, spray guns, hoses, lances, and nozzles. The scope of the investigation covers cold water gas powered pressure washers, whether or not assembled or packaged with a frame, cart, or trolley, with or without wheels attached.

For purposes of this investigation, an unfinished and/or unassembled cold water gas powered pressure washer consists of, at a minimum, the power

¹⁰ 88 FR 595503, August 29, 2023.

unit or components of the power unit, packaged or imported together. Importation of the power unit whether or not accompanied by, or attached to, additional components including, but not limited to a frame, spray guns, hoses, lances, and nozzles constitutes an unfinished cold water gas powered pressure washer for purposes of this scope. The inclusion in a third country of any components other than the power unit does not remove the cold water gas powered pressure washer from the scope. A cold water gas powered pressure washer is within the scope of this investigation regardless of the origin of its engine. Subject merchandise also includes finished and unfinished cold water gas powered pressure washers that are further processed in a third country or in the United States, including, but not limited to, assembly or any other processing that would not otherwise remove the merchandise from the scope of this investigation if performed in the country of manufacture of the in-scope cold water gas powered pressure washers.

The scope excludes hot water gas powered pressure washers, which are pressure washers that include a heating element used to heat the water sprayed from the machine.

Also specifically excluded from the scope of this investigation is merchandise covered by the scope of the antidumping and countervailing duty orders on certain vertical shaft engines between 99cc and up to 225cc, and parts thereof from the People's Republic of China.

See Certain Vertical Shaft Engines Between 99cc and Up to 225cc, and Parts Thereof from the People's Republic of China: Antidumping and Countervailing Duty Orders,⁸⁶ FR 023675 (May 4, 2021).

Tariff treatment

GPPW are classifiable in the Harmonized Tariff Schedule of the United States (“HTS”) under subheading 8424.30.90. Certain parts of the merchandise subject to these investigations may be imported under HTS statistical reporting number 8424.90.9040. The 2023 general rate of duty is free for HTS subheadings 8424.30.90 and 8424.90.90. Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

HTS subheadings 8424.30.90 and 8424.90.9040 were not included in the enumeration of steel mill and aluminum article products that are subject to the additional Section 232 national

security duties, effective March 23, 2018.¹¹ However, certain steel and aluminum inputs which are used in the production of pressure washers may be included, and thus may be subject to the additional section 232 duties.

GPPW originating in China, classifiable under in-scope HTS subheadings 8424.30.90 and 8424.90.90 (which includes the statistical reporting number, 8424.90.9040, under which the subject merchandise is imported), were part of the third enumeration of products subject to an additional 25 percent ad valorem Section 301 duty imposed associated with heading 9903.88.03, under which HTS subheadings 8424.30.90 and 8424.90.90 both qualify.¹² Exclusions were granted based on descriptions at the statistical reporting number level and were granted to pressure washers imported under 8424.30.9000 on October 28, 2019.¹³ These exclusions were effective as of the September 24, 2018, the date of the \$200 billion action.¹⁴ These exclusions were not extended after their expiration on August 7, 2020.¹⁵

The product¹⁶

Description and applications

GPPW have three main components: an internal combustion engine, a power take-off shaft, and a positive displacement pump. Together, these components are known as the “power unit.” Most GPPW use a four-stroke cycle engine.¹⁷ The positive displacement pump may be an axial pump or triplex pump, with triplex pumps offering higher quality and longevity than axial pumps.¹⁸ GPPW include both finished and unfinished gas powered pressure washers, which include, “at a minimum, the power unit, or components of the components of the power

¹¹ Section 232 of the Trade Expansion Act of 1962, as amended (19 U.S.C. 1862) authorizes the President, on advice of the Secretary of Commerce, to adjust the imports of an article and its derivative that are being imported into the United States in such quantities or under such circumstances as to threaten to impair national security.

¹² See U.S. note 20(f), subchapter III of HTS chapter 99.

¹³ Notice of Product Exclusions: China’s Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation, 84 FR 57803 (U.S. Trade Rep., October 28, 2019).

¹⁴ *Id.*

¹⁵ Notice of Product Exclusion Extensions: China’s Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation, 85 FR 486000 (U.S. Trade Rep., August 11, 2020).

¹⁶ Unless otherwise noted, the information in this section is based on Petition, Vol. I, pp 5-8.

¹⁷ Repair Clinic, <https://www.youtube.com/watch?v=ALqQtM9k7Ec>, August 24, 2012.

¹⁸ Pressure Washers Direct, <https://www.pressurewashersdirect.com/stories/379-How-to-Pick-a-Small-Semi-Pro-Gas-Power-Washer.html>, retrieved September 7, 2023.

unit, packaged or imported together.”¹⁹ Additional components, including, but not limited to, spray guns, nozzles, and hoses, may accompany the power unit.

Pressure washers are machines that use a pressurized stream of water to clean off dirt, grime, and mud from surfaces such as decks, driveways, siding, and cars. Pressure washers can either be gas or electric powered. Unlike pressure washers that are gas powered, electric powered pressure washers rely on an electric-powered engine rather than an internal combustion engine and are plugged into an electric power source or use battery power.^{20 21} Gas powered pressure washers generally offer more cleaning power than electric powered pressure washers and do not have a cord. Therefore, they are better suited for jobs covering a larger area and for tough stains.²² Electric powered pressure washers are more suited for light-duty use or for light cleaning tasks, such as cleaning outdoor chairs. Electric powered pressure washers may also be used inside because they do not produce emissions and are generally quieter.

¹⁹ 88 FR 59503, August 29, 2023.

²⁰ According to the preliminary conference for these investigations, residential electric powered pressure washers are not believed to be produced in the United States. See conference transcript p. 36.

²¹ Popular Mechanics, "The Best Cordless Power Washers to Keep Your Vehicle Good and Shiny," October 21, 2021, <https://www.popularmechanics.com/cars/a37941026/best-cordless-power-washers/>, retrieved February 1, 2023; The Home Depot, "Gas vs Electric Pressure Washers," undated, <https://www.homedepot.com/c/ab/gas-vs-electric-pressure-washers/9ba683603be9fa5395fab9013996f456>, retrieved February 1, 2023.

²² Conference transcript, pp 15-16 (G. Alexander).

Figure I-1
GPPW (left) vs. electric powered pressure washers (right)



Source: Hunting Wing, "Top 5 Reasons for Pressure Washer Overheating – Solutions – 2022," June 4, 2022, <https://huntingwing.com/top-5-reasons-for-pressure-washer-overheating-solutions-2022/>, retrieved on February 1, 2023.

Pressure washers can either emit hot water or cold water. Cold-water pressure washers differ from hot water pressure washers in both product characteristics and end use. Unlike cold water pressure washes, in addition to a power unit, hot water pressure washers include a boiler to heat water before extrusion. These boilers include a heating coiler, energy source (*e.g.* natural gas, butane, *etc.*), and a mechanism to ignite the boiler. The combustion of natural gas, butane, propane, kerosene, or diesel within a fuel-fired burner or an electric heater warms a cylindrical coil inside the heating component.²³ As water flows through the tubular coil, the temperature rises to the needed degree.²⁴ Hot water pressure washers use a pressurized stream of heated water to clean surfaces. Due to the use of heated water, hot water pressure washers offer more cleaning capacity and can be more effective at cleaning oil and grease from surfaces and may meet certain sanitation requirements for food processing. Hot water pressure washers are generally larger and more expensive to maintain and operate since the boiler

²³ The coil in the heating component may be heated directly by flame or immersed in a tank of hot water. Kärcher North America, <https://www.hotsy.com/en/resources/media-library/articles/when-to-choose-a-hot-or-cold-water-pressure-washer.html>, retrieved January 31, 2023.

²⁴ Spartan Manufacturing Corp, <https://smcwashers.com/guide-hot-water-pressure-washers/>, retrieved January 31, 2023.

systems mount to the frame, taking up more space, and requires parts that a cold water pressure washer would not have.²⁵

Figure I-2
A hot water pressure washer with an internal combustion engine



Source: Lowe's, "Easy Kleen Commercial 4000 PSI 3.5-Gallon-GPM Hot Water Gas Pressure Washer (CARB)," undated, <https://www.lowes.com/pd/Easy-Kleen-Commercial-Series-4000-PSI-3-5-GPM-Hot-Water-Gas-Pressure-Washer-with-Kohler-Engine-CARB/1001053714>, retrieved February 1, 2023.

The cleaning power of pressure washers is measured by pounds per square inch ("PSI") and gallons per minute ("GPM"). PSI indicates how powerful the machine's output is, while GPM measures the flow of water. Both PSI and GPM are positively correlated with cleaning power. Some pressure washer attachments allow users to reduce the pressure washer's PSI below its maximum possible output for jobs involving more fragile surfaces, such as windows.²⁶ The orifice of pressure washer nozzles, guns, or other attachments may also influence its PSI and GPM output. A smaller orifice increases PSI but decreases GPM. The opposite holds for larger orifices.²⁷

²⁵ Conference transcript, p. 16 (G. Alexander).

²⁶ Conference transcript, pp. 90-91 (G. Alexander).

²⁷ Conference transcript, p. 20 (C. Alexander) and hearing transcript, p. 22 (C. Alexander).

GPPW may, but are not required to, meet certification standards established by the Pressure Washer Manufacturers' of America (PWMA) and the Cleaning Equipment Trade Association (CETA).²⁸ Pressure washers are also divided into commercial and residential models, with commercial models generally offering higher performance metrics than residential grades. However, there is no bright-line distinction between commercial and residential grade power washers, so more powerful residential-grade pressure washers' performance metrics may overlap with less-powerful commercial-grade pressure washers' performance metrics.²⁹ Both commercial and residential-grade models for GPPW and electric powered pressure washers exist.

Manufacturing processes

The manufacturing process for GPPW consists of fabricating, assembling, and finishing the frame of the pressure washer, coupling the engine and pump to form the power unit, mounting the power unit on the frame, testing and calibrating the power unit, and packaging the power unit and frame with accessories, if included, for shipment.^{30 31}

The first step in making a GPPW is to fabricate or assemble the frame. Some manufacturers perform assembly-only operations for the frame, while other producers may manufacture the frame from raw steel, then paint and assemble the frame.^{32 33} Manufacturing the frame typically starts with bending, punching, and swedging raw steel or bending steel tubes. This steel is welded or bolted to an engine mounting plate.³⁴ Together, this forms the lower base assembly, which is *** painted. ***

²⁸ Conference transcript, pp. 111-113 (C. Alexander).

²⁹ Conference transcript, pp. 20-21 (C. Alexander).

³⁰ Conference transcript, p. 19 (C. Alexander); Petitions, at Exhibit I-4.

³¹ The petitioner stated that the process for manufacturing GPPW is consistent across all major manufacturers, both domestically and outside of United States. Hearing transcript, p. 21 (C. Alexander).

³² Petitions, at Exhibit I-4.

³³ FNA does not produce engines or positive displacement pumps. However, FNA fabricates GPPW frames and hoses in the United States. ***. Since January 2020, FNA sourced engines from a domestic supplier and from suppliers in China and Thailand and pumps from China ***. FNA also ***. *** Hearing transcript, p. 50-51 (C. Alexander); Hearing transcript, p. 107 (N. Ellis); Hearing transcript, p. 112 (J. Barleycorn); *** U.S. producer supplemental questionnaire, section S-4.

³⁴ Petitions, at Exhibit I-4.

***.³⁵ The upper handle is manufactured through a similar process.³⁶ ***. The lower base is attached to the handle assembly. Together, the lower base and handle assembly combine to form the frame assembly, which may also include other components such as an axle, dashboard, or hose or gun hangers and nozzle holders.³⁷

Next, manufacturers will make the GPPW power unit. To do this, manufacturers couple the positive displacement pump to the internal combustion engine. ***.³⁸ To couple the pump to the internal combustion engine, an engine shaft is connected to the engine and an engine shaft key is forcibly press fit into the engine shaft.³⁹ Next, anti-seize grease is applied to the engine shaft.⁴⁰ After this step, the engine is attached to the positive displacement pump and typically secured with four bolts.⁴¹ This combination of components (i.e. the engine, pump, and engine shaft) is called the power unit. The power unit is mounted to the frame. Manufacturers may also attach wheels to the frame at this stage.⁴²

After this, manufacturers will test and calibrate the machine. Once it is determined that the machine meets the manufacturer's standards, the unit is packaged for sale, along with any accessories, such as the handle kit assembly, gun, lance, nozzle, and other pieces.⁴³ This packaging may also include material to ensure safe delivery in transport.^{44 45}

Hoses, nozzles, and other GPPW accessories may be imported or domestically produced.

³⁵ *** U.S. producer supplemental questionnaire, section S-1.

³⁶ ***; Petitions, at Exhibit I-4.

³⁷ Petitions, at Exhibit I-4.

³⁸ ***.

³⁹ Petitions, at Exhibit I-4,

⁴⁰ Petitions, at Exhibit I-4.

⁴¹ Petitions, at Exhibit I-4.

⁴² Petitions, at Exhibit I-4.

⁴³ Petitions, at Exhibit I-4.

⁴⁴ Petitions, at Exhibit I-4.

⁴⁵ The manufacturing process is believed to be generally similar in the U.S. and the subject countries, but may differ in the extent to which automation is used. Conference transcript, p. 121 (C. Alexander).

Domestic like product issues

No issues with respect to the domestic like product have been raised in these investigations. The petitioner proposes a single domestic like product that is co-extensive with the scope of the investigations.⁴⁷ It contends that all domestically produced GPPW's within the scope have similar physical characteristics and uses, channels of distribution, common manufacturing facilities, production processes, and employees, customer and producer perceptions, are generally interchangeable, and are sold within a reasonable range of similar prices.⁴⁸ It maintains that clear lines divide in-scope GPPWs from out-of-scope electric powered pressure washers.⁴⁹ Employing the Commission's semi-finished product analysis, Petitioner also contends that in-scope domestic GPPW power units are not a separate domestic like product from in-scope domestically produced finished GPPW (assembled, retail-ready).⁵⁰ No respondents contested the domestic like product definition in the preliminary phase of these investigations, but reserved the right to do so in any final phase investigation.⁵¹

In the preliminary phase of these investigations, the Commission defined a single domestic like product, coextensive with the scope.⁵² The Commission included both GPPW subassemblies and finished GPPWs in its domestic like product definition.⁵³

In the final phase investigations, no parties requested data or other information necessary for the analysis of the domestic like product. No party disputed the proposed domestic like product definition in their prehearing or posthearing briefs or during the Commission's hearing.⁵⁴

⁴⁶ *** U.S. producer posthearing questionnaire, section S-1.

⁴⁷ Petitions, p. 19; Petitioner's postconference brief, p. 2.

⁴⁸ Petitioner's postconference brief, pp. 2-5.

⁴⁹ Petitioner's postconference brief, pp. 5-12.

⁵⁰ Petitioner's postconference brief, p. 12.

⁵¹ Conference transcript, p. 147 (Kahn).

⁵² Gas Powered Pressure Washers from China and Vietnam (Preliminary), USITC Publication 5409, February 2023 ("Preliminary investigation publication"), pp. 9-10.

⁵³ Ibid. p. 12.

⁵⁴ Petitioner's prehearing brief, p. 8, and respondents' prehearing brief, p. 3.

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

U.S. market characteristics

GPPW are used to clean outdoor structures and surfaces including houses, decks, and outdoor furniture. Most GPPW are used by individual consumers, while some are purchased for larger scale uses (“commercial” or “professional grade”) that require more cleaning power. GPPWs are generally composed of an internal combustion engine with a “power take-off shaft” and a positive displacement pump mounted on a frame.¹ Other parts include hoses, lances, nozzles, and a spray gun attachment.² GPPW components can be imported or made domestically.^{3 4}

Petitioner FNA sells GPPW under various brand names and under private labels. However, brands may be supplied from both U.S. and imported sources.⁵ For example, petitioner’s economist described the Craftsman brand as currently supplied by petitioner FNA, but previously supplied by Chinese product. He added that the Ryobi brand is supplied by both domestic producers and subject importers. Additionally, FNA has its own brand names, Simpson and Delco, and importer MWE owns the brand name of Westinghouse.⁶

Petitioner FNA stated that there are three main customer segments – consumer, professional, and commercial/industrial. Consumer GPPWs and professional GPPWs are sold through brick-and-mortar retailers and on-line retailers. Consumer GPPWs are targeted towards residential homeowners while professional GPPWs are for contractors, painters, and small business owners. Professional GPPWs are typically higher in performance and PSI, and are more expensive than consumer GPPWs. The industrial segment of the GPPW market is for construction companies, contractors, industrial cleaning, and distributors of other outdoor power equipment.⁷ At the conference, Petitioner FNA reported that there is no “bright line”

¹ The engine and pump together are considered the “power unit.” Hearing transcript, pp. 69-70 (McConkey).

² Hearing transcript, p. 18 (G. Alexander).

³ Hearing transcript, pp. 15, 41-42, 45, 50-51 (G. Alexander, C. Alexander, McConkey)

⁴ Engine producer Honda announced it was ending production of its U.S.-made engines in 2021. Honda supplied FNA with domestically produced engines through the end of 2022. FNA was Honda’s largest domestic partner prior to closing its domestic engine production and is FNA’s largest international partner for Honda’s commercial series engines produced in Thailand. Hearing transcript, pp. 50-51, 58. (C. Alexander).

⁵ Hearing transcript, pp. 62-63 (Szamoszegi).

⁶ Conference transcript, pp. 30, 81-82, 125 (Szamoszegi, W. Alexander, Barleycorn).

⁷ Hearing transcript, pp. 89-91 (W. Alexander).

between professional and consumer GPPWs.^{8 9} Importer MWE described itself as providing a limited number of types of GPPW, entirely for the consumer (not commercial) market. It characterized FNA as having a much wider array of product offerings.¹⁰

Petitioner, along with other GPPW suppliers and purchasers, are members of the Cleaning Equipment Trading Association (CETA), which provides certification for product quality of GPPW. According to the petitioner, there is another such organization, the Power Washer Manufacturers Association (PWMA), which currently has only two members.¹¹ Petitioner described CETA as having more stringent de facto standards. However, retailers do not require these certifications when purchasing GPPW.¹² Importer MWE described CETA's membership as primarily commercial GPPW end users.¹³

Petitioner described GPPW consumers as particularly concerned with price and the pounds per square inch (PSI) that the GPPW can provide.^{14 15} The range of PSI that various models of GPPW can produce is higher than that produced by electric power pressure washers ("EPPWs", an out-of-scope product), although the most powerful EPPWs have PSI that may overlap with the lower end of the GPPW PSI range.¹⁶ Petitioner also noted that some consumers prefer EPPWs for smaller jobs, like cleaning patio furniture, while GPPWs are used for expansive surfaces.¹⁷

Three responding U.S. producers, most importers (8 of 10) and purchasers (5 of 6) indicated that the GPPW market was not subject to distinctive conditions of competition.¹⁸ Among those reporting unique conditions, importer *** reported that weather can play a

⁸ Conference transcript, pp.97-98 (McConkey).

⁹ The highest-powered consumer GPPWs can overlap with the lowest-powered professional grade GPPWs. Hearing transcript, pp. 22-23 (G. Alexander).

¹⁰ Conference transcript, pp. 127-128 (Barleycorn).

¹¹ Current PWMA members are Greenworks (based in China) and JD North America Corp. (based in California). PWMA, About Us, <https://www.pwma.org/about.asp> (retrieved September 14, 2023).

¹² Conference transcript, pp. 45-52, 111-113 (C. Alexander, G. Alexander and W. Alexander).

¹³ Conference transcript, p. 168 (Barleycorn).

¹⁴ Conference transcript, pp. 14 (G. Alexander) and 106 (W. Alexander).

¹⁵ The pump and engine are used to calculate the PSI and gallons per minute ("GPM") metrics. Multiplying the PSI by GPM calculates the cleaning units. Comparable GPPWs have comparable performance metrics within certain ranges. Hearing transcript, pp. 22-23 (G. Alexander).

¹⁶ Conference transcript, p. 21 (C. Alexander). See also hearing transcript, pp.17-18 (G. Alexander).

¹⁷ Hearing transcript, p. 19 (G. Alexander).

¹⁸ U.S. producers FNA, Generac, TTI, and Northern Tool are also importers. Their U.S. producer and importer questionnaire responses are reported separately throughout this section of the report, unless otherwise noted. Importers *** are also purchasers; their responses are reported separately throughout this section of the report, unless otherwise noted. *** reported on its importer questionnaire that it imports ***.

“critical role” in the market.¹⁹ All responding U.S. producers and six of nine importers reported that there had not been a change in the product mix or marketing of GPPWs since 2020.

Apparent U.S. consumption of GPPW decreased irregularly during 2020-22. Overall, apparent U.S. consumption in 2022 was *** percent lower than in 2020.²⁰ Apparent U.S. consumption of GPPW was *** percent lower in January-March 2023 compared to the same period in 2022.

U.S. purchasers

The Commission received seven usable questionnaire responses from firms that had purchased GPPW during January 2020-March 2023.^{21 22 23} Five responding purchasers are both online and brick-and-mortar retailers, one firm is an online retailer only (***), and one firm (***) classified itself as a distributor. In general, responding U.S. purchasers were located east of the Mississippi. Large purchasers of GPPW, in descending order of quantity of purchases and imports from 2020-March 2023, include ***.

Impact of section 301 tariffs

At the conference, petitioner and importer MWE described the section 301 tariffs as having caused an increase in the prices of GPPW in the United States. It added that the section

¹⁹ *** did not provide a response *** regarding distinct conditions of competition in the GPPW market.

²⁰ In 2021, the California Air Resources Board (CARB) updated its regulations on gasoline-powered engines to allow continued use of GPPW until 2028. (Previous regulations might have curtailed such sales in California in 2024.) Conference transcript, pp. 57-58 (G. Alexander) and “CARB approves updated regulations requiring most new small off-road engines be zero emission by 2024,” December 9, 2021, <https://ww2.arb.ca.gov/news/carb-approves-updated-regulations-requiring-most-new-small-road-engines-be-zero-emission-2024> , retrieved January 31, 2023.

²¹ The following firms provided purchaser questionnaire responses: ***. Purchaser *** did not respond to the Commission’s questionnaire despite staff’s repeated efforts. Emails to ***.

²² Of the seven responding purchasers, six purchased domestic GPPWs, seven purchased imports of the subject merchandise from China, and two (***) purchased imports of GPPW from Vietnam. Three responding purchasers reported purchases from other sources, including Canada, Germany, Italy, Japan, and Mexico.

²³ All responding purchasers indicated they had marketing/pricing knowledge of domestic product and Chinese product, and two purchasers had marketing/pricing knowledge of Vietnamese product.

301 tariffs were responsible for driving Chinese producers to relocate GPPW assembly operations to Vietnam.²⁴ Petitioner stated that an exemption to the section 301 tariff for GPPW and its components ended in the third quarter of 2020, which is when the main shift of production from China to Vietnam occurred.²⁵

U.S. producers, importers, and purchasers were asked to report the impact of section 301 tariffs on the GPPW market including any effects on GPPW cost, price, supply, and/or overall demand since January 1, 2020. All four responding U.S. producers, 7 of 10 importers, and 4 of 7 purchasers reported that the section 301 tariffs impacted the GPPW market. *** reported that costs and retail prices increased due to the tariffs. *** reported that U.S. customers did not accept price increases at a level that covered the ***. Importer *** reported that supply chains moved outside of China when the exemption ended. Importer *** reported that the section 301 tariffs impacted cost, price, supply and demand due to uncertainty. Purchaser *** reported that supplier margins shrank, and retail prices hit a new high due to the section 301 tariffs.

Channels of distribution

U.S. producers and importers of Chinese and Vietnamese GPPWs sold mainly to other (non-online only/primarily) retailers. However, sales of importers' shipments of Vietnamese GPPWs shifted towards online only or primarily online retailers in 2022 at the expense of other retail sales, and shipments of Chinese GPPWs to distributors and end users increased from 2020-22, as shown in table II-1.^{26 27}

²⁴ Conference transcript, pp. 34 (Szamosszegi), 95 (C. Alexander), and 131 (Barleycorn).

²⁵ Conference transcript, p. 94 (C. Alexander).

²⁶ U.S. producer *** reported other retailers included OEMs, distributors, and dealers.

²⁷ U.S. producer *** reported its shipments to its *** as shipments to distributors and other end users.

Table II-1**GPPW: Share of U.S. shipments by source, channel of distribution, and period**

Shares in percent

Source	Channel	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
United States	Online retailers	***	***	***	***	***
United States	Other retailers	***	***	***	***	***
United States	Distributors and end users	***	***	***	***	***
China	Online retailers	***	***	***	***	***
China	Other retailers	***	***	***	***	***
China	Distributors and end users	***	***	***	***	***
Vietnam	Online retailers	***	***	***	***	***
Vietnam	Other retailers	***	***	***	***	***
Vietnam	Distributors and end users	***	***	***	***	***
Subject	Online retailers	***	***	***	***	***
Subject	Other retailers	***	***	***	***	***
Subject	Distributors and end users	***	***	***	***	***
Nonsubject	Online retailers	***	***	***	***	***
Nonsubject	Other retailers	***	***	***	***	***
Nonsubject	Distributors and end users	***	***	***	***	***
All imports	Online retailers	***	***	***	***	***
All imports	Other retailers	***	***	***	***	***
All imports	Distributors and end users	***	***	***	***	***

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

Note: Online retailers are those that are online only or primarily online retailers.

Geographic distribution

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

Table II-2**GPPW: Count of U.S. producers' and U.S. importers' geographic markets**

Region	U.S. producers	China	Vietnam	Subject sources
Northeast	4	6	5	8
Midwest	4	6	5	8
Southeast	4	6	5	8
Central Southwest	4	6	5	8
Mountain	4	6	5	8
Pacific Coast	4	6	5	8
Other	4	5	4	6
All regions (except Other)	4	6	5	8
Reporting firms	4	6	5	8

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

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

Supply and demand considerations

U.S. supply

Table II-3 provides a summary of the supply factors regarding GPPW from U.S. producers and from subject countries. Between 2020 and 2022, Chinese capacity decreased ***, while Vietnamese capacity increased **. Domestic GPPW capacity increased **.

Table II-3**GPPW: Supply factors that affect the ability to increase shipments to the U.S. market, by country**

Quantity in units; ratio and share in percent

Factor	Measure	United States	China	Vietnam	Subject suppliers
Capacity 2020	Quantity	***	***	***	***
Capacity 2022	Quantity	***	***	***	***
Capacity utilization 2020	Ratio	***	***	***	***
Capacity utilization 2022	Ratio	***	***	***	***
Ending inventories 2020	Ratio	***	***	***	***
Ending inventories 2022	Ratio	***	***	***	***
Home market 2022	Share	***	***	***	***
Non-US export markets 2022	Share	***	***	***	***
Ability to shift production	Count	***	***	***	***

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

Note: Responding U.S. producers accounted for the majority of U.S. production of GPPW in 2022. Based on responses to the questionnaire, responding foreign producer/exporter firms accounted for approximately one-quarter of U.S. imports of GPPW from China and approximately all of U.S. imports from Vietnam during 2022. For additional data on the number of responding firms and their share of U.S. production and of U.S. imports from each subject country, please refer to part VII. Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

Domestic production

Based on available information, U.S. producers of GPPW have the ability to respond to changes in demand with large changes in the quantity of shipments of U.S.-produced GPPW 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 production to or from alternate products. Factors mitigating responsiveness of supply include a limited ability to shift shipments from alternate markets.

Capacity utilization decreased between 2020 and 2022, as capacity increased but production declined. The largest export markets include ***. Other products that U.S. producers reportedly can produce on the same equipment as GPPW are out-of-scope GPPWs, ***.²⁸ U.S. producer *** reported that out-of-scope GPPW production requires a “different skill set” than that used to produce GPPW.²⁹

Subject imports from China

Based on available information, producers of GPPW from China have the ability to respond to changes in demand with large changes in the quantity of shipments of GPPW to the U.S. market. Despite the reported higher capacity utilization and declining capacity, one Chinese producer reported that it was able to ***.³⁰ Other contributing factors to this high degree of responsiveness include the ability to shift shipments from alternate markets, and the ability to shift production to or from alternate products. Factors mitigating responsiveness of supply are the limited availability of current unused capacity and very limited inventories.

Chinese capacity decreased *** between 2020 and 2022, while production decreased at a *** rate, resulting in an increase in capacity utilization. Reported export markets include ***. Chinese GPPW

²⁸ U.S. producer *** was the only producer to report ***.

²⁹ Neither of the other two responding U.S. producers reported limitations. U.S. producer *** reported that it builds other products on a “regular mix dependent upon demand signals” and *** reported it is not currently planning to produce other products.

³⁰ Chinese producer *** reported it ***. Vietnamese producer *** reported that it ***.

producers reported *** between export markets. Other products that responding Chinese GPPW producers reportedly can produce on the same equipment as GPPW are outdoor products such as ***. Factors affecting foreign producers' ability to shift production include training, changeover of equipment and fixtures, and testing.

Subject imports from Vietnam

Based on available information, producers of GPPW from Vietnam have the ability to respond to changes in demand with very large changes in the quantity of shipments of GPPW to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of very large amounts of unused capacity, the ability to shift production to or from alternate products, and a large increase in capacity. Factors mitigating responsiveness of supply include limited inventories and the *** to shift shipments from alternate markets.

Capacity increased by over *** percent from 2020 to 2022, while production increased by approximately *** percent, resulting in a very low rate of capacity utilization. Vietnamese producers reported exporting ***. Other products that responding Vietnamese producers reportedly can produce on the same equipment as GPPW are ***. Factors affecting Vietnamese producers' ability to shift production include training, the changeover of equipment and fixtures, testing, and demand/orders for other products.

Imports from nonsubject sources

No importers reported imports of GPPWs from nonsubject sources.³¹

Supply constraints

Half of responding U.S. producers (2 of 4) and half of responding importers (5 of 10) reported they had not experienced supply constraints from January 1, 2020 to the filing of the petition on December 30, 2022. U.S. producer *** reported there were not supply constraints, but there were longer lead times, while *** reported supply constraints in 2021

³¹ In 2022, imports from nonsubject sources accounted for 14.2 percent of imports, on a quantity basis, based on official Commerce import statistics under HTS statistical reporting numbers 8424.30.9000 and 8424.90.9040, which include out-of-scope product. In descending order, Canada, Mexico, Germany, and Italy were large sources of imports from nonsubject countries from 2020-22 based on the same official Commerce import statistics.

due to the limited availability of engines and because a “supplier” exited the market.³² U.S. producer *** reported that supply chain “challenges” impacted delivery times.³³ Importer *** reported it was placed on allocation due to unavailability of Honda engines (a component of GPPWs), and importers *** both reported that COVID-19-related factory shutdowns led to longer lead times and manufacturing/shipment delays.³⁴ Importer *** also reported COVID-19 related disruptions as a pre-petition supply constraint. Respondent Harbor Freight added the COVID-19 pandemic impacted the GPPW market as it caused shutdowns for manufacturers of components and GPPWs and disrupted international shipping due to a shipping container shortage.³⁵

Two of three responding producers reported supply constraints following the filing of the petition. U.S. producer *** reported freight delays and price increases during the second half of 2021 through 2022, and *** reported engine supply delays resulting in longer lead times. Most importers (9 of 10) reported no post-petition supply constraints.

Four of seven responding purchasers reported that there were no supply constraints prior to the petition, and almost all purchasers (six of seven) reported no supply constraints following the filing of the petition on December 30, 2022. Purchaser *** reported that prior to the petition, FNA could not meet its requested demand from 2021-22, and *** sourced GPPWs from “multiple countries” instead. Purchasers *** cited COVID-19 related shipping delays and supply shortages as supply constraints prior to the petition filing.

New suppliers

Purchaser *** was the only purchaser to report a new supplier since January 1, 2020, indicating that (Champion) had entered the market.³⁶

³² *** did not report the name of the supplier.

³³ *** reported the ***.

³⁴ *** included overseas labor strikes and “capacity” (generally) as reasons for extended lead times. *** specifically listed the *** for GPPWs as the supply constraint.

³⁵ Hearing transcript, p. 121 (Sprong).

³⁶ It added that Champion was the only specific firm it could list, but there are “many firms that have entered the {GPPW} market in the last two years, {it} just can’t think of the specific brands. They were brands {it} had never heard of before.”

U.S. demand

Based on available information, the overall demand for GPPW is likely to experience small-to-moderate changes in response to changes in price. The main contributing factor is the somewhat limited range of substitute products.

End uses and cost share

Uses for GPPWs pertain to washing large items and outdoor surfaces such as homes, decks, concrete, marine vehicles, automobiles, RVs, and driveways.³⁷ U.S. demand for GPPW depends on final consumer demand for power washing, especially power washing that requires GPPW (as opposed to less powerful options, such as EPPWs). Petitioner stated that, before 2020, housing sales were one indicator of demand for GPPW, but that events since then have lowered the effectiveness of such indicators.³⁸ (See “Demand trends” below.)

Business cycles

All four U.S. producers, five of nine importers, and five of seven purchasers indicated that the market was subject to business cycles. Specifically, firms reported that sales of GPPW are seasonal with a bias towards spring and summer. Importer *** reported that imports historically are higher in the first and second quarters to support this seasonality. Respondent MWE agreed, stating that importers increase shipments in the first half of the year to build inventories preceding peak selling months.³⁹

Demand trends

Two U.S. producers reported an increase in U.S. demand for GPPW since January 1, 2020, while two reported demand fluctuated but decreased overall (table II-4).⁴⁰ Importer and purchaser responses were varied; a plurality of importers reported no change in domestic demand and a slight plurality of purchasers reported demand fluctuated in a downward trend. Some firms reported that the lockdowns associated with the COVID-19 pandemic, which allowed consumers to spend more time at home and focus on home improvement projects, increased demand for GPPWs. Purchaser *** reported that government subsidies distributed to construction companies for infrastructure projects and municipality

³⁷ Of the two responding purchasers, both reported demand for GPPW end uses has fluctuated since January 2020.

³⁸ Conference transcript, pp. 80-81 (W. Alexander).

³⁹ Hearing transcript, p. 114 (Barleycorn).

⁴⁰ *** did not provide reasons for why demand had fluctuated down.

upgrades incentivized such companies to increase their purchases of GPPWs and to buy larger GPPWs. Purchaser *** and importer *** reported a shift away from GPPWs and towards EPPWs and battery powered pressure washers. Respondent Harbor Freight added that demand for GPPWs increased during 2020-21, especially once consumers received economic stimulus checks related to the COVID-19 pandemic, and demand returned to the “historic norm” in 2022.⁴¹

Table II-4

GPPW: Count of firms’ responses regarding overall domestic and foreign demand, by firm type

Market	Firm type	Steadily Increase	Fluctuate Up	No change	Fluctuate Down	Steadily Decrease
Domestic demand	U.S. producers	2	0	0	2	0
Domestic demand	Importers	2	1	5	2	1
Domestic demand	Purchasers	1	2	0	3	1
Foreign demand	U.S. producers	0	0	0	0	0
Foreign demand	Importers	0	0	2	0	0
Foreign demand	Purchasers	0	1	0	0	2

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

Substitute products

Substitutes for GPPW mainly include other types of pressure washers, especially EPPWs and, to a lesser extent, battery powered pressure washers. All U.S. producers, almost all importers, and all purchasers reported that EPPWs were a substitute for GPPWs. Three firms (one importer and two purchasers) reported battery powered pressure washers as a substitute for GPPWs. Importer *** noted that EPPWs are similar to GPPWs but are more limited in use and application due to their lower PSI and GPM.

Three of four responding U.S. producers and almost all responding purchasers reported that changes in demand for EPPW impacted GPPW demand, while most importers disagreed. U.S. producer *** noted that the demand for EPPWs has a greater impact on demand for lower PSI rated GPPWs which are “generally not considered in-scope.” U.S. producer *** added that the U.S. market generally prefers GPPWs but EPPWs are gaining in popularity. Purchaser *** reported that demand shifted from GPPWs to EPPWs in the DIY and residential uses, but not as much in the commercial/professional sectors. Purchaser *** reported that a supply shortage “of one fuel source has forced consumers to seek alternate sources,” and *** reported that entry level consumers are “intimidated” by GPPWs and opt for EPPWs.

⁴¹ Hearing transcript, p. 120 (Sprong).

All responding producers and almost all importers reported that changes in EPPW prices had no impact on GPPW prices. Most purchasers (four of five), however, reported EPPW prices impacted GPPW prices. Purchaser *** reported that customers choose the lower priced option.

Substitutability issues

This section assesses the degree to which U.S.-produced GPPW and imports of GPPW from subject countries can be substituted for one another by examining the importance of certain purchasing factors and the comparability of GPPW from domestic and imported sources based on those factors. Based on available data, staff believes that there is a high degree of substitutability between domestically produced GPPW and GPPW imported from subject sources.⁴² Factors contributing to this level of substitutability include similar quality, availability, similarities between domestically produced GPPWs and GPPWs imported from subject countries across most purchase factors, most firms reporting domestic and subject sourced GPPWs are always interchangeable, and U.S. producers' and importers' responses regarding limited significant factors other than price. Factors reducing substitutability include customers' preferences for engine brands; different lead times from domestic and subject sources, especially for importers' produced-to-order GPPWs; some preference for particular producers; and purchasers' varied responses to factors other than price when comparing domestic and Chinese GPPWs.

Factors affecting purchasing decisions

Purchaser decisions based on source

As shown in table II-5, a plurality of purchasers sometimes make purchasing decisions based on the producer or country of origin. An equal number of purchasers each reported that their customers usually, sometimes, or never make purchasing decisions based on the producer, and sometimes or never make purchasing decisions based on the country of origin. Purchaser *** reported that customers purchase recognized brands, and *** reported that commercial customers have stronger preferences for certain

⁴² The degree of substitution between domestic and imported GPPW depends upon the extent of product differentiation between the domestic and imported products and reflects how easily purchasers can switch from domestically produced GPPW to the GPPW imported from subject countries (or vice versa) when prices change. The degree of substitution may include such factors as relative prices (discounts/rebates), quality differences (e.g., grade standards, defect rates, etc.), and differences in sales conditions (e.g., lead times between order and delivery dates, reliability of supply, product services, etc.).

producers but did not list which producers. Purchaser *** reported that “FNA was unable to fill {its} needed demand in 2021 and 2022” and so it purchased GPPWs from other producers.

Table II-5

GPPW: Count of purchasers’ responses regarding frequency of purchasing decisions based on producer and country of origin

Firm making decision	Decision based on	Always	Usually	Sometimes	Never
Purchaser	Producer	0	2	3	2
Customer	Producer	0	2	2	2
Purchaser	Country	0	1	4	2
Customer	Country	0	0	3	3

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

No purchasers reported that certain grades (residential or commercial), pressure ratings (psi), and/or flow ratings (gpm) of GPPWs were only available from one source.

Importance of purchasing domestic product

Six of seven purchasers reported that most (1 firm) or all (5 firms) of their purchases did not require purchasing U.S.-produced product. No purchasers reported that domestic product was required by law, two purchasers reported it was required by their customers (for 10 to 95 percent of their purchases), and no purchasers reported other preferences for domestic product.

Importance of engine brands

Four of six responding purchasers reported that their customers prefer GPPWs made with particular engine brands, including Honda (all four purchasers) and Briggs and Stratton (one purchaser). Purchaser *** added that Honda engines are reliable and durable, but Honda is exiting the market. Purchaser *** reported that Honda engines are high quality but expensive and can have limited availability. Purchaser *** reported that engine brand is one factor it considers but not the only factor.

Most purchasers (five of seven) reported they do not have a preference for engine brands. *** reported they prefer to purchase GPPWs with specific engine brands, and both firms prefer Honda engines. *** reported it had difficulty obtaining GPPWs from FNA and TTI “because Honda is exiting the market.”

Most important purchase factors

The most often cited top three factors firms consider in their purchasing decisions for GPPW were price and quality (six firms each) and availability/capacity to supply (five firms), as shown in table II-6. An equal number of purchasers ranked price, quality, and availability/capacity to supply as the first-most important (two firms each), followed by brand (one firm); quality and price were the most frequently reported second-most important factor (three firms each); and brand was the most frequently reported third-most important factor (three firms).

Table II-6

GPPW: Count of ranking of factors used in purchasing decisions as reported by purchasers, by factor

Factor	First	Second	Third	Total
Price	2	3	1	6
Quality	2	3	1	6
Availability/capacity to supply	2	1	2	5
Brand	1	0	3	4

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

Note: Quality includes one response of “features,” availability/capacity to supply includes one response of “do they have the resources to keep up with *** in shipments?”, brand includes one response of “vendor” and one response of “brand recognition.”

All seven responding purchasers reported that they sometimes purchase the lowest-priced product.

Importance of specified purchase factors

Purchasers were asked to rate the importance of 16 factors in their purchasing decisions (table II-7). The factors rated as very important by more than half of responding purchasers were product consistency, quality meets industry standards, reliability of supply (seven each), availability (six), price, technical support/service (five), and delivery time (four). Engine brand was rated somewhat important by all seven purchasers.

Table II-7**GPPW: Count of purchasers' responses regarding importance of purchase factors, by factor**

Factor	Very important	Somewhat important	Not important
Availability	6	0	0
Delivery terms	1	5	1
Delivery time	4	3	0
Discounts offered	1	6	0
Engine brand	0	7	0
Minimum quantity requirements	3	1	3
Packaging	1	5	1
Payment terms	1	6	0
Price	5	2	0
Product consistency	7	0	0
Product range	3	4	0
Quality meets industry standards	7	0	0
Quality exceeds industry standards	2	5	0
Reliability of supply	7	0	0
Technical support/service	5	2	0
U.S. transportation costs	2	5	0

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

Lead times

U.S. producers primarily sold GPPWs from inventory, while nearly half of importers' sales of GPPWs from China and Vietnam were produced-to-order. U.S. producers reported that *** percent of their sales were sold from inventory, with lead times averaging *** days. The remaining *** percent of their sales were produced to order, with lead times averaging *** days. Importers reported that *** percent of their sales were from U.S. inventories with lead times averaging *** days, and *** percent of sales were from foreign inventories with lead times averaging *** days. The remaining *** percent of importers' sales were produced to order, with lead times averaging *** days.

Supplier certification

Four of seven responding purchasers did not require their suppliers to become certified or qualified to sell GPPW to their firm. The three purchasers that did require supplier certification reported that the time to qualify a new supplier ranged from 14 days (

) to 60 days ().⁴³ No purchaser named a domestic or foreign supplier that had failed in its attempt to qualify GPPW or had lost its approved status since 2020.⁴⁴

Minimum quality specifications

As can be seen from table II-8, most responding purchasers reported that domestically produced product always met minimum quality specifications. Of those with knowledge of Chinese and Vietnamese GPPWs, two reported Chinese GPPWs usually met minimum quality specifications, and one purchaser reported Vietnamese GPPWs always met minimum quality specifications.

Table II-8
GPPW: Count of purchasers' responses regarding suppliers' ability to meet minimum quality specifications, by source

Source of purchases	Always	Usually	Sometimes	Rarely or never	Don't Know
United States	3	1	0	0	2
China	1	2	0	0	4
Vietnam	1	0	0	0	5
Nonsubject sources	1	1	0	0	3

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

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

All seven responding purchasers reported factors that determined quality. PSI was listed by three firms as an indicator of quality. Other listed factors included engine brand and engine durability, reliability, product specifications, and performance.

Changes in purchasing patterns

Two purchasers reported that they had changed suppliers since January 1, 2020, while five reported that they had not. Specifically, *** dropped or reduced purchases from: FNA (Simpson) because of *** price increases due to increases in raw

⁴³ Purchaser *** reported that there is not a set number of days required for certification, and instead it focuses on "reputable brands, carried at other retailers, and that have a factory that can keep up with *** in shipments. If {it feels} they cannot keep up with this demand, {it} may limit the scope of the partnership or not work with them at all." *** also provided factors it considers such as the supplier's service network line, the product line of GPPWs offered, online reviews, and whether there are Google searches for the brand of GPPWs offered.

⁴⁴ Purchaser *** reported a supplier had failed to certify with the firm, but it did not name the supplier, reporting "{b}rands that have not been able to keep up with their demand, or their raw materials got so expensive they priced themselves out of the market. New brands entering in the market of less expensive gas-powered pressure washers."

material prices; Kranzle/Dirt Killer due to product shortages; Briggs and Stratton due to its acquisition and production stoppage; and Easy-Kleen due to limited availability.⁴⁵

Purchasers were also asked about changes in their purchasing patterns from different countries since January 1, 2020 (table II-9). Purchasers' responses varied regarding changes in their purchases of domestic product. Four of seven purchasers reported a general increase in domestic purchases, while the remaining three reported a general decrease.⁴⁶ Most purchasers reported increased demand for GPPWs due to COVID-19, although *** noted that demand has since returned to pre-COVID-19 levels.⁴⁷

Most purchasers reported decreasing their purchases of Chinese GPPWs. Half of responding purchasers did not purchase Vietnamese GPPWs, and the remaining purchasers reported either that purchases of Vietnamese GPPWs fluctuated up, that there was no change in purchase patterns, or that purchases fluctuated down. Reasons for decreasing purchases of Chinese GPPWs included a change in supplier (***), the impact of the section 301 tariffs and suppliers moving production to the United States and to Vietnam (***), and increased purchases of domestic GPPWs (***). Purchaser *** reported its purchases of Vietnamese GPPWs fluctuated up due to higher demand during the COVID-19 pandemic and that demand has returned to pre-pandemic levels, while *** reported it purchased domestic GPPWs instead of Vietnamese GPPWs.

Table II-9
GPPW: Count of purchasers' responses regarding changes in purchase patterns from U.S., subject, and nonsubject countries

Source of purchases	Steadily Increase	Fluctuate Up	No change	Fluctuate Down	Steadily Decrease	Did not purchase
United States	1	3	0	2	1	0
China	0	0	0	1	4	1
Vietnam	0	1	1	0	1	3
Nonsubject sources	0	2	0	1	0	3
Sources unknown	0	1	0	0	0	3

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

⁴⁵ Purchasers did not report adding or increasing purchases from any supplier. Purchaser *** reported it changed suppliers but did not name the supplier, reporting that its previous supplier no longer manufactures GPPWs.

⁴⁶ General increase includes steadily increased and fluctuated up responses, and general decrease includes steadily decreased and fluctuated down responses.

⁴⁷ Purchaser *** also added that the "pandemic caused manufacturers to move their manufacturing process to the U.S./North America to remove potential supply chain disruptions."

Purchase factor comparisons of domestic products, subject imports, and nonsubject imports

Purchasers were asked a number of questions comparing GPPW produced in the United States, subject countries, and nonsubject countries. First, purchasers were asked for a country-by-country comparison on the same 16 factors (tables II-10) for which they were asked to rate the importance.

Six purchasers compared GPPW from the United States with that from China, reporting that domestic GPPWs were superior regarding delivery time and reliability of supply. An equal number of purchasers reported U.S. GPPWs were superior or comparable to Chinese GPPWs regarding availability, minimum quantity requirements, and U.S. transportation costs; at least a plurality of purchasers reported domestic and Chinese GPPWs were comparable on all other factors.

Four purchasers compared GPPWs from the United States with GPPWs from Vietnam, reporting that domestic GPPWs were superior regarding delivery time, and an equal number ranked domestic GPPWs as superior or comparable regarding delivery terms, minimum quantity requirements, and product consistency. An equal number of purchasers reported domestic GPPWs as superior and inferior to Vietnamese GPPWs regarding reliability of supply, and at least a plurality of purchasers ranked domestic and Vietnamese GPPWs as comparable on all other factors. Both responding purchasers (***) reported that U.S. GPPWs and GPPWs from nonsubject sources were comparable on ten factors.⁴⁸

⁴⁸ *** reported that domestic GPPWs were superior regarding delivery time compared to GPPWs from nonsubject sources. They rated domestic GPPWs as superior and comparable for availability and U.S. transportation costs compared to nonsubject sourced GPPWs. They rated domestic GPPWs as comparable and inferior to nonsubject sourced GPPWs for price and product consistency. Regarding reliability of supply, *** ranked domestic GPPWs as superior, while *** ranked domestic GPPWs as inferior to nonsubject sourced GPPWs.

Table II-10**GPPW: Count of purchasers' responses comparing U.S.-produced and imported product, by factor and country pair**

Factor	Country pair	Superior	Comparable	Inferior
Availability	U.S. vs China	3	3	0
Delivery terms	U.S. vs China	2	4	0
Delivery time	U.S. vs China	5	1	0
Discounts offered	U.S. vs China	1	4	1
Engine brand	U.S. vs China	1	5	0
Minimum quantity requirements	U.S. vs China	3	3	0
Packaging	U.S. vs China	0	6	0
Payment terms	U.S. vs China	1	4	1
Price	U.S. vs China	0	4	2
Product consistency	U.S. vs China	2	3	1
Product range	U.S. vs China	0	6	0
Quality meets industry standards	U.S. vs China	1	5	0
Quality exceeds industry standards	U.S. vs China	1	5	0
Reliability of supply	U.S. vs China	4	1	1
Technical support/service	U.S. vs China	2	4	0
U.S. transportation costs	U.S. vs China	3	3	0

Table continued.

Table II-10 Continued**GPPW: Count of purchasers' responses comparing U.S.-produced and imported product, by factor and country pair**

Factor	Country pair	Superior	Comparable	Inferior
Availability	U.S. vs Vietnam	1	3	0
Delivery terms	U.S. vs Vietnam	2	2	0
Delivery time	U.S. vs Vietnam	3	0	1
Discounts offered	U.S. vs Vietnam	1	2	1
Engine brand	U.S. vs Vietnam	0	4	0
Minimum quantity requirements	U.S. vs Vietnam	2	2	0
Packaging	U.S. vs Vietnam	0	4	0
Payment terms	U.S. vs Vietnam	0	3	1
Price	U.S. vs Vietnam	1	2	0
Product consistency	U.S. vs Vietnam	2	2	0
Product range	U.S. vs Vietnam	1	3	0
Quality meets industry standards	U.S. vs Vietnam	1	3	0
Quality exceeds industry standards	U.S. vs Vietnam	1	2	1
Reliability of supply	U.S. vs Vietnam	2	0	2
Technical support/service	U.S. vs Vietnam	1	3	0
U.S. transportation costs	U.S. vs Vietnam	1	2	1

Table continued.

Table II-10 Continued

GPPW: Count of purchasers' responses comparing U.S.-produced and imported product, by factor and country pair

Factor	Country pair	Superior	Comparable	Inferior
Availability	China vs Vietnam	0	2	0
Delivery terms	China vs Vietnam	0	2	0
Delivery time	China vs Vietnam	0	2	0
Discounts offered	China vs Vietnam	0	2	0
Engine brand	China vs Vietnam	0	2	0
Minimum quantity requirements	China vs Vietnam	0	2	0
Packaging	China vs Vietnam	0	2	0
Payment terms	China vs Vietnam	0	2	0
Price	China vs Vietnam	1	1	0
Product consistency	China vs Vietnam	0	2	0
Product range	China vs Vietnam	0	2	0
Quality meets industry standards	China vs Vietnam	0	2	0
Quality exceeds industry standards	China vs Vietnam	0	2	0
Reliability of supply	China vs Vietnam	0	2	0
Technical support/service	China vs Vietnam	0	2	0
U.S. transportation costs	China vs Vietnam	0	2	0

Table continued.

Table II-10 Continued

GPPW: Count of purchasers' responses comparing U.S.-produced and imported product, by factor and country pair

Factor	Country pair	Superior	Comparable	Inferior
Availability	U.S. vs Nonsubject	1	1	0
Delivery terms	U.S. vs Nonsubject	0	2	0
Delivery time	U.S. vs Nonsubject	2	0	0
Discounts offered	U.S. vs Nonsubject	0	2	0
Engine brand	U.S. vs Nonsubject	0	2	0
Minimum quantity requirements	U.S. vs Nonsubject	0	2	0
Packaging	U.S. vs Nonsubject	0	2	0
Payment terms	U.S. vs Nonsubject	0	2	0
Price	U.S. vs Nonsubject	0	1	1
Product consistency	U.S. vs Nonsubject	0	1	1
Product range	U.S. vs Nonsubject	0	2	0
Quality meets industry standards	U.S. vs Nonsubject	0	2	0
Quality exceeds industry standards	U.S. vs Nonsubject	0	2	0
Reliability of supply	U.S. vs Nonsubject	1	0	1
Technical support/service	U.S. vs Nonsubject	0	2	0
U.S. transportation costs	U.S. vs Nonsubject	1	1	0

Table continued.

Table II-10 Continued**GPPW: Count of purchasers' responses comparing U.S.-produced and imported product, by factor and country pair**

Factor	Country pair	Superior	Comparable	Inferior
Availability	China vs Nonsubject	0	2	0
Delivery terms	China vs Nonsubject	1	1	0
Delivery time	China vs Nonsubject	0	1	1
Discounts offered	China vs Nonsubject	1	1	0
Engine brand	China vs Nonsubject	0	2	0
Minimum quantity requirements	China vs Nonsubject	0	2	0
Packaging	China vs Nonsubject	0	2	0
Payment terms	China vs Nonsubject	0	2	0
Price	China vs Nonsubject	1	1	0
Product consistency	China vs Nonsubject	1	1	0
Product range	China vs Nonsubject	1	1	0
Quality meets industry standards	China vs Nonsubject	0	2	0
Quality exceeds industry standards	China vs Nonsubject	0	1	1
Reliability of supply	China vs Nonsubject	0	1	1
Technical support/service	China vs Nonsubject	0	2	0
U.S. transportation costs	China vs Nonsubject	0	1	1

Table continued.

Table II-10 Continued**GPPW: Count of purchasers' responses comparing U.S.-produced and imported product, by factor and country pair**

Factor	Country pair	Superior	Comparable	Inferior
Availability	Vietnam vs Nonsubject	0	1	0
Delivery terms	Vietnam vs Nonsubject	0	1	0
Delivery time	Vietnam vs Nonsubject	0	1	0
Discounts offered	Vietnam vs Nonsubject	0	1	0
Engine brand	Vietnam vs Nonsubject	0	1	0
Minimum quantity requirements	Vietnam vs Nonsubject	0	1	0
Packaging	Vietnam vs Nonsubject	0	1	0
Payment terms	Vietnam vs Nonsubject	0	1	0
Price	Vietnam vs Nonsubject	0	1	0
Product consistency	Vietnam vs Nonsubject	0	1	0
Product range	Vietnam vs Nonsubject	0	1	0
Quality meets industry standards	Vietnam vs Nonsubject	0	1	0
Quality exceeds industry standards	Vietnam vs Nonsubject	0	1	0
Reliability of supply	Vietnam vs Nonsubject	0	1	0
Technical support/service	Vietnam vs Nonsubject	0	1	0
U.S. transportation costs	Vietnam vs Nonsubject	0	1	0

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

Note: 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.

Comparison of U.S.-produced and imported GPPW

In order to determine whether U.S.-produced GPPW can generally be used in the same applications as imports from China and Vietnam, U.S. producers, importers, and purchasers were asked whether the products can always, frequently, sometimes, or never be used interchangeably. As shown in tables II-11 to II-13, all three responding U.S. producers, almost all responding importers, and most purchasers reported that domestic GPPWs and GPPWs from both subject countries are always interchangeable. Importer *** noted that domestic GPPWs and GPPWs from other countries are interchangeable as long as they meet the same specifications and standards. It added that, when comparing GPPW from different countries, it considers factors such as quality, fuel type, operating pressure, flow rate, and compatible accessories. Importer *** reported that regulatory concerns can limit interchangeability.⁴⁹ Respondents MWE and Harbor Freight also argued that domestic GPPWs and GPPWs from subject sources have similarly sourced (or identical) components.⁵⁰

Table II-11

GPPW: Count of U.S. producers reporting the interchangeability between product produced in the United States and in other countries, by country pair

Country pair	Always	Frequently	Sometimes	Never
U.S. vs. China	3	0	0	0
U.S. vs. Vietnam	3	0	0	0
China vs. Vietnam	3	0	0	0
United States vs. Other	2	0	1	0
China vs. Other	2	0	0	0
Vietnam vs. Other	2	0	0	0

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

Table II-12

GPPW: Count of importers reporting the interchangeability between product produced in the United States and in other countries, by country pair

Country pair	Always	Frequently	Sometimes	Never
U.S. vs. China	7	0	1	0
U.S. vs. Vietnam	7	0	1	0
China vs. Vietnam	6	0	1	0
United States vs. Other	6	0	0	0
China vs. Other	5	0	0	0
Vietnam vs. Other	5	0	0	0

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

⁴⁹ *** reported that GPPWs from domestic and subject sources are sometimes interchangeable.

⁵⁰ The Importers' joint posthearing brief, Annex G, pp. 3-4.

Table II-13**GPPW: Count of purchasers reporting the interchangeability between product produced in the United States and in other countries, by country pair**

Country pair	Always	Frequently	Sometimes	Never
U.S. vs. China	5	1	0	0
U.S. vs. Vietnam	2	1	0	0
China vs. Vietnam	2	1	0	0
United States vs. Other	4	0	0	0
China vs. Other	3	0	0	0
Vietnam vs. Other	2	0	0	0

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

In addition, U.S. producers, importers, and purchasers were asked to assess how often differences other than price were significant in sales of GPPW from the United States, subject, or nonsubject countries. As seen in tables II-14 to II-16, two of three U.S. producers reported that non-price factors are never important between domestic and Chinese GPPWs. An equal number of U.S. producers (two each) reported that non-price factors are sometimes or never important between domestic and Vietnamese GPPWs.⁵¹ A majority of importers reported non-price factors are sometimes important between domestic GPPWs and GPPWs from each subject source. Purchasers' responses varied; an equal number of purchasers reported non-price factors are always, frequently, and sometimes important when comparing domestic and Chinese GPPWs, and a slight plurality reported non-price factors are frequently important in domestic and Vietnamese GPPW comparisons. Purchasers *** listed significant non-price factors they consider, including quality (mentioned by all three purchasers), availability, value, brand, store service network, repair and service network, supplier reputation, and capacity. Importer *** also reported quality as a significant non-price factor, which included the "look and feel" of the GPPW and the "product warranty and availability of service locations."⁵² Importer *** reported that most of the major components, such as the engine and pump, are sourced from China and Vietnam. It added that the lack of domestic components eliminates the benefits of domestic assembly.⁵³

⁵¹ U.S. producer *** did not provide a response to the importance of non-price factors between domestic product and Chinese product but provided a response regarding Vietnamese product.

⁵² *** added that GPPWs are expensive, and customers would rather repair a GPPW than buy a new one as they are "difficult to dispose of properly because they contain regulated substances such as residual engine oil and gasoline."

⁵³ In additional comments to its questionnaire, purchaser *** added that the term "American Made" does not always mean better, and that it has quality issues with GPPWs produced in any country.

Table II-14

GPPW: Count of U.S. producers reporting the significance of differences other than price between product produced in the United States and in other countries, by country pair

Country pair	Always	Frequently	Sometimes	Never
U.S. vs. China	0	0	1	2
U.S. vs. Vietnam	0	0	2	2
China vs. Vietnam	0	0	1	2
United States vs. Other	0	0	0	1
China vs. Other	0	0	0	1
Vietnam vs. Other	0	0	0	1

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

Table II-15

GPPW: Count of importers reporting the significance of differences between product produced in the United States and in other countries, by country pair

Country pair	Always	Frequently	Sometimes	Never
U.S. vs. China	0	1	4	2
U.S. vs. Vietnam	0	1	5	2
China vs. Vietnam	0	0	4	2
United States vs. Other	0	1	1	2
China vs. Other	0	0	1	2
Vietnam vs. Other	0	0	1	2

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

Table II-16

GPPW: Count of purchasers reporting the significance of differences between product produced in the United States and in other countries, by country pair

Country pair	Always	Frequently	Sometimes	Never
U.S. vs. China	2	2	2	0
U.S. vs. Vietnam	1	2	1	0
China vs. Vietnam	1	2	1	0
United States vs. Other	1	2	1	0
China vs. Other	0	2	1	0
Vietnam vs. Other	0	2	0	0

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

Elasticity estimates

This section discusses elasticity estimates. Petitioner noted that the supply estimates are generally reasonable, as described below.

U.S. supply elasticity

The domestic supply elasticity for GPPW measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price of GPPW. 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 GPPW. Analysis of these factors above indicates that the U.S. industry has the ability to greatly increase or decrease shipments to the U.S. market; an estimate in the range of 7 to 10 is suggested.⁵⁴

U.S. demand elasticity

The U.S. demand elasticity for GPPW measures the sensitivity of the overall quantity demanded to a change in the U.S. market price of GPPW. 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 GPPW in the production of any downstream products. Based on the available information, the aggregate demand for GPPW is likely to be moderately inelastic; a range of -0.5 to -1.0 is suggested.⁵⁵

Substitution elasticity

The elasticity of substitution depends upon the extent of product differentiation between the domestic and imported products.⁵⁶ 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 GPPW and imported GPPW is likely to be in the range of 4 to 7.⁵⁷ Factors contributing to this level of substitutability include similar quality, availability, similarities between domestically produced GPPWs and GPPWs imported from subject countries across most purchase factors, most firms reporting domestic and subject sourced GPPWs as always interchangeable, and U.S. producers' and importers' responses regarding limited significant factors other than price. Factors reducing substitutability include some customers' preferences for engine brands (although most purchasers reported no

⁵⁴ Petitioner stated that the estimated range is "consistent" with the inventory levels and capacity utilization rates for the end of the first quarter of 2023. It added that a lower supply elasticity range would be justified to account for ***. However, ***. Petitioner's prehearing brief, exh. 8. See part VI for more information on ***.

⁵⁵ Petitioner agreed with the estimated elasticity of aggregate demand. Petitioner's prehearing brief, exh. 8.

⁵⁶ 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.

⁵⁷ Petitioner stated that the estimated substitution elasticity range is "reasonable" but "somewhat conservative." Petitioner's prehearing brief, exh. 8.

preference for engine brands); different lead times from domestic and subject sources, especially for importers' produced-to-order GPPWs which represent almost half of their sales; some preference for particular producers; and purchasers' varied responses to factors other than price when comparing domestic and Chinese GPPWs.

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 four firms that accounted for the majority of U.S. production of GPPW during 2022.

U.S. producers

The Commission issued a U.S. producer questionnaire to nine firms based on information contained in the petition, and staff research. Four firms, FNA, Generac, Northern Tool, and TTI, provided usable data on their operations. Staff believes that these responses represent the majority of U.S. production of GPPW.¹

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

¹ In the petitions nine firms were identified as possible U.S. producers, but of those firms identified ***.

Additionally, ***.

Table III-1

GPPW: U.S. producers, their positions on the petition, production locations, and shares of reported production, 2022

Share in percent

Firm	Position on petition	Production location(s)	Share of production
FNA	Petitioner	Mesquite, TX	***
Generac	***	Jefferson, WI	***
Northern Tool	***	Faribault, MN	***
TTI	***	Anderson, SC	***
All firms	Various	Various	***

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

Table III-2 presents information on U.S. producers' ownership, related and/or affiliated firms. *** indicated that it is ***. *** indicated that it is ***. *** indicated that it is ***. ***.

Table III-2

GPPW: U.S. producers' ownership, related and/or affiliated firms

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

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

As indicated in table III-2, *** is related to foreign producers of the subject merchandise and *** is related to U.S. importers of the subject merchandise. ***. Additionally,

***.

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

Producers in the United States were asked to report any change in the character of their operations or organization relating to the production of GPPW since 2020. Two of the three responding U.S. producers indicated in their questionnaires that they had experienced such changes. Table III-3 presents the changes identified by these producers. The petitioner reported that it expanded its GPPW production capacity in 2020 with the plant opening of the 400,000 sq. foot Mesquite, Texas facility.² In addition, ***³

Table III-3
GPPW: U.S. producers' reported changes in operations, since January 1, 2020

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

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

² Conference transcript, p. 17 (G. Alexander) and hearing transcript, p. 19 (G. Alexander)

³ *** U.S. producer questionnaire response, section II-3e.

Domestic production-related activities

Table III-4 shows data for sufficient production-related activities reported by all U.S. producers for GPPW. Additional information on domestic production related activities are presented in appendix D. *** responding producers rated the complexity, intensity, and importance of manufacturing activities of GPPW as a *** out of 5, while the remaining *** rated it a ***.

Table III-4

GPPW: U.S. producers' summary of sufficient production-related activities factors as it relates to GPPW operations in the United States

Factors	FNA	Genera c	Norther n Tool	TTI
Capital investments: Based on capital expenditures (value in 1,000 dollars)	*** to ***	***	*** to ***	*** to ***
Capital investments: Based on greenfield investment estimate (value in 1,000 dollars)	***	***	***	***
Technical expertise: Based on research and development costs (value in 1,000 dollars)	*** to ***	***	*** to ***	*** to ***
Value added: Based on share of direct labor and factory overhead out of total COGS (percent)	*** to ***	*** to ***	*** to ***	*** to ***
Employment: Based on average PRWs (number)	*** to ***	*** to ***	*** to ***	*** to ***
Quantity, type, and source of parts: Based on domestic inputs share of total raw materials (percent)	*** to ***	*** to ***	*** to ***	*** to ***

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

Note: Ranges when reported are based on the data for the three full calendar years 2020-22 and does not include the Jan-Mar interim periods.

U.S. production, capacity, and capacity utilization

Table III-5 presents U.S. producers' installed and practical capacity and production on the same equipment as subject production. During 2020-22, installed capacity, installed production, and installed capacity utilization fluctuated but ended lower in 2022 than in 2020. During interim January-March 2023 ("interim 2023") were compared to January-March 2022 ("interim 2022") installed capacity, installed production, and installed capacity utilization were lower. During 2020-22, practical capacity increased while practical production and practical utilization decreased. During interim 2023 were compared to interim 2022 practical capacity, practical production, and practical capacity utilization were lower. ***

***.

Table III-5

GPPW: U.S. producers' overall installed and practical capacity and production on the same equipment as in-scope production, by period

Capacity and production in units; utilization in percent

Item	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
Installed overall	Capacity	***	***	***	***	***
Installed overall	Production	***	***	***	***	***
Installed overall	Utilization	***	***	***	***	***
Practical overall	Capacity	***	***	***	***	***
Practical overall	Production	***	***	***	***	***
Practical overall	Utilization	***	***	***	***	***
Practical GPPWs	Capacity	***	***	***	***	***
Practical GPPWs	Production	***	***	***	***	***
Practical GPPWs	Utilization	***	***	***	***	***

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

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

Table III-6 presents U.S. producers' reported narratives regarding practical capacity constraints. *** reported production constraints for its production of GPPW.

Table III-6
GPPW: U.S. producers' reported capacity constraints since January 1, 2020

Item	Firm name and narrative response on constraints to practical overall capacity
Production bottlenecks	***
Production bottlenecks	***
Existing labor force	***
Existing labor force	***
Supply of material inputs	***
Supply of material inputs	***
Fuel or energy	***
Storage capacity	***
Storage capacity	***
Logistics/transportation	***
Logistics/transportation	***

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

Table III-7 and figure III-1 present U.S. producers' GPPW production, capacity, and capacity utilization. U.S. producers' average capacity fluctuated but increased overall by *** percent between 2020 and 2022. U.S. producers' average capacity was *** percent lower during interim 2023 compared with interim 2022. ***, while ***

*** during the same period.⁴ ***.⁵

U.S. producers' production fluctuated but decreased overall by *** percent between 2020 and 2022. ***. U.S. producers' production was *** percent lower during interim 2023 compared with interim 2022. Capacity utilization fluctuated but overall decreased by *** percentage points between 2020 and 2022. Capacity utilization was *** percentage points lower in interim 2023 compared with interim 2022. *** percentage points between 2020 and 2022, while FNA's capacity utilization decreased by *** percentage points over the same period, ending in 2022 at *** percent.

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

Practical capacity

Capacity in units

Firm	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
FNA	***	***	***	***	***
Generac	***	***	***	***	***
Northern Tool	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

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

Production

Production in units

Firm	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
FNA	***	***	***	***	***
Generac	***	***	***	***	***
Northern Tool	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

⁴ *** U.S. producer questionnaire response, section II-2a.

⁵ ***. ***. *** U.S. producer questionnaire response, section II-3f and Email from ***, August 1, 2023.

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

Capacity utilization

Ratio in percent

Firm	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
FNA	***	***	***	***	***
Generac	***	***	***	***	***
Northern Tool	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

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

Share of production

Share in percent

Firm	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
FNA	***	***	***	***	***
Generac	***	***	***	***	***
Northern Tool	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

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

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

Figure III-1
GPPW: U.S. producers' output, by period

* * * * *

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

Alternative products

As shown in table III-8, *** of the product produced during 2020-22 and the interim periods by U.S. producers was GPPW. *** reported producing electric powered pressure washers, and ***.⁶

⁶ In addition, ***. *** U.S. producer questionnaire response, section II-4b.

Table III-8

GPPW: U.S. producers' overall production on the same equipment as subject production, by period

Quantity in units; ratio and share in percent

Product type	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
GPPWs	Quantity	***	***	***	***	***
Electric powered pressure washers	Quantity	***	***	***	***	***
Other products	Quantity	***	***	***	***	***
All out-of-scope products	Quantity	***	***	***	***	***
All products	Quantity	***	***	***	***	***
GPPWs	Share	***	***	***	***	***
Electric powered pressure washers	Share	***	***	***	***	***
Other products	Share	***	***	***	***	***
All out-of-scope products	Share	***	***	***	***	***
All products	Share	***	***	***	***	***

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

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

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

Table III-9 presents U.S. producers' U.S. shipments, export shipments, and total shipments. In general, the quantity and value of U.S. producers' U.S. shipments increased slightly (less than *** percent) between 2020 and 2021 and then declined (approximately *** percent) in 2022.

The quantity of U.S. producers' U.S. shipments of GPPW decreased irregularly by *** percent from 2020 to 2022, and was *** percent lower in interim 2023 compared with interim 2022.⁷ The value of U.S. producers' U.S. shipments decreased by *** percent from 2020 to 2022, and was *** percent lower in interim 2022 compared with interim 2022. The unit value of U.S. producers' U.S. shipments increased by *** percent from 2020 to 2022, and was *** percent higher in interim 2023 compared with interim 2022.

There was no internal consumption or transfers to related firms during 2020-22 and interim 2022 and interim 2023.

The quantity of U.S. producers' U.S. exports, which represented less than *** percent of total shipments in any period for which data were collected, increased by *** percent

⁷ ***.

from 2020 to 2022, but was *** percent lower in interim 2023 compared with interim 2022.⁸ The value of U.S. producers' U.S. exports increased by *** percent from 2020 to 2022, but was *** percent lower in interim 2023 compared with interim 2022. The unit value of U.S. producers' U.S. exports increased by *** percent from 2020 to 2022, and was *** percent higher in interim 2023 compared with interim 2022.

Table III-9
GPPW: U.S. producers' shipments, by destination and period

Quantity in units; value in 1,000 dollars; unit value in dollars per unit; shares in percent

Item	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
U.S. shipments	Quantity	***	***	***	***	***
Export shipments	Quantity	***	***	***	***	***
Total shipments	Quantity	***	***	***	***	***
U.S. shipments	Value	***	***	***	***	***
Export shipments	Value	***	***	***	***	***
Total shipments	Value	***	***	***	***	***
U.S. shipments	Unit value	***	***	***	***	***
Export shipments	Unit value	***	***	***	***	***
Total shipments	Unit value	***	***	***	***	***
U.S. shipments	Share of quantity	***	***	***	***	***
Export shipments	Share of quantity	***	***	***	***	***
Total shipments	Share of quantity	***	***	***	***	***
U.S. shipments	Share of value	***	***	***	***	***
Export shipments	Share of value	***	***	***	***	***
Total shipments	Share of value	***	***	***	***	***

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

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

U.S. producers' inventories

Table III-10 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 by *** percent during 2020-22, and were *** percent

⁸ *** reported exports. Principal export markets included ***.

higher during interim 2023 compared with interim 2022. U.S. producers' inventories were at their highest levels, absolutely but not relatively (relative to production in 2020) to production and U.S. and total shipments, in 2022, and at their lowest absolute to levels of production in 2020. *** accounted for *** percent of end-of-period inventories during 2020 and 2021, respectively, while *** accounted for *** percent of end-of-period inventories in 2022.

Table III-10

GPPW: U.S. producers' inventories and their ratio to select items, by period

Quantity in units; ratio in percent

Item	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
End-of-period inventory quantity	***	***	***	***	***
Inventory ratio to U.S. production	***	***	***	***	***
Inventory ratio to U.S. shipments	***	***	***	***	***
Inventory ratio to total shipments	***	***	***	***	***

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

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

U.S. producers' imports from subject sources

U.S. producers' imports of GPPW are presented in tables III-11 (***), III-12 (***, III-13 (***), III-14 (***), and III-15 (reasons for importing). ***. ***. ***. ***. ***. ***.⁹

⁹ Appendix G presents U.S. producers' data, apparent U.S. consumption, and market shares which exclude ***

Table III-11

GPPW: * U.S. production, subject imports, and ratio of subject imports to production, by source and period**

Quantity in units; ratio in percent

Item	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
U.S. production	Quantity	***	***	***	***	***
Imports from ***	Quantity	***	***	***	***	***
Imports from *** to U.S. production	Ratio	***	***	***	***	***

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

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

Table III-12

GPPW: * U.S. production, subject imports, and ratio of subject imports to production, by source and period**

Quantity in units; ratio in percent

Item	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
U.S. production	Quantity	***	***	***	***	***
Imports from ***	Quantity	***	***	***	***	***
Imports from ***	Quantity	***	***	***	***	***
Imports from ***	Quantity	***	***	***	***	***
Imports from *** to U.S. production	Ratio	***	***	***	***	***
Imports from *** to U.S. production	Ratio	***	***	***	***	***
Imports from *** to U.S. production	Ratio	***	***	***	***	***

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

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

Table III-13

GPPW: * U.S. production, subject imports, and ratio of subject imports to production, by source and period**

Quantity in units; ratio in percent

Item	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
U.S. production	Quantity	***	***	***	***	***
Imports from ***	Quantity	***	***	***	***	***
Imports from ***	Quantity	***	***	***	***	***
Imports from ***	Quantity	***	***	***	***	***
Imports from *** to U.S. production	Ratio	***	***	***	***	***
Imports from *** to U.S. production	Ratio	***	***	***	***	***
Imports from *** to U.S. production	Ratio	***	***	***	***	***

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

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

Table III-14

GPPW: * U.S. production, subject imports, and ratio of subject imports to production, by source and period**

Quantity in units; ratio in percent

Item	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
U.S. production	Quantity	***	***	***	***	***
Imports from ***	Quantity	***	***	***	***	***
Imports from ***	Quantity	***	***	***	***	***
Imports from ***	Quantity	***	***	***	***	***
Imports from *** to U.S. production	Ratio	***	***	***	***	***
Imports from *** to U.S. production	Ratio	***	***	***	***	***
Imports from *** to U.S. production	Ratio	***	***	***	***	***

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

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

Table III-15

GPPW: U.S. producers' reasons for importing

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

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

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

No responding U.S. producer reported purchases of GPPW during 2020-22 and both interim periods.

U.S. employment, wages, and productivity

Table III-16 shows U.S. producers' employment-related data. The number of production and related workers ("PRWs") for U.S. producers fluctuated year to year, increasing by *** percent from 2020 to 2021, then decreasing by *** percent from 2021 to 2022, for an overall decrease of *** percent during 2020-22. PRWs for U.S. producers was lower by *** percent in interim 2023 than in interim 2022. ***.¹⁰

Hourly wages increased by *** percent during 2020-22. Hourly wages were *** percent lower during interim 2023 compared with interim 2022. Productivity decreased by *** percent during 2020-22, and was *** percent lower during interim 2023 compared with interim 2022. Unit labor costs increased *** during 2020-22, and was *** percent higher during interim 2023 compared with interim 2022.

Table III-16

GPPW: U.S. producers' employment related information, by period

Item	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
Production and related workers (PRWs) (number)	***	***	***	***	***
Total hours worked (1,000 hours)	***	***	***	***	***
Hours worked per PRW (hours)	***	***	***	***	***
Wages paid (\$1,000)	***	***	***	***	***
Hourly wages (dollars per hour)	***	***	***	***	***
Productivity (units per 1,000 hours)	***	***	***	***	***
Unit labor costs (dollars per unit)	***	***	***	***	***

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

¹⁰ ***. ***. ***. ***.

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

U.S. importers

The Commission issued importer questionnaires to 26 firms believed to be importers of subject GPPW, as well as to all U.S. producers of GPPW.¹ U.S. import data for GPPW are based on the usable questionnaire responses from 11 U.S. importers, accounting for approximately *** percent of U.S. imports of GPPW from China, and approximately *** percent of U.S. imports of GPPW from Vietnam, and representing approximately *** percent of U.S. imports (based on value, adjusted to remove out-of-scope imports as reported in U.S. importer questionnaire responses) from China and Vietnam in 2022 under Harmonized Tariff Schedule statistical reporting numbers 8424.30.9000 and 8424.90.9040, “basket” category HTS statistical reporting numbers.^{2 3 4} Table IV-1 lists all responding U.S. importers of GPPW from China, Vietnam, and other sources, their locations, and their shares of U.S. imports, in 2022.

The largest importers responding to the Commission’s questionnaire were ***.

¹ The Commission issued questionnaires to those firms identified in the petition, along with firms that, based on a review of data from third-party sources, may have accounted for more than one percent of total imports under HTS statistical reporting numbers 8424.30.9000 and 8424.90.9040 in 2021.

² Seven firms completed the U.S. importers’ questionnaire, and two companies submitted partially completed (specific to sections II-8a and II-8b) that pertained to out-of-scope products falling under the same HTS statistical reporting numbers as GPPW. ***.

³ Based on responding firms, out-of-scope merchandise constitute *** of U.S. imports under HTS statistical reporting numbers 8424.30.9000 and 8424.90.9040 during 2020-22, January-March 2022, and January-March 2023, thus subject importer coverage is likely understated.

⁴ *** U.S. importer questionnaire, section II-2a; <https://www.kpsfund.com/news/press-releases/2020/07/20/kps-capital-partners-agrees-to-acquire-substantially-all-of-the-assets-of-briggs-stratton-corporation-including-equity-of-foreign-subidiaries>; and <https://www.kpsfund.com/news/press-releases/2020/09/22/briggs-stratton-announces-completion-of-sale-to-kps-capital-partners>. Email from ***, September 12, 2023.

Table IV-1
GPPW: U.S. importers, their headquarters, and share of imports within each source, 2022

Share in percent

Firm	Headquarters	China	Vietnam	Subject sources	Nonsubject sources	All import sources
Balkamp	Plainfield, IN	***	***	***	***	***
Briggs & Stratton	Wauwatosa, WI	***	***	***	***	***
FNA	Pleasant Prairie, WI	***	***	***	***	***
Generac	Waukesha, WI	***	***	***	***	***
Harbor Freight	Calabasas, CA	***	***	***	***	***
Lowes	Mooresville, NC	***	***	***	***	***
MWE Investments	Columbus, OH	***	***	***	***	***
Northern Tool	Burnsville, MN	***	***	***	***	***
TTI	Anderson, SC	***	***	***	***	***
All firms	Various	***	***	***	***	***

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

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

U.S. imports

Tables IV-2 and IV-3, and figure IV-1 presents data for U.S. imports of GPPW from China, Vietnam, and all other sources.⁵ There were no imports from nonsubject sources. The quantity of GPPW imports from the subject countries fluctuated year to year, increasing by *** percent from 2020 to 2021, then decreasing by *** percent from 2021 to 2022, for an overall increase of *** percent during 2020-22. GPPW imports from subject countries, by quantity, was lower by *** percent in interim 2023 than in interim 2022. During 2020-22, the value of GPPW imports from the subject countries increased by *** percent, but was lower by *** percent during interim 2023 than during interim 2022.

Imports of GPPW from China, by quantity, fluctuated year to year, decreasing by *** percent from 2020 to 2021, then increasing by *** percent from 2021 to 2022, for an overall increase of *** percent during 2020-22. Imports of GPPW from China were lower by *** percent in interim 2023 than in interim 2022. Imports of GPPW from Vietnam fluctuated year to year, increasing by *** percent from 2020 to 2021, then decreasing by *** percent from 2021 to 2022, for an overall increase of *** percent during 2020-22. Imports of GPPW from Vietnam were lower by *** percent in interim 2023 than in interim 2022. ***. ***.

⁵ Appendix F presents official U.S. imports of GPPW based on value (landed duty paid) adjusted to remove out of scope imports as reported in U.S. importer questionnaire responses (specific to out-of-scope imports in sections II-8a and II-8b).

Average unit values (“AUVs”) of GPPW from subject sources fluctuated year to year, decreasing by *** percent from 2020 to 2021, then increasing by *** percent from 2021 to 2022, for an overall increase of *** percent during 2020-22. AUV’s of GPPW from subject sources were higher by *** percent in interim 2023 than in interim 2022. AUVs of GPPW from China fluctuated year to year, increasing by *** percent from 2020 to 2021, then decreasing by *** percent from 2021 to 2022, for an overall increase of *** percent during 2020-22. AUV’s of GPPW from China was higher by *** percent in interim 2023 than in interim 2022. AUVs of GPPW from Vietnam fluctuated year to year, decreasing by *** percent from 2020 to 2021, then increasing by *** percent from 2021 to 2022, for an overall increase of *** percent during 2020-22. AUV’s of GPPW from Vietnam was higher by *** percent in interim 2023 than in interim 2022.

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

Quantity in units; value in 1,000 dollars; unit value in dollars per units

Source	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
China	Quantity	***	***	***	***	***
Vietnam	Quantity	***	***	***	***	***
Subject sources	Quantity	***	***	***	***	***
Nonsubject sources	Quantity	***	***	***	***	***
All import sources	Quantity	***	***	***	***	***
China	Value	***	***	***	***	***
Vietnam	Value	***	***	***	***	***
Subject sources	Value	***	***	***	***	***
Nonsubject sources	Value	***	***	***	***	***
All import sources	Value	***	***	***	***	***
China	Unit value	***	***	***	***	***
Vietnam	Unit value	***	***	***	***	***
Subject sources	Unit value	***	***	***	***	***
Nonsubject sources	Unit value	***	***	***	***	***
All import sources	Unit value	***	***	***	***	***

Table continued.

Table IV-2 Continued
GPPW: Share of U.S. imports by source and period

Share and ratio in percent; ratios represent the ratio to U.S. production

Source	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
China	Share of quantity	***	***	***	***	***
Vietnam	Share of quantity	***	***	***	***	***
Subject sources	Share of quantity	***	***	***	***	***
Nonsubject sources	Share of quantity	***	***	***	***	***
All import sources	Share of quantity	***	***	***	***	***
China	Share of value	***	***	***	***	***
Vietnam	Share of value	***	***	***	***	***
Subject sources	Share of value	***	***	***	***	***
Nonsubject sources	Share of value	***	***	***	***	***
All import sources	Share of value	***	***	***	***	***
China	Ratio	***	***	***	***	***
Vietnam	Ratio	***	***	***	***	***
Subject sources	Ratio	***	***	***	***	***
Nonsubject sources	Ratio	***	***	***	***	***
All import sources	Ratio	***	***	***	***	***

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

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

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

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

Changes in percent

Source	Measure	2020-22	2020-21	2021-22	Jan-Mar 2022-23
China	%Δ Quantity	▲ ***	▼ ***	▲ ***	▼ ***
Vietnam	%Δ Quantity	▲ ***	▲ ***	▼ ***	▼ ***
Subject sources	%Δ Quantity	▲ ***	▲ ***	▼ ***	▼ ***
Nonsubject sources	%Δ Quantity	***	***	***	***
All import sources	%Δ Quantity	▲ ***	▲ ***	▼ ***	▼ ***
China	%Δ Value	▲ ***	▲ ***	▲ ***	▼ ***
Vietnam	%Δ Value	▲ ***	▲ ***	▼ ***	▼ ***
Subject sources	%Δ Value	▲ ***	▲ ***	▲ ***	▼ ***
Nonsubject sources	%Δ Value	***	***	***	***
All import sources	%Δ Value	▲ ***	▲ ***	▲ ***	▼ ***
China	%Δ Unit value	▲ ***	▲ ***	▼ ***	▲ ***
Vietnam	%Δ Unit value	▲ ***	▼ ***	▲ ***	▲ ***
Subject sources	%Δ Unit value	▲ ***	▼ ***	▲ ***	▲ ***
Nonsubject sources	%Δ Unit value	***	***	***	***
All import sources	%Δ Unit value	▲ ***	▼ ***	▲ ***	▲ ***

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

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

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

* * * * *

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

Table IV-4 presents U.S. imports by the responding U.S. producers and/or affiliated firms during 2020-22, interim 2022, and interim 2023. *** imported from subject sources during 2020-22, and during the interim periods.

Table IV-4
GPPW: U.S. imports by U.S. producers and/or affiliated firms, by period

Quantity in units; ratio in percent

Source	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
China	Quantity	***	***	***	***	***
Vietnam	Quantity	***	***	***	***	***
Subject sources	Quantity	***	***	***	***	***
Nonsubject sources	Quantity	***	***	***	***	***
All import sources	Quantity	***	***	***	***	***
China	Ratio	***	***	***	***	***
Vietnam	Ratio	***	***	***	***	***
Subject sources	Ratio	***	***	***	***	***
Nonsubject sources	Ratio	***	***	***	***	***
All import sources	Ratio	***	***	***	***	***

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

Note: Ratio are U.S. imports to production.

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

Negligibility

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.⁶ Negligible imports are generally defined in the Act, as amended, as imports from a country of merchandise corresponding to a domestic like product where such imports account for less than 3 percent of the volume of all such merchandise imported into the United States in the most recent 12-month period for which data are available that precedes the filing of the petition or the initiation of the investigation. However, if there are imports of such merchandise from a number of countries subject to investigations initiated on the same day that individually account for less than 3 percent of the total volume of the subject merchandise, and if the imports from those countries collectively account for more than 7 percent of the volume of all such merchandise imported into the United States during the applicable 12-month period, then imports from such countries are deemed not to be negligible.⁷ Imports from China accounted for *** percent of total imports of GPPW by quantity and imports from Vietnam accounted for *** percent of total imports of GPPW by quantity during December 2021 through November

⁶ 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)).

⁷ Section 771 (24) of the Act (19 U.S.C § 1677(24)).

2022. Table IV-5 presents the individual shares of total imports by source, during December 2021 through November 2022.⁸

Table IV-5
GPPW: U.S. imports in the twelve-month period preceding the filing of the petition, December 2021 through November 2022

Quantity in units; share in percent

Source of imports	Quantity	Share of quantity
China	***	***
Vietnam	***	***
All other sources	***	***
All import sources	***	***

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

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

Critical circumstances

On June 5, 2023, Commerce issued its preliminary countervailing duty ("CVD") determination that "critical circumstances" exist with respect to imports of GPPW from China for Jiangsu Jianghuai Engine Co., Ltd. ("JD Power"), Chongqing Dajiang Power Equipment Co., Ltd. ("CDPE"), and companies that were not responsive to Commerce's quantity and value questionnaire,⁹ but do not exist with respect to all other producers or exporters not individually examined.¹⁰ In this CVD investigation, if both Commerce and the Commission make affirmative

⁸ The negligibility quantity and shares data present use adjusted (with the removal of out-of-scope imports, based on questionnaires responses) official statistics, but these may include additional out-of-scope merchandise.

⁹ These firms are: Jiangsu Jianghuai Engine Co., Ltd, Chongqing Sajian Power Equipment Co., Ltd, China GTL Tools Group, Ltd, Loncin Motor Co., Ltd, Maxworld Home Co, Ningbo Jugang Machinery Manufacturing Co., Powerful Machinery & Electronics Technology, Pinghu Biyi Cleaning Equipment Co., Ltd, Senci Electric Machinery Co., Ltd, Taizhou Bison Machinery Co., Ltd, Taizhou Longfa Machinery Co., Ltd, Taizhou Newland Machinery Co., Ltd, Zhejiang Anlu Cleaning Machinery & Electronics Co., Ltd, Zhejiang Constant Power Machinery Co., Ltd, Zhejiang Lingben Machinery & Electronics Co., Ltd, Zhejiang Xinchang Bigyao Power Tool Co., Ltd, Zhejiang Zhinanche Cleaning Equipment Co., Ltd, 88 FR 36531, June 5, 2023.

¹⁰ 88 FR 36531, June 5, 2023, 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

(continued...)

final critical circumstances determinations, certain subject imports may be subject to countervailing duties retroactive by 90 days from June 5, 2023, the effective date of Commerce’s preliminary affirmative countervailing duty determination.

On August 3, 2023, Commerce issued its preliminary antidumping duty (“AD”) determination that “critical circumstances” exist with regard to imports from China of GPPW from Jiangsu Jianghuai Engine Co., Ltd. (JD Power) and the China-wide entity, but do not exist with respect to the non-selected companies receiving a separate rate.¹¹

On August 29, 2023, Commerce issued its final AD determination that “critical circumstances” exist with regard to imports from Vietnam of GPPW from Vietnam-Wide Entity.¹²

In these AD 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 June 15, 2023, the effective date of Commerce’s preliminary affirmative LTFV determinations. Table IV-6 through IV-11, and figure IV-2 through IV-4 presents this data.

Table IV-6
GPPW: U.S. imports subject to Commerce’s affirmative preliminary China CVD critical circumstances determination by month

Quantity in units

Month	Relation to petition	Quantity
July 2022	Before	***
August 2022	Before	***
September 2022	Before	***
October 2022	Before	***
November 2022	Before	***
December 2022	Before	***
January 2023	After	***
February 2023	After	***
March 2023	After	***
April 2023	After	***
May 2023	After	***
June 2023	After	***

Table continued.

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.

¹¹ 88 FR 51279, August 3, 2023.

¹² 88 FR 59503, August 29, 2023.

Table IV-6 Continued

GPPW: U.S. imports subject to Commerce’s affirmative preliminary China CVD critical circumstances determination

Quantity in units

Comparison pre-post petition period	Cumulative before period quantity	Cumulative after period quantity	Difference in percent
1 month	***	***	***
2 months	***	***	***
3 months	***	***	***
4 months	***	***	***
5 months	***	***	***
6 months	***	***	***

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

Note: ***.

Figure IV-2

GPPW: U.S. imports from China potentially subject to Commerce’s preliminary China CVD critical circumstances determination, July 2022 through June 2023

* * * * *

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

Table IV-7

GPPW: U.S. importers' U.S. inventories of imports from China for analysis in relation to Commerce's affirmative preliminary China CVD critical circumstances determination, by date

Quantity in unit; index in percent

Date	Quantity	Index
December 31, 2022	***	***
January 31, 2023	***	***
February 28, 2023	***	***
March 31, 2023	***	***
April 30, 2023	***	***
May 31, 2023	***	***
June 30, 2023	***	***

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

Note: Index based on end of period inventories on December 31, 2022, equal to 100.0 percent.

Note: ***.

Table IV-8

GPPW: U.S. imports subject to Commerce’s affirmative preliminary China AD critical circumstances determination by month

Quantity in units

Month	Relation to petition	Quantity
July 2022	Before	***
August 2022	Before	***
September 2022	Before	***
October 2022	Before	***
November 2022	Before	***
December 2022	Before	***
January 2023	After	***
February 2023	After	***
March 2023	After	***
April 2023	After	***
May 2023	After	***
June 2023	After	***

Table continued.

Table IV-8 Continued

GPPW: U.S. imports subject to Commerce’s affirmative preliminary China AD critical circumstances determination

Quantity in units

Comparison pre-post petition period	Cumulative before period quantity	Cumulative after period quantity	Difference in percent
1 month	***	***	***
2 months	***	***	***
3 months	***	***	***
4 months	***	***	***
5 months	***	***	***
6 months	***	***	***

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

Note: ***.

Figure IV-3

GPPW: U.S. imports from China potentially subject to Commerce’s preliminary China AD critical circumstances determination, July 2022 through June 2023

* * * * *

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

Table IV-9

GPPW: U.S. importers’ U.S. inventories of imports from China for analysis in relation to Commerce’s affirmative preliminary China AD critical circumstances determination by date

Quantity in unit; index in percent

Date	Quantity	Index
December 31, 2022	***	***
January 31, 2023	***	***
February 28, 2023	***	***
March 31, 2023	***	***
April 30, 2023	***	***
May 31, 2023	***	***
June 30, 2023	***	***

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

Note: Index based on end of period inventories on December 31, 2022, equal to 100.0 percent.

Table IV-10**GPPW: U.S. imports subject to Commerce's affirmative final Vietnam AD critical circumstances determination by month**

Quantity in units

Month	Relation to petition	Quantity
July 2022	Before	***
August 2022	Before	***
September 2022	Before	***
October 2022	Before	***
November 2022	Before	***
December 2022	Before	***
January 2023	After	***
February 2023	After	***
March 2023	After	***
April 2023	After	***
May 2023	After	***
June 2023	After	***

Table IV-10 Continued**GPPW: U.S. imports subject to Commerce's affirmative final Vietnam AD critical circumstances determination**

Quantity in units

Comparison pre-post petition period	Cumulative before period quantity	Cumulative after period quantity	Difference in percent
1 month	***	***	***
2 months	***	***	***
3 months	***	***	***
4 months	***	***	***
5 months	***	***	***
6 months	***	***	***

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

Note: ***

Figure IV-4

GPPW: U.S. imports from Vietnam subject to Commerce's final critical circumstances determination, July 2022 through June 2023

* * * * *

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

Table IV-11

GPPW: U.S. importers' U.S. inventories of imports from Vietnam for analysis in relation to Commerce's affirmative final Vietnam AD critical circumstances determination by date

Quantity in units; index in percent

Date	Quantity	Index
December 31, 2022	***	***
January 31, 2023	***	***
February 28, 2023	***	***
March 31, 2023	***	***
April 30, 2023	***	***
May 31, 2023	***	***
June 30, 2023	***	***

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

Note: Index based on end of period inventories on December 31, 2022, equal to 100.0 percent.

Cumulation considerations

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

Fungibility

Table IV-12 and figures IV-5, IV-6, and IV-7 present U.S. producers' and U.S. importers' U.S. shipments of GPPW, by product type during 2022.¹³ The vast majority of U.S. producers' U.S. shipments and U.S. importers' U.S. shipments of imports from subject sources consisted of the full completed unit, accounting for *** U.S. shipments in 2022. The majority of both U.S. producers' and U.S. importers' U.S. shipments of GPPW were of the residential grade. ***.¹⁴

Table IV-12
GPPW: U.S. producers' and U.S. importers' U.S. shipments, by source and product type, 2022

Quantity in units

Source	Residential full unit	Commercial full unit	All full units	All components	All product types
U.S. producers	***	***	***	***	***
China	***	***	***	***	***
Vietnam	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
All sources	***	***	***	***	***

Table continued.

¹³ Appendix E presents U.S. producers and U.S. importers' U.S. shipments by product type and period.

¹⁴ ***.

Table IV-12 Continued**GPPW: U.S. producers' and U.S. importers' U.S. shipments by source and product type, 2022**

Share across in percent

Source	Residential full unit	Commercial full unit	All full units	All components	All product types
U.S. producers	***	***	***	***	***
China	***	***	***	***	***
Vietnam	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
All sources	***	***	***	***	***

Table continued.

Table IV-12 Continued**GPPW: U.S. producers' and U.S. importers' U.S. shipments by source and product type, 2022**

Share down in percent

Source	Residential full unit	Commercial full unit	All full units	All components	All product types
U.S. producers	***	***	***	***	***
China	***	***	***	***	***
Vietnam	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
All sources	***	***	***	***	***

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

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

Figure IV-4
GPPW: U.S. producers' and U.S. importers' U.S. shipments, by source and product type, 2022

* * * * *

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

Figure IV-5

GPPW: U.S. importers' U.S. shipments of imports from subject sources quantity and average unit values, by product type, 2022

* * * * *

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

Note: For more details on shipments by product type see Appendix E.

Figure IV-6
GPPW: U.S. producers' U.S. shipments quantity and average unit values, by product type, 2022

* * * * *

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

Note: For more details on shipments by product type see Appendix E.

Geographical markets

Table IV-13 presents U.S. imports of GPPW, by source and border of entry in 2022, by value, based on official Commerce statistics.¹⁵ U.S. imports of subject GPPW from China and Vietnam entered through multiple U.S. ports of entry across the nation. The largest shares of GPPW from China and Vietnam combined entered through the Eastern border.

¹⁵ This coverage may include a sizeable amount of imports of out-of-scope products (including electric powered pressure washers) under HTS statistical reporting numbers 8424.30.9000 and 8424.90.9040.

Table IV-13
GPPW: U.S. imports by source and border of entry, 2022

LPD value in 1,000 dollars

Source	East	North	South	West	All borders
China	97,287	18,657	42,747	86,213	244,905
Vietnam	185,897	16,230	24,385	74,119	300,632
Subject sources	283,184	34,887	67,132	160,333	545,537
Nonsubject sources	51,647	79,574	58,095	25,627	214,943
All import sources	334,832	114,461	125,227	185,960	760,480

Table continued.

Table IV-13 Continued
GPPW: U.S. imports by source and border of entry, 2022

Share across in percent

Source	East	North	South	West	All borders
China	39.7	7.6	17.5	35.2	100.0
Vietnam	61.8	5.4	8.1	24.7	100.0
Subject sources	51.9	6.4	12.3	29.4	100.0
Nonsubject sources	24.0	37.0	27.0	11.9	100.0
All import sources	44.0	15.1	16.5	24.5	100.0

Table continued.

Table IV-11 Continued
GPPW: U.S. imports by source and border of entry, 2022

Share down in percent

Source	East	North	South	West	All borders
China	29.1	16.3	34.1	46.4	32.2
Vietnam	55.5	14.2	19.5	39.9	39.5
Subject sources	84.6	30.5	53.6	86.2	71.7
Nonsubject sources	15.4	69.5	46.4	13.8	28.3
All import sources	100.0	100.0	100.0	100.0	100.0

Source: Compiled from official U.S. import statistics of the U.S. Department of Commerce Census Bureau using statistical reporting numbers 8424.30.9000 and 8424.90.9040, accessed July 6, 2023. Imports are based on the imports for consumption data series and reflect landed duty paid value.

Note: HTS numbers include out of scope product and thus value above are overstated for scope product. Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Presence in the market

Table IV-14 and figures IV-7 and IV-8 present monthly data for U.S. imports of GPPW from subject and nonsubject sources between January 2020 and June 2023. Subject imports of GPPW from China were present in each month during this period, and imports of GPPW from Vietnam were present in each month starting in February 2020.

Table IV-14
GPPW: U.S. imports, by source and month

Quantity in units

Year	Month	China	Vietnam	Subject sources	Nonsubject sources	All import sources
2020	January	***	***	***	***	***
2020	February	***	***	***	***	***
2020	March	***	***	***	***	***
2020	April	***	***	***	***	***
2020	May	***	***	***	***	***
2020	June	***	***	***	***	***
2020	July	***	***	***	***	***
2020	August	***	***	***	***	***
2020	September	***	***	***	***	***
2020	October	***	***	***	***	***
2020	November	***	***	***	***	***
2020	December	***	***	***	***	***
2021	January	***	***	***	***	***
2021	February	***	***	***	***	***
2021	March	***	***	***	***	***
2021	April	***	***	***	***	***
2021	May	***	***	***	***	***
2021	June	***	***	***	***	***
2021	July	***	***	***	***	***
2021	August	***	***	***	***	***
2021	September	***	***	***	***	***
2021	October	***	***	***	***	***
2021	November	***	***	***	***	***
2021	December	***	***	***	***	***

Table continued.

Table IV-14 Continued
GPPW: U.S. imports, by source and month

Quantity in units

Year	Month	China	Vietnam	Subject sources	Nonsubject sources	All import sources
2022	January	***	***	***	***	***
2022	February	***	***	***	***	***
2022	March	***	***	***	***	***
2022	April	***	***	***	***	***
2022	May	***	***	***	***	***
2022	June	***	***	***	***	***
2022	July	***	***	***	***	***
2022	August	***	***	***	***	***
2022	September	***	***	***	***	***
2022	October	***	***	***	***	***
2022	November	***	***	***	***	***
2022	December	***	***	***	***	***
2023	January	***	***	***	***	***
2023	February	***	***	***	***	***
2023	March	***	***	***	***	***
2023	April	***	***	***	***	***
2023	May	***	***	***	***	***
2023	June	***	***	***	***	***

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

Note: Zeroes, null values, and undefined calculations are suppressed and shown as “---”.

Figure IV-7
GPPW: U.S. imports, by individual subject sources, quantity, and month

* * * * *

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

Figure IV-8
GPPW: U.S. imports, by source, value, and month

* * * * *

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

Apparent U.S. consumption and market shares

Quantity

Table IV-15 and figure IV-9 present data on apparent U.S. consumption and U.S. market shares by quantity for GPPW. The quantity of apparent U.S. consumption fluctuated year to year, increasing by *** percent 2020 to 2021, then decreasing by *** percent from 2021 to 2022, for an overall decrease of *** percent overall during 2020-22. Apparent U.S. consumption was *** percent lower in interim 2023 than in interim 2022. Additionally, U.S. producers' market shares, by quantity, were lower by *** percentage points during 2020-22, and were *** percentage points higher during interim 2023 compared to interim 2022.

Table IV-15**GPPW: Apparent U.S. consumption and market shares based on quantity, by source and period**

Quantity in units; shares in percent

Source	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
U.S. producer: FNA	Quantity	***	***	***	***	***
U.S. producer: Generac	Quantity	***	***	***	***	***
U.S. producer: Northern Tool	Quantity	***	***	***	***	***
U.S. producer: TTI	Quantity	***	***	***	***	***
All U.S. producers	Quantity	***	***	***	***	***
China	Quantity	***	***	***	***	***
Vietnam	Quantity	***	***	***	***	***
Subject sources	Quantity	***	***	***	***	***
Nonsubject sources	Quantity	***	***	***	***	***
All import sources	Quantity	***	***	***	***	***
All sources	Quantity	***	***	***	***	***
U.S. producer: FNA	Share	***	***	***	***	***
U.S. producer: Generac	Share	***	***	***	***	***
U.S. producer: Northern Tool	Share	***	***	***	***	***
U.S. producer: TTI	Share	***	***	***	***	***
All U.S. producers	Share	***	***	***	***	***
China	Share	***	***	***	***	***
Vietnam	Share	***	***	***	***	***
Subject sources	Share	***	***	***	***	***
Nonsubject sources	Share	***	***	***	***	***
All import sources	Share	***	***	***	***	***
All sources	Share	***	***	***	***	***

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

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

Figure IV-9
GPPW: Apparent U.S. consumption based on quantity, by source and period

* * * * *

Source: Compiled from data submitted in response to Commission questionnaires

Value

Table IV-16 and figure IV-10 presents data on apparent U.S. consumption and U.S. market shares by value for GPPW.¹⁶ The value of apparent U.S. consumption fluctuated year to year, increasing by *** percent 2020 to 2021, then decreasing by *** percent from 2021 to 2022, for an overall decrease of *** percent overall during 2020-22. Apparent U.S. consumption was *** percent lower in interim 2023 than in interim 2022.

Additionally, market shares by value for GPPW for U.S. producers were lower by *** percentage points during 2020-22, and were *** percent higher during interim 2023 compared to interim 2022.

¹⁶ *** . *** . *** U.S. importer questionnaire, section II-2a.

Table IV-16**GPPW: Apparent U.S. consumption and market shares based on value, by source and period**

Value in 1,000 dollars; shares in percent

Source	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
U.S. producer: FNA	Value	***	***	***	***	***
U.S. producer: Generac	Value	***	***	***	***	***
U.S. producer: Northern Tool	Value	***	***	***	***	***
U.S. producer: TTI	Value	***	***	***	***	***
All U.S. producers	Value	***	***	***	***	***
China	Value	***	***	***	***	***
Vietnam	Value	***	***	***	***	***
Subject sources	Value	***	***	***	***	***
Nonsubject sources	Value	***	***	***	***	***
All import sources	Value	***	***	***	***	***
All sources	Value	***	***	***	***	***
U.S. producer: FNA	Share	***	***	***	***	***
U.S. producer: Generac	Share	***	***	***	***	***
U.S. producer: Northern Tool	Share	***	***	***	***	***
U.S. producer: TTI	Share	***	***	***	***	***
All U.S. producers	Share	***	***	***	***	***
China	Share	***	***	***	***	***
Vietnam	Share	***	***	***	***	***
Subject sources	Share	***	***	***	***	***
Nonsubject sources	Share	***	***	***	***	***
All import sources	Share	***	***	***	***	***
All sources	Share	***	***	***	***	***

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---". Ratio represents the ratio to overall apparent consumption reported in table IV-15 above.

Figure IV-10
GPPW: Apparent U.S. consumption based on value, by source and period

* * * * *

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

Markets for residential and commercial GPPW units

Tables IV-17 (residential) and IV-18 (commercial) present U.S. shipments of complete units of GPPW for residential and commercial grades during 2020-22, January-March 2022, and January-March 2023. Residential GPPW U.S. production declined each period, while subject imports increased in 2021 before declining in 2022, but to a level above 2020. Commercial GPPW U.S. production increased in 2021 then declined in 2022 to below production in 2020, while subject imports increased each period.

Table IV-17
GPPW: U.S. shipments of complete residential units, by source and period

Quantity in units; shares and ratios in percent

Source	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
U.S. producers	Quantity	***	***	***	***	***
China	Quantity	***	***	***	***	***
Vietnam	Quantity	***	***	***	***	***
Subject sources	Quantity	***	***	***	***	***
Nonsubject sources	Quantity	***	***	***	***	***
All import sources	Quantity	***	***	***	***	***
All sources	Quantity	***	***	***	***	***
U.S. producers	Share	***	***	***	***	***
China	Share	***	***	***	***	***
Vietnam	Share	***	***	***	***	***
Subject sources	Share	***	***	***	***	***
Nonsubject sources	Share	***	***	***	***	***
All import sources	Share	***	***	***	***	***
All sources	Share	***	***	***	***	***
U.S. producers	Ratio	***	***	***	***	***
China	Ratio	***	***	***	***	***
Vietnam	Ratio	***	***	***	***	***
Subject sources	Ratio	***	***	***	***	***
Nonsubject sources	Ratio	***	***	***	***	***
All import sources	Ratio	***	***	***	***	***
All sources	Ratio	***	***	***	***	***

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---". Ratio represents the ratio to overall apparent consumption reported in table IV-15 above.

Table IV-18**GPPW: U.S. shipments of complete commercial units, by source and period**

Quantity in units; shares and ratios in percent

Source	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
U.S. producers	Quantity	***	***	***	***	***
China	Quantity	***	***	***	***	***
Vietnam	Quantity	***	***	***	***	***
Subject sources	Quantity	***	***	***	***	***
Nonsubject sources	Quantity	***	***	***	***	***
All import sources	Quantity	***	***	***	***	***
All sources	Quantity	***	***	***	***	***
U.S. producers	Share	***	***	***	***	***
China	Share	***	***	***	***	***
Vietnam	Share	***	***	***	***	***
Subject sources	Share	***	***	***	***	***
Nonsubject sources	Share	***	***	***	***	***
All import sources	Share	***	***	***	***	***
All sources	Share	***	***	***	***	***
U.S. producers	Ratio	***	***	***	***	***
China	Ratio	***	***	***	***	***
Vietnam	Ratio	***	***	***	***	***
Subject sources	Ratio	***	***	***	***	***
Nonsubject sources	Ratio	***	***	***	***	***
All import sources	Ratio	***	***	***	***	***
All sources	Ratio	***	***	***	***	***

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---". Ratio represents the ratio to overall apparent consumption reported in table IV-15 above.

Part V: Pricing data

Factors affecting prices

Raw material costs

Raw materials account for a large share of the costs of producing GPPWs. GPPWs are comprised of an internal combustion engine with a power take-off shaft, pumps, hoses, nozzles, and spray gun, with all these parts mounted on a (usually wheeled) steel frame.¹ GPPW producers (both domestic and foreign) may manufacture some of these components or may purchase them from other suppliers.² FNA obtains its engines from various countries (including the United States) and its pumps from China and Italy.³ However, FNA produces its own hoses.⁴

Raw materials (including components such as engines and pumps) comprised approximately *** percent of COGS in 2020, before decreasing to *** percent in 2021 and then decreasing to *** percent in 2022. All four responding U.S. producers reported that raw material prices had generally increased since January 1, 2020, with three producers reporting prices steadily increased and one reporting they fluctuated up.⁵ ⁶ Importers' responses regarding raw material price changes varied; responses included: prices steadily increased (four importers), prices fluctuated up (four), there was no change in prices (three), and prices fluctuated down (one).⁷ Four of seven responding purchasers reported that they were familiar with GPPW raw material prices, and three of these purchasers reported that raw material prices impacted negotiations or contracts to purchase GPPWs. Specifically, *** listed

¹ Conference transcript, pp. 15-16 (G. Alexander).

² Conference transcript, p. 19 (C. Alexander), hearing transcript, pp.41-42 (C. Alexander).

³ Engine producer Honda announced it was ending production of its U.S.-made engines in 2021. Honda supplied FNA with domestically produced engines through the end of 2022 and supplies FNA with engines produced in Thailand. Hearing transcript, pp. 50-51, 58. (C. Alexander).

⁴ Conference transcript, p. 37 (C. Alexander), hearing transcript, pp.47-48 (G. Alexander).

⁵ U.S. producer *** reported it was able to pass on "only a small percentage of the commodity and freight price increases to its customers, who are also quick to claw back any gains when costs reduce."

⁶ U.S. producers FNA, Generac, TTI, and Northern Tool are also importers. Their U.S. producer and importer questionnaire responses are reported separately throughout this section of the report, unless otherwise noted. Importers *** are also purchasers, their responses are reported separately throughout this section of the report, unless otherwise noted. *** reported in its importer questionnaire that it imports ***.

⁷ Two importers reported more than one trend in raw material prices. Importer *** reported that raw material prices fluctuated up and did not change, explaining that that cost has fluctuated up and then came back down to previous levels. Importer *** reported prices fluctuated up and fluctuated down, explaining that prices fluctuated with "no clear trend."

the price of engines and models as impacting contracts, while *** reported that suppliers have generally increased prices.

Transportation costs to the U.S. market

Transportation costs for GPPW shipped from subject countries to the United States averaged 6.9 percent for China during 2022 and 3.1 percent for Vietnam in the same year. These estimates were derived from official import data and represent the transportation and other charges on imports.⁸

U.S. inland transportation costs

Five responding importers and U.S. producers *** reported that they typically arrange transportation to their customers. Four importers and one U.S. producer (***) reported that their purchasers typically arrange transportation. U.S. producers reported U.S. inland transportation costs of one, three, and eight percent.⁹ Importers reported costs of one to five percent.¹⁰

Pricing practices

Pricing methods

U.S. producers and importers were asked to describe any differences in their sales to online-only retailers and other retailers (not exclusively online). In describing sales to online-only retailers, U.S. producer *** reported that online-only retailers allow GPPW sellers to list products at any price as long as the online retailer meets its minimum margin requirement.

In describing sales to other retailers (not exclusively online), U.S. producer *** reported that it ensures a ***. U.S. producer *** reported

⁸ The estimated transportation costs were obtained by subtracting the customs value from the c.i.f. value of the imports for 2022 and then dividing by the customs value based on the HTS statistical reporting numbers 8424.30.9000 and 8424.90.9040 which may include out-of-scope products.

⁹ U.S. producer *** reported that its costs were zero. Elsewhere in its questionnaire, it indicated that ***.

¹⁰ Eight importers reported shipping from a U.S. storage facility and one reported shipping from its point of importation.

that its sales to other retailers (such as ***) were spot sales, noting that it holds ***.¹¹

In describing the solicitation process (also called a product line review) for selling to other retailers, U.S. producer *** reported that, in making purchasing decisions, consumers and retailers consider brand, market competition, performance/innovation, but the most important factor is price. It added that price is the last and most difficult aspect of its negotiations, and in negotiations *** will provide “***.” Importer *** listed costs, capacity, and domestic and foreign competition as factors it considers in determining its initial bid price. Importer *** reported that in a product line review, retailers set prices based on cost and domestic competition.

U.S. producers and importers reported setting prices using a variety of methods. U.S. producers *** reported transaction-by-transaction negotiations for setting prices;¹² *** reported using a set price list; U.S. producers *** reported using other methods.¹³ U.S. importers reported selling GPPW through all price setting methods, with most reporting they use a set price list.¹⁴

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

Method	U.S. producers	Importers
Transaction-by-transaction	2	4
Contract	0	2
Set price list	1	6
Other	2	3
Responding firms	4	9

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

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

¹¹ U.S. producer *** reported that its online-only and other retail sales were both sold under a combination of short-term contracts and spot sales.

¹² *** added that it has multiple levels of price determination based on the type of customer, and with most retailers it uses ***.

¹³ *** reported that it sets prices “based on what the market will support to achieve our financial targets” and *** reported it uses “regular and sale prices.” *** sells its products through its ***.

¹⁴ Importers *** echoed their ***, and *** reported it negotiates prices based on ***.

U.S. producers reported selling most of their GPPW under annual contracts, and importers almost exclusively sold in the spot market (table V-2).^{15 16}

Table V-2
GPPW: U.S. producers' and importers' shares of commercial U.S. shipments by type of sale, 2022

Share in percent

Type of sale	U.S. producers	Subject importers
Long-term contracts	***	***
Annual contracts	***	***
Short-term contracts	***	***
Spot sales	***	***
Total	100.0	100.0

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

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

U.S. producers and importers were asked how sales of GPPWs under contracts versus spot sales differ in terms of their firm's preference and purchasers' preferences, and under what circumstances they sell GPPWs under contracts versus selling as spot sales. U.S. producer *** reported it uses an *** for the term of the agreement. *** prefers *** for large volume sales to help manage its costs with its vendors. *** uses spot sales (which allows for negotiated pricing) for low volume commercial/industrial sales of larger and more complex GPPWs. It added that dealers and distributors "negotiate off of a grid" based on anticipated annual volumes. Importer *** reported that all its sales are priced for single deliveries and *** reported it sells directly to consumers and has no contract sales.¹⁷

Purchasers were asked whether they preferred to purchase GPPWs under contracts or spot purchases. Six of seven purchasers reported preferring contracts to ensure availability and stability (***), to maintain an existing relationship with the vendor and the access to support if there are any issues (***), and to meet a company policy for vendor agreements (***). ***, the one purchaser to prefer spot sales, explained

¹⁵ U.S. producer *** was the only firm to report ***.

¹⁶ U.S. producer ***.

¹⁷ No importers explained their preference or customers' preferences for spot versus contract sales. Importer *** noted that they only sell via spot sales during the "short season" when customers place purchase orders.

that spot purchases allow it to stock the warehouse when needed. It added that purchasing via contracts can lead to excess inventory at the end of the peak season.

Four purchasers reported that they purchase product weekly, one purchases daily, and one purchases monthly. No purchasers reported a change in their purchasing frequency since 2020. Five of the seven responding purchasers reported contacting one to four suppliers, while *** contacted up to five and *** contacted up to six.

Purchasers were asked to report their five largest bidding GPPW suppliers (in terms of bid size) that submitted bids/ participated in line reviews during each year of 2020-22. Four purchasers (***) provided responses, which are presented in Appendix J.

Sales terms and discounts

Half of responding U.S. producers and five of eight importers quote only on an f.o.b. basis, the remaining U.S. producers and two importers quote only on a delivered basis, and one importer quotes on both a delivered and f.o.b. basis.

U.S. producers reported a variety of discounts. *** reported using a quantity discount, total volume discount, and a discount related to marketing, freight, or damage. U.S. producer *** reported using other discounts including a cash discount, freight discount, and a rebate; *** reported promotions throughout the year. U.S. producer *** was the only producer to report it had no discount policy.

Most (seven of nine importers) reported using other discounts, including a volume by category discount, promotions for larger customers or at certain times, consumer product coupons and sales events. In addition, two importers reported using a quantity discount, and three used a total volume discount.¹⁸

Price leadership

Of the five responding purchasers, *** named FNA as a price leader, *** reported no price leaders, and *** listed other retailers as price leaders.¹⁹ *** reported that FNA increases prices and other suppliers follow, while *** reported that FNA builds units to “hit key price points and customer needs.” *** reported that FNA is the “high price setter” and has a

¹⁸ Three importers reported having more than one type of discount policy.

¹⁹ Purchaser *** named the following retailers as price leaders: Home Depot, Lowe’s, Menards, and Amazon, as well as importer Harbor Freight. It described their price leadership: “Each of these retailers are competitive and depending on the season can get aggressive in their retail pricing.”

large line of prosumer, consumer, professional, and commercial sector GPPWs, and that FNA has entry-level GPPWs that are “extremely competitive.”

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 GPPW products shipped to unrelated U.S. customers during January 2020-March 2023.

Product 1.-- Consumer grade gas powered pressure washer with an axial pump and a pressure rating of 2700 psi up to and including 3100 psi, with a flow of 2.3 or 2.4 gallons per minute (“GPM”).

Product 2.-- Consumer grade gas powered pressure washer with an axial pump and a pressure rating of 3200 psi up to and including 3600 psi, with a flow of 2.3 GPM up to and including 2.8 GPM.

Product 3.-- Professional grade gas powered pressure washer with a triplex pump and a pressure rating of 3000 psi up to and including 3700 psi, with a flow of 2.3 GPM up to and including 3.0 GPM.

Product 4.-- Professional grade gas powered pressure washer with a triplex pump and a pressure rating of 3800 psi up to and including 4400 psi, with a flow of 2.5 GPM up to and including 4.0 GPM.

Two U.S. producers²⁰ and four importers²¹ provided usable pricing data for sales of the requested products,²² although not all firms reported pricing for all products for all quarters.²³ ²⁴ Pricing data reported by these firms accounted for approximately *** percent of U.S. producers' commercial U.S. shipments of GPPW, *** percent of commercial U.S. shipments of subject imports from China, and *** percent from Vietnam in 2022.²⁵ No importers reported pricing data for product 4.²⁶

²⁰ U.S. producer *** explained that ***. Phone call with ***.

²¹ Importer *** reported that it "****". These data are excluded as they represent a different level of sale compared to other producers' and importers' commercial U.S. shipments.

²² Two importers reported pricing data for GPPWs from China only (***, and two importers reported pricing data for GPPWs from China and Vietnam (***). *** was unable to provide ***. Phone call with ***. See part IV for an explanation of *** reported data.

²³ 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.

²⁴ U.S. producer *** reported ***. Its data for the first quarter of 2023 are not included in the tables and graphs below. Email from *** and emails to ***.

²⁵ The U.S. shipments of complete units of consumer and professional GPPWs may not align with the reported price data breakouts for consumer and professional grade GPPWs as there is no clear definition for consumer and professional grade GPPW. The U.S. shipments of consumer GPPWs included GPPWs with a maximum PSI of less than 3,400. The less than 3,400 PSI metric overlaps with pricing product 3 which is considered a professional GPPW. As described in part II, there is no bright line distinction between consumer and professional grade GPPWs.

²⁶ In the preliminary phase of these investigations, *** was the only importer to report price data for product 4. As noted above, its price data are excluded in this phase.

Price data for products 1-4 are presented in tables V-3 to V-6 and figures V-1 to V-4. Appendix H presents the pricing data excluding data from ***.

Table V-3

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

Price in dollars per unit, quantity in units, margin in percent.

Period	U.S. price	U.S. quantity	China price	China quantity	China margin	Vietnam price	Vietnam quantity	Vietnam margin
2020 Q1	***	***	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***	***	***
2021 Q2	***	***	***	***	***	***	***	***
2021 Q3	***	***	***	***	***	***	***	***
2021 Q4	***	***	***	***	***	***	***	***
2022 Q1	***	***	***	***	***	***	***	***
2022 Q2	***	***	***	***	***	***	***	***
2022 Q3	***	***	***	***	***	***	***	***
2022 Q4	***	***	***	***	***	***	***	***
2023 Q1	***	***	***	***	***	***	***	***

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

Note: Product 1: Consumer grade gas powered pressure washer with an axial pump and a pressure rating of 2700 psi up to and including 3100 psi, with a flow of 2.3 or 2.4 gallons per minute (“GPM”). Importer *** reported a small volume of Chinese product in the *** with a ***. Email from ***.

Table V-4

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

Price in dollars per unit, quantity in units, margin in percent.

Period	U.S. price	U.S. quantity	China price	China quantity	China margin	Vietnam price	Vietnam quantity	Vietnam margin
2020 Q1	***	***	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***	***	***
2021 Q2	***	***	***	***	***	***	***	***
2021 Q3	***	***	***	***	***	***	***	***
2021 Q4	***	***	***	***	***	***	***	***
2022 Q1	***	***	***	***	***	***	***	***
2022 Q2	***	***	***	***	***	***	***	***
2022 Q3	***	***	***	***	***	***	***	***
2022 Q4	***	***	***	***	***	***	***	***
2023 Q1	***	***	***	***	***	***	***	***

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

Note: Product 2: Consumer grade gas powered pressure washer with an axial pump and a pressure rating of 2700 psi up to and including 3100 psi, with a flow of 2.3 or 2.4 gallons per minute (“GPM”).

Table V-5

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

Price in dollars per unit, quantity in units, margin in percent.

Period	U.S. price	U.S. quantity	China price	China quantity	China margin	Vietnam price	Vietnam quantity	Vietnam margin
2020 Q1	***	***	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***	***	***
2021 Q2	***	***	***	***	***	***	***	***
2021 Q3	***	***	***	***	***	***	***	***
2021 Q4	***	***	***	***	***	***	***	***
2022 Q1	***	***	***	***	***	***	***	***
2022 Q2	***	***	***	***	***	***	***	***
2022 Q3	***	***	***	***	***	***	***	***
2022 Q4	***	***	***	***	***	***	***	***
2023 Q1	***	***	***	***	***	***	***	***

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

Note: Product 3: Professional grade gas powered pressure washer with a triplex pump and a pressure rating of 3000 psi up to and including 3700 psi, with a flow of 2.3 GPM up to and including 3.0 GPM.

Table V-6

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

Price in dollars per unit, quantity in units, margin in percent.

Period	U.S. price	U.S. quantity
2020 Q1	***	***
2020 Q2	***	***
2020 Q3	***	***
2020 Q4	***	***
2021 Q1	***	***
2021 Q2	***	***
2021 Q3	***	***
2021 Q4	***	***
2022 Q1	***	***
2022 Q2	***	***
2022 Q3	***	***
2022 Q4	***	***
2023 Q1	***	***

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

Note: Product 4: Professional grade gas powered pressure washer with a triplex pump and a pressure rating of 3800 psi up to and including 4400 psi, with a flow of 2.5 GPM up to and including 4.0 GPM.

Note: No importers reported price data for product 4 from either subject source.

Figure V-1

GPPW: Weighted-average prices and quantities of domestic and imported product 1, by quarter

Price of product 1

* * * * *

Volume of product 1

* * * * *

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

Note: Product 1: Consumer grade gas powered pressure washer with an axial pump and a pressure rating of 2700 psi up to and including 3100 psi, with a flow of 2.3 or 2.4 gallons per minute ("GPM").

Figure V-2

GPPW: Weighted-average prices and quantities of domestic and imported product 2, by quarter

Price of product 2

* * * * *

Volume of product 2

* * * * *

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

Note: Product 2: Consumer grade gas powered pressure washer with an axial pump and a pressure rating of 3200 psi up to and including 3600 psi, with a flow of 2.3 GPM up to and including 2.8 GPM").

Figure V-3

GPPW: Weighted-average prices and quantities of domestic and imported product 3, by quarter

Price of product 3

* * * * *

Volume of product 3

* * * * *

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

Note: Product 3: Professional grade gas powered pressure washer with a triplex pump and a pressure rating of 3000 psi up to and including 3700 psi, with a flow of 2.3 GPM up to and including 3.0 GPM.

Figure V-4

GPPW: Weighted-average prices and quantities of domestic and imported product 4, by quarter

Price of product 4

* * * * *

Volume of product 4

* * * * *

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

Note: Product 4: Professional grade gas powered pressure washer with a triplex pump and a pressure rating of 3800 psi up to and including 4400 psi, with a flow of 2.5 GPM up to and including 4.0 GPM.

Price trends

U.S. prices for products 2-4 increased during January 2020-March 2023, while prices for product 1 decreased by less than *** percent. Prices of product 2 from China decreased by *** percent. No importer reported price data for product 4 from China or Vietnam. Table V-7 summarizes the price trends, by country and by product. As shown in the table, domestic price increases ranged from *** percent to *** percent during January 2020-March 2023, and the domestic price decrease was *** percent.

Table V-7
GPPW: Summary of price data, by product and source, January 2020-March 2023

Volume in units, price in dollars per unit

Product	Source	Number of quarters	Quantity of shipments	Low price	High price	First quarter price	Last quarter price	Percent change in price over period
Product 1	United States	***	***	***	***	***	***	***
Product 1	China	***	***	***	***	***	***	***
Product 1	Vietnam	***	***	***	***	***	***	***
Product 2	United States	***	***	***	***	***	***	***
Product 2	China	***	***	***	***	***	***	***
Product 2	Vietnam	***	***	***	***	***	***	***
Product 3	United States	***	***	***	***	***	***	***
Product 3	China	***	***	***	***	***	***	***
Product 3	Vietnam	***	***	***	***	***	***	***
Product 4	United States	***	***	***	***	***	***	***
Product 4	China	***	***	***	***	***	***	***
Product 4	Vietnam	***	***	***	***	***	***	***

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

Note: Percentage change from the first quarter in which data were available in 2020 to the last quarter in which data were available in 2023. The percentage change for product 1 from China was *** percent from the *** to the ***. The volume reported for China for product 1 in the *** was *** with an associated ***. The percentage change for product 1 from Vietnam was *** percent from *** to the ***. There was not enough price data available for product 3 from China, and 2-3 from Vietnam to complete a meaningful analysis of price changes from January 2020-March 2023. Email from ***.

Price comparisons

As shown in tables V-8 and V-9, prices for product imported from China were below those for U.S.-produced product in 31 of 34 instances (** units); margins of underselling ranged from ** to ** percent. In the remaining three instances (** units), prices for product from China were ** to ** percent above prices for the domestic product. Prices for product imported from Vietnam were below those for U.S.-produced product in all 29 instances (** units); margins of underselling ranged from ** to ** percent.

Table V-8
GPPW: Instances of underselling and overselling and the range and average of margins, by product

Quantity in units; margin in percent

Product	Type	Number of quarters	Quantity	Average margin	Min margin	Max margin
Product 1	Underselling	23	**	**	**	**
Product 2	Underselling	19	**	**	**	**
Product 3	Underselling	18	**	**	**	**
Product 4	Underselling	---	**	**	**	**
Total	Underselling	60	1,126,195	22.1	6.8	51.1
Product 1	Overselling	---	**	**	**	**
Product 2	Overselling	3	**	**	**	**
Product 3	Overselling	---	**	**	**	**
Product 4	Overselling	---	**	**	**	**
Total	Overselling	3	41,083	(9.3)	(7.3)	(11.7)

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

Note: These data include only quarters in which there is a comparison between the U.S. and subject product.

Table V-9**GPPW: Instances of underselling and overselling and the range and average of margins, by source**

Quantity in units; margin in percent

Source	Type	Number of quarters	Quantity	Average margin	Min margin	Max margin
China	Underselling	31	***	***	***	***
Vietnam	Underselling	29	***	***	***	***
All subject sources	Underselling	60	1,126,195	22.1	6.8	51.1
China	Overselling	3	***	***	***	***
Vietnam	Overselling	---	***	***	***	***
All subject sources	Overselling	3	41,083	(9.3)	(7.3)	(11.7)

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

Note: These data include only quarters in which there is a comparison between the U.S. and subject product.

Lost sales and lost revenue

In the preliminary phase of these investigations, the Commission requested that U.S. producers of GPPW report purchasers with which they experienced instances of lost sales or revenue due to competition from imports of GPPW from China and Vietnam during January 2019-September 2022. U.S. producer *** submitted lost sales and lost revenue allegations. *** identified *** firms with which they lost sales or revenue (including seven lost sales allegations and 12 lost revenue allegations).

In the final phase of these investigations, of the three responding U.S. producers, *** was the ***.

Staff contacted 12 purchasers and received responses from 7 purchasers. Responding purchasers reported purchasing and importing 3.9 million units of GPPW during January 2020-March 2023 (table V-10).

Of the seven responding purchasers, four reported that, since 2020, they had purchased imported GPPW from China instead of the U.S.-produced product, three of these purchasers reported that subject import prices from China were lower than U.S.-produced product, and the same three purchasers reported that price was a primary reason for purchasing Chinese product rather than domestic product. Three purchasers estimated the quantity of GPPW from

China purchased instead of domestic product; quantities ranged from *** units to *** units (table V-11).²⁷

Two purchasers reported they had imported GPPW from Vietnam instead of purchasing domestic product, and both purchasers reported that Vietnamese prices were lower than domestic prices, but only one of these purchasers (***) reported that price was a primary reason for purchasing Vietnamese GPPWs rather than domestic GPPWs. *** was the only purchaser to estimate the quantity of GPPW from Vietnam purchased instead of domestic product; it reported *** such units.²⁸

Purchaser *** reported quality, market brand preference, and limitations on domestic suppliers' manufacturing capacity as non-price reasons for purchasing Chinese and Vietnamese GPPWs rather than U.S.-produced product.²⁹

*** was the only purchaser to report that U.S. producers had reduced prices in order to compete with lower-priced imports from China.³⁰ *** estimated a price reduction of *** and that the reduction “just occurred in the gas powered pressure washers for entry-level consumer models. It's a very small proportion. This was to keep up with the demand during the pandemic specifically, to sell to the consumer who had more ‘home time.’ For units that were priced around \$350 and lower. {It} happened from April 2020 - September 2022.”

²⁷ *** reported it purchased *** units of Chinese GPPWs instead of domestic GPPWs, which were all of its reported purchases of Chinese GPPWs from January 2020 to March 2023.

²⁸ These *** units represented all of *** purchases of Vietnamese GPPWs from January 2020 to March 2023.

²⁹ Purchaser *** reported that it purchased Chinese and Vietnamese GPPWs instead of domestic product. It reported that Vietnamese GPPWs were priced lower than domestic GPPWs but Chinese GPPWs were not priced lower. It also reported that price was not a primary reason for purchasing GPPWs from either subject source.

³⁰ *** reported U.S. producers did not reduce prices to compete with purchases from Vietnam. Five purchasers reported they did not know if domestic producers had reduced prices to compete with imports from either subject source and *** reported that domestic purchasers did not reduce prices to compete with imports from either subject source.

Table V-10
GPPW: Purchasers' reported purchases and imports, by firm and source

Quantity in units, share in percent

Firm	Domestic quantity	Subject quantity	All other quantity	Change in domestic share	Change in subject share
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All firms	***	***	***	***	***

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

Note: All other includes all other sources and unknown sources. Change is the percentage point change in the share of the firm's total purchases of domestic and/or subject country imports between first and last years.

Note: *** reported all its purchases as "Sources Unknown" and listed the following firms for its purchases: ***. It added it was unable to determine the country of origin for its purchases: "****." *** reported subject quantities in the table above are its ***.

Table V-11**GPPW: Purchasers' responses to purchasing subject imports instead of domestic product, by firm**

Quantity in units

Firm	Purchased subject imports instead of domestic	Imports priced lower	Choice based on price	Quantity	Narrative on reasons for purchasing imports
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All firms	Yes--4; No--3	Yes--4; No--0	Yes--3; No--1	***	NA

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

Table V-12**GPPW: Purchasers' responses to purchasing subject imports instead of domestic product, by source**

Count in number of firms reporting, quantity in units

Source	Purchased subject imports instead of domestic	Imports priced lower	Choice based on price	Quantity
China	4	3	3	***
Vietnam	2	2	1	***
Subject sources	4	4	3	***

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

Part VI: Financial experience of U.S. producers

Background¹

FNA,² Generac,³ Northern Tool,⁴ and TTI⁵ provided usable financial results on their GPPW operations. *** U.S. producers reported financial data on a calendar year basis. *** reported data on the basis of GAAP, while *** reported data on the basis of IFRS.⁶

Figure VI-1 presents each responding firm's share of the total reported net sales quantity in 2022.

¹ The following abbreviations are used in the tables and/or text of this section: generally accepted accounting principles ("GAAP"), international financial reporting standard ("IFRS"), fiscal year ("FY"), net sales ("NS"), cost of goods sold ("COGS"), selling, general, and administrative expenses ("SG&A expenses"), average unit values ("AUVs"), research and development expenses ("R&D expenses"), and return on assets ("ROA").

² Staff conducted a verification of FNA's U.S. producers' questionnaire data. Changes from the verification are incorporated within the report.

³ Generac provided its questionnaire response late in these investigations, on August 29, 2023.

⁴ Northern Tool's ***.

⁵ TTI ***. U.S. producers' questionnaire response, section II-3f. The firm ***. Email from ***, August 1, 2023.

⁶ Appendix K presents U.S. producers financial data excluding ***.

Figure VI-1
GPPW: U.S. producers' share of net sales quantity in 2022, by firm

* * * * *

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

Note: The data used to calculate the firms' shares of total net sales quantity appear in table VI-3.

Operations on GPPW

Table VI-1 presents aggregated data on U.S. producers' operations in relation to GPPW, while table VI-2 presents corresponding changes in AUVs. Table VI-3 presents selected company-specific financial data.

Table VI-1
GPPW: U.S. producers' results of operations, by item and period

Quantity in units; value in 1,000 dollars; ratios in percent

Item	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
Total net sales	Quantity	***	***	***	***	***
Total net sales	Value	***	***	***	***	***
COGS: Raw materials	Value	***	***	***	***	***
COGS: Direct labor	Value	***	***	***	***	***
COGS: Other factory	Value	***	***	***	***	***
COGS: Total	Value	***	***	***	***	***
Gross profit or (loss)	Value	***	***	***	***	***
SG&A expenses	Value	***	***	***	***	***
Operating income or (loss)	Value	***	***	***	***	***
Interest expense	Value	***	***	***	***	***
All other expenses	Value	***	***	***	***	***
All other income	Value	***	***	***	***	***
Net income or (loss)	Value	***	***	***	***	***
Depreciation/amortization	Value	***	***	***	***	***
Cash flow	Value	***	***	***	***	***
COGS: Raw materials	Ratio to NS	***	***	***	***	***
COGS: Direct labor	Ratio to NS	***	***	***	***	***
COGS: Other factory	Ratio to NS	***	***	***	***	***
COGS: Total	Ratio to NS	***	***	***	***	***
Gross profit	Ratio to NS	***	***	***	***	***
SG&A expense	Ratio to NS	***	***	***	***	***
Operating income or (loss)	Ratio to NS	***	***	***	***	***
Net income or (loss)	Ratio to NS	***	***	***	***	***

Table continued.

Table VI-1 Continued
GPPW: U.S. producers' results of operations, by item and period

Shares in percent; unit values in dollars per unit; count in number of firms reporting

Item	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
COGS: Raw materials	Share	***	***	***	***	***
COGS: Direct labor	Share	***	***	***	***	***
COGS: Other factory	Share	***	***	***	***	***
COGS: Total	Share	***	***	***	***	***
Total net sales	Unit value	***	***	***	***	***
COGS: Raw materials	Unit value	***	***	***	***	***
COGS: Direct labor	Unit value	***	***	***	***	***
COGS: Other factory	Unit value	***	***	***	***	***
COGS: Total	Unit value	***	***	***	***	***
Gross profit or (loss)	Unit value	***	***	***	***	***
SG&A expenses	Unit value	***	***	***	***	***
Operating income or (loss)	Unit value	***	***	***	***	***
Net income or (loss)	Unit value	***	***	***	***	***
Operating losses	Count	***	***	***	***	***
Net losses	Count	***	***	***	***	***
Data	Count	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires

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

Table VI-2
GPPW: Changes in AUVs between comparison periods

Changes in percent

Item	2020-22	2020-21	2021-22	Jan-Mar 2022-23
Total net sales	▲ ***	▲ ***	▲ ***	▲ ***
COGS: Raw materials	▲ ***	▼ ***	▲ ***	▲ ***
COGS: Direct labor	▲ ***	▲ ***	▲ ***	▲ ***
COGS: Other factory	▲ ***	▲ ***	▲ ***	▲ ***
COGS: Total	▲ ***	▲ ***	▲ ***	▲ ***

Table continued.

Table VI-2 Continued
GPPW: Changes in AUVs between comparison periods

Changes in dollars per unit

Item	2020-22	2020-21	2021-22	Jan-Mar 2022-23
Total net sales	▲ ***	▲ ***	▲ ***	▲ ***
COGS: Raw materials	▲ ***	▼ ***	▲ ***	▲ ***
COGS: Direct labor	▲ ***	▲ ***	▲ ***	▲ ***
COGS: Other factory	▲ ***	▲ ***	▲ ***	▲ ***
COGS: Total	▲ ***	▲ ***	▲ ***	▲ ***
Gross profit or (loss)	▼ ***	▼ ***	▼ ***	▼ ***
SG&A expense	▲ ***	▼ ***	▲ ***	▲ ***
Operating income or (loss)	▼ ***	▼ ***	▼ ***	▼ ***
Net income or (loss)	▼ ***	▲ ***	▼ ***	▼ ***

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

Note: Unit value changes shown as "0" represent values greater than zero, but less than ".50". Zeroes, null values, and undefined calculations are suppressed and shown as "---". Period changes preceded by a "▲" represent an increase, while period changes preceded by a "▼" represent a decrease.

Table VI-3**GPPW: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Net sales quantity**

Quantity in units

Firm	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
FNA	***	***	***	***	***
Generac	***	***	***	***	***
Northern Tool	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued**GPPW: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Net sales value**

Value in 1,000 dollars

Firm	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
FNA	***	***	***	***	***
Generac	***	***	***	***	***
Northern Tool	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued**GPPW: U.S. producers' sales, costs/expenses, and profitability, by firm and period****COGS**

Value in 1,000 dollars

Firm	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
FNA	***	***	***	***	***
Generac	***	***	***	***	***
Northern Tool	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued**GPPW: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Gross profit or (loss)**

Value in 1,000 dollars

Firm	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
FNA	***	***	***	***	***
Generac	***	***	***	***	***
Northern Tool	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued**GPPW: U.S. producers' sales, costs/expenses, and profitability, by firm and period****SG&A expenses**

Value in 1,000 dollars

Firm	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
FNA	***	***	***	***	***
Generac	***	***	***	***	***
Northern Tool	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued**GPPW: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Operating income or (loss)**

Value in 1,000 dollars

Firm	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
FNA	***	***	***	***	***
Generac	***	***	***	***	***
Northern Tool	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued**GPPW: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Net income or (loss)**

Value in 1,000 dollars

Firm	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
FNA	***	***	***	***	***
Generac	***	***	***	***	***
Northern Tool	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued**GPPW: U.S. producers' sales, costs/expenses, and profitability, by firm and period****COGS to net sales ratio**

Ratios in percent

Firm	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
FNA	***	***	***	***	***
Generac	***	***	***	***	***
Northern Tool	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued**GPPW: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Gross profit or (loss) to net sales ratio**

Ratios in percent

Firm	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
FNA	***	***	***	***	***
Generac	***	***	***	***	***
Northern Tool	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued**GPPW: U.S. producers' sales, costs/expenses, and profitability, by firm and period****SG&A expenses to net sales ratio**

Ratios in percent

Firm	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
FNA	***	***	***	***	***
Generac	***	***	***	***	***
Northern Tool	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued**GPPW: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Operating income or (loss) to net sales ratio**

Ratios in percent

Firm	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
FNA	***	***	***	***	***
Generac	***	***	***	***	***
Northern Tool	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued**GPPW: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Net income or (loss) to net sales ratio**

Ratios in percent

Firm	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
FNA	***	***	***	***	***
Generac	***	***	***	***	***
Northern Tool	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued**GPPW: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Unit net sales value**

Unit values in dollars per unit

Firm	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
FNA	***	***	***	***	***
Generac	***	***	***	***	***
Northern Tool	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued**GPPW: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Unit raw material costs**

Unit values in dollars per unit

Firm	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
FNA	***	***	***	***	***
Generac	***	***	***	***	***
Northern Tool	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued**GPPW: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Unit direct labor costs**

Unit values in dollars per unit

Firm	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
FNA	***	***	***	***	***
Generac	***	***	***	***	***
Northern Tool	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued**GPPW: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Unit other factory costs**

Unit values in dollars per unit

Firm	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
FNA	***	***	***	***	***
Generac	***	***	***	***	***
Northern Tool	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued**GPPW: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Unit COGS**

Unit values in dollars per unit

Firm	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
FNA	***	***	***	***	***
Generac	***	***	***	***	***
Northern Tool	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued**GPPW: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Unit gross profit or (loss)**

Unit values in dollars per unit

Firm	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
FNA	***	***	***	***	***
Generac	***	***	***	***	***
Northern Tool	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued**GPPW: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Unit SG&A expenses**

Unit values in dollars per unit

Firm	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
FNA	***	***	***	***	***
Generac	***	***	***	***	***
Northern Tool	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued**GPPW: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Unit operating income or (loss)**

Unit values in dollars per unit

Firm	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
FNA	***	***	***	***	***
Generac	***	***	***	***	***
Northern Tool	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued**GPPW: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Unit net income or (loss)**

Unit values in dollars per unit

Firm	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
FNA	***	***	***	***	***
Generac	***	***	***	***	***
Northern Tool	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires

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

Net sales

As shown in table VI-1, total net sales quantity slightly increased (***) from 2020 to 2021 before decreasing by *** percent from 2021 to 2022. Total net sales quantity overall decreased from 2020 to 2022 by *** percent and was *** percent lower in January-March 2023 compared with January-March 2022. Total net sales value followed the same trend as quantity and decreased by *** percent from 2020 to 2022, and was *** percent lower in January-March 2023 compared with January-March 2022.^{7 8} As shown in table VI-3, *** U.S. producers reported a decline in sales quantity and value from 2020 to 2022 and *** but *** reported lower sales in January-March 2023 compared with January-March 2022. On an average per-unit basis, sales values increased from \$*** in 2020 to \$*** in 2022, and were higher in January-March 2023 at \$*** compared with \$*** in January-March 2022. On a firm-by-firm basis, unit sales values varied between the four U.S. producers

⁷ FNA's ***. Email from ***, July 18, 2023. FNA's ***. At the hearing, a witness for FNA stated that data for the first quarter of 2022 benefited from demand in 2021 but domestic industry performance declined during the following three quarters in 2022. Hearing transcript, p. 87 (Szamosszegi).

⁸ ***. Email from ***, January 24, 2023. The sales data reported by ***.

due to the differences in product mix, but were uniform in directional trends overall from 2020 to 2022. In January-March 2023 the unit sales values of *** were higher compared with January-March 2022, while *** were lower.^{9 10}

Cost of goods sold and gross profit or loss

Raw material costs, direct labor and other factory costs accounted for *** percent of total COGS, respectively, in 2022.

Raw material costs the *** component of COGS, decreased by *** percent from 2020 (\$***) to 2022 (\$*** and were *** percent lower in January-March 2023 (\$***) compared with January-March 2022 (\$***). On an average per-unit basis, raw material costs decreased from \$*** in 2020 to \$*** in 2021, then increased to \$*** in 2022, and were higher in January-March 2023 at \$*** compared to \$*** in January-March 2022. As shown in table VI-3, the *** U.S. producers varied in directional trends from 2020 to 2022 and between the comparable interim periods, *** reported increased per-unit values while *** reported a decrease in its unit values.¹¹ Three firms, *** reported higher unit values in January-March 2023 compared with January-March 2022, while *** reported lower unit values

⁹ ***. Email from ***, July 28, 2023.

¹⁰ ***. Email from ***, July 31, 2023.

¹¹ ***. Petitioner's postconference brief, pp. 5-10. ***. Hearing transcript, p. 84 (Szamossegi). Petitioner provided additional information on its raw material costs and the composition of its other factory costs as well as a calculation that reclassified ***. See petitioner's posthearing brief, exh. 1, pp. 12-14, and exh. 4.

during the same comparable periods.¹² As a ratio to net sales, raw material costs decreased overall from *** percent in 2020 to *** percent in 2021, and *** percent in 2022, and were higher in January-March 2023 at *** percent compared with *** percent in January-March 2022.

Table VI-4 presents details on specific raw material inputs as a share of total material costs in 2022. Engines and pumps accounted for the largest share of raw material costs accounting for *** percent, respectively.^{13 14}

Table VI-4
GPPW: U.S. producers' raw material costs in 2022

Value in 1,000 dollars; share of value in percent

Item	Value	Unit value	Share of value
Engine	***	***	***
Pump	***	***	***
Other material inputs	***	***	***
Frame/cart or trolley	***	***	***
Dashboard	***	***	***
Engine plate/base	***	***	***
All raw materials	***	***	***

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

Note: Other material inputs include: hardware, labels, wheels, foam, packaging, plastic, rubber, hoses, nozzles, and guns.

Note: While the engine and pump were reported as consisting of aluminum, other metal components (dashboard and frame) are primarily of steel.

Direct labor costs, which represented the *** component of COGS, increased by *** percent from 2020 to 2021, then decreased by *** percent from 2021 to 2022 and

¹² ***. Email from ***, August 1, 2023.

¹³ ***. U.S. producers' questionnaire responses sections III-6, III-7a, and III-7b.

¹⁴ Data presenting separately domestic and imported components of raw materials were provided by each of the four firms in the Commission's supplemental questionnaire. The aggregate value of the breakouts reconciled with total raw materials costs data provided in their U.S. producers' questionnaire for each of the periods for which data were gathered.

overall decreased by *** percent from 2020 to 2022. Direct labor costs were *** percent lower in January-March 2023 compared with January-March 2022. On an average per-unit basis, direct labor costs were \$*** in each of the three yearly periods, and were \$*** in January-March 2022, compared with \$*** in January-March 2023. As shown in table VI-3, U.S. producers varied in directional trends from 2020 to 2022 and in January-March of 2022 and 2023. As a ratio to net sales, direct labor costs also fluctuated within a narrow range of *** percent from 2020 to 2022, and the ratio was *** percent in January-March 2022 and *** percent in January-March 2023.

Other factory costs, which represented the *** component of COGS, increased by *** percent from 2020 to 2021, then decreased by *** percent from 2021 to 2022, and overall increased by *** percent from 2020 to 2022.¹⁵ Other factory costs were *** percent lower in January-March 2023 compared with January-March 2022. As a ratio to net sales, other factory costs increased from *** percent to *** percent between 2020 and 2022; the ratio was *** percent in interim 2023 compared with *** percent in interim 2022. On an average per-unit basis, other factory costs increased from \$*** in 2020 to \$*** in 2022, and were higher in January-March 2023 at \$*** compared with \$*** in January-March 2022. An increase in the ratio to net sales or per-unit indicates a lower decline relative to sales. As shown in table VI-3, *** reported an overall increase in unit values from 2020 to 2022, while *** reported an overall decline. *** reported higher unit values in January-March 2023 compared with January-March 2022, and *** reported unchanged values during the same comparable periods.

Given the foregoing changes in the components, total COGS increased by *** percent from 2020 to 2021, before decreasing by *** percent from 2021 to 2022, and overall decreased by *** percent from 2020 to 2022. Total COGS were *** percent lower in January-March 2023 compared with January-March 2022. On an average per-unit basis, total COGS increased from \$*** in 2020 to \$*** in 2022, and were higher in January-March 2023 at \$*** compared with January-March 2022 at \$***. As a ratio to net sales, total COGS

¹⁵ ***. Hearing transcript, p. 84 (Szamossegi). As noted earlier, *** was addressed in petitioner's posthearing brief, exh. 1, pp. 12-14, and exh. 4.

increased from *** percent in 2020 to *** percent in 2022, and were higher in January-March 2023 at *** percent compared with *** percent in January-March 2022.

As shown in table VI-1, gross profit decreased from \$*** in 2020 to \$*** in 2022, and was lower in January-March 2023 at \$*** compared with January-March 2022 at \$***. As a ratio to net sales, gross profit decreased from *** percent in 2020 to *** percent in 2022, and was lower in January-March 2023 at *** percent compared with January-March 2022 at *** percent. As shown in table VI-3, *** reported an overall decrease in gross profits from 2020 to 2022, while *** reported an increase. In January-March 2023, *** reported a lower gross profit compared with January-March 2022, while *** reported a higher profit during the same comparable periods.

SG&A expenses and operating income or loss

U.S. producers' SG&A expenses decreased by *** percent from 2020 to 2022 and were *** percent higher in January-March 2023 compared with January-March 2022. As shown in table VI-3, *** reported an overall increase in their SG&A expenses from 2020 to 2022, and higher SG&A expenses in January-March 2023 compared with January-March 2022, while *** reported a decrease from 2020 to 2022 and lower expenses in January-March of 2023 compared with January-March 2022.¹⁶ The corresponding SG&A expense ratio (total SG&A expenses divided by total sales value) decreased from *** percent in 2020 to *** percent in 2021 then increased to *** percent in 2022, and was higher in January-March 2023 at *** percent compared to *** percent in January-March 2022.

U.S. producers' operating income decreased from \$*** in 2020 to \$*** in 2022, and was lower in January-March 2023 at \$*** compared with \$*** in January-March 2022. As a ratio to net sales, operating income decreased from *** percent in 2020 to *** percent in 2022, and was lower in January-March 2023 at *** percent compared with *** percent in January-March 2022. As shown in table VI-3, *** reported a decrease in their operating income from 2020 to 2022. However, in January-March 2023, *** reported a *** lower operating profit compared to January-March 2022, while

¹⁶ ***. Email from ***, July 31, 2023. SG&A expenses reported by ***.

's operating profit was higher. ***'s operating income increased from 2020 to 2022 and was lower () in January-March 2023 compared with January-March 2022. ***.

All other expenses and net income or loss

Classified below the operating income level are interest expenses, other expenses, and other income, the majority of which were reported by ***. Total interest expenses overall increased from 2020 to 2022 and were higher in January-March 2023 compared with January-March 2022; ***. Other expenses (***) increased from 2020 to 2022, and were higher in January-March 2023 compared with January-March 2022. Other income increased from 2020 to 2021, then decreased in 2022 and was slightly higher in January-March 2023 compared with January-March 2022. The majority of the increase in other income is attributed to ***'s data. ***. Other income in 2021 offset interest expense and other expenses and increased net income.^{17 18}

Net income increased from \$*** in 2020 to \$*** in 2021 then decreased to \$*** in 2022, and was lower in January-March 2023 at \$*** compared with \$*** in January-March 2022. As a ratio to net sales, net income decreased from *** percent in 2020 to *** percent in 2022, and was lower in January-March 2023 at *** percent compared with *** percent in January-March 2022. As shown in table VI-3, *** reported an overall decrease in net income from 2020 to 2022. In January-March 2023, *** reported a lower net income compared to January-March 2022, while ***'s net income was higher. ***'s net income increased from 2020 to 2022 and was lower (***) in January-March 2023 compared with January-March 2022. ***.¹⁹

¹⁷ Email from ***, July 18, 2023.

¹⁸ ***. Email from ***, August 1, 2023.

¹⁹ A variance analysis is not presented due to ***.

Capital expenditures and research and development expenses

Table VI-5 presents capital expenditures, by firm, and table VI-7 presents R&D expenses, by firm. Tables VI-6 and VI-8 present the firms' narrative explanations of the nature, focus, and significance of their capital expenditures and R&D expenses, respectively. Total capital expenditures overall declined from 2020 to 2022 and were lower in January-March 2023 compared with January-March 2022. As may be seen from data in the table, *** accounted for the majority of capital expenditures in the 2020-21 period,²⁰ ***'s spending rose from 2020 to 2022.²¹ R&D expenses overall declined from 2020 to 2022 and were higher in January-March 2023 compared with January-March 2022.

Table VI-5
GPPW: U.S. producers' capital expenditures, by firm and period

Value in 1,000 dollars

Firm	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
FNA	***	***	***	***	***
Generac	***	***	***	***	***
Northern Tool	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

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

Note: Zeroes, null values, and undefined calculations are suppressed and shown as "---".

²⁰ *** Email from ***, July 18, 2023.

²¹ *** . Email from ***, July 27, 2023.

Table VI-6**GPPW: U.S. producers' narrative descriptions of their capital expenditures, by firm**

Firm	Narrative on capital expenditures
FNA	***
Generac	***
Northern Tool	***
TTI	***

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

Table VI-7**GPPW: U.S. producers' R&D expenses, by firm and period**

Value in 1,000 dollars

Firm	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
FNA	***	***	***	***	***
Generac	***	***	***	***	***
Northern Tool	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

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

Note: Zeroes, null values, and undefined calculations are suppressed and shown as “---”.

Table VI-8**GPPW: U.S. producers' narrative descriptions of their R&D expenses, by firm**

Firm	Narrative on R&D expenses
FNA	***
Generac	***
Northern Tool	***
TTI	***

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

Assets and return on assets

Table VI-9 presents data on the U.S. producers' total assets while table VI-10 presents their operating ROA.²² Table VI-11 presents U.S. producers' narrative responses explaining their major asset categories and any significant changes in asset levels over time. The U.S. producers' total net assets overall increased from 2020 to 2022. The calculated ROA decreased from *** percent in 2020 to *** percent in 2022.

Table VI-9
GPPW: U.S. producers' total net assets, by firm and period

Value in 1,000 dollars

Firm	2020	2021	2022
FNA	***	***	***
Generac	***	***	***
Northern Tool	***	***	***
TTI	***	***	***
All firms	***	***	***

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

Table VI-10
GPPW: U.S. producers' ROA, by firm and period

Ratio in percent

Firm	2020	2021	2022
FNA	***	***	***
Generac	***	***	***
Northern Tool	***	***	***
TTI	***	***	***
All firms	***	***	***

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

²² The operating ROA is calculated as operating income divided by total assets. With respect to a firm's overall operations, the total asset value reflects an aggregation of a number of assets which are generally not product specific. Thus, high-level allocations are generally required in order to report a total asset value on a product-specific basis.

Table VI-11**GPPW: U.S. producers' narrative descriptions of their total net assets, by firm**

Firm	Narrative on assets
FNA	***
Generac	***
Northern Tool	***
TTI	***

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

The Commission requested U.S. producers to describe any effects the COVID-19 pandemic or government actions taken to contain the spread of COVID-19 had on their firms' financial performance. Table VI-12 provides the U.S. producers' narrative responses.

Table VI-12**GPPWs: Narratives explaining the effects of COVID-19 on financial performance**

Firm	Narrative on effects of COVID-19 on financial performance
FNA	***
Generac	***
Northern Tool	***
TTI	***

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

Capital and investment

The Commission requested U.S. producers of GPPW to describe any actual or potential negative effects of imports of GPPW from China and Vietnam on their firms' growth, investment, ability to raise capital, development and production efforts, or the scale of capital investments. Table VI-13 presents the number of firms reporting an impact in each category and table VI-14 provides the U.S. producers' narrative responses.

Table VI-13

GPPW: Count of firms indicating actual and anticipated negative effects of imports from subject sources on investment, growth, and development since January 1, 2020, by effect

Number of firms reporting

Effect	Category	Count
Cancellation, postponement, or rejection of expansion projects	Investment	1
Denial or rejection of investment proposal	Investment	0
Reduction in the size of capital investments	Investment	0
Return on specific investments negatively impacted	Investment	1
Other investment effects	Investment	0
Any negative effects on investment	Investment	2
Rejection of bank loans	Growth	0
Lowering of credit rating	Growth	0
Problem related to the issue of stocks or bonds	Growth	0
Ability to service debt	Growth	0
Other growth and development effects	Growth	1
Any negative effects on growth and development	Growth	1
Anticipated negative effects of imports	Future	1

Source: Compiled from data submitted in response to Commission questionnaires

Note: ***.

Table VI-14

GPPW: U.S. producers' narratives relating to actual and anticipated negative effects of imports on investment, growth, and development, since January 1, 2020, by firm and effect

Item	Firm name and narrative on impact of imports
Cancellation, postponement, or rejection of expansion projects	***
Return on specific investments negatively impacted	***
Other effects on growth and development	***
Anticipated effects of imports	***

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

Part VII: Threat considerations and information on nonsubject countries

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

In determining whether an industry in the United States is threatened with material injury by reason of imports (or sales for importation) of the subject merchandise, the Commission shall consider, among other relevant economic 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 alleged subsidies was presented earlier in this report; information on the volume and pricing of imports of the subject merchandise is presented in Parts IV and V; and information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts is presented in Part VI. Information on inventories of the subject merchandise; foreign producers' operations, including the potential for "product-shifting;" any other threat indicators, if applicable; and any dumping in third-country markets, follows. Also presented in this section of the report is information obtained for consideration by the Commission on nonsubject countries.

² Section 771(7)(F)(iii) of the Act (19 U.S.C. § 1677(7)(F)(iii)) further provides that, in antidumping investigations, "... the Commission shall consider whether dumping in the markets of foreign countries (as evidenced by dumping findings or antidumping remedies in other WTO member markets against the same class or kind of merchandise manufactured or exported by the same party as under investigation) suggests a threat of material injury to the domestic industry."

The industry in China

The Commission issued foreign producers' or exporters' questionnaires to 26 firms believed to produce and/or export GPPW from China.³ Usable responses to the Commission's questionnaire were received from three firms: Chongqing Dajiang Power Equipment Co., Ltd., ("Ducar China"), Chongqing Chen Hui Electric Machinery Co., Ltd. ("Senci"), and Techtronic Industries (Dongguan) Co., Ltd., ("Techtronic China"). These firms' exports to the United States accounted for approximately *** percent of U.S. imports (based on questionnaire data) of GPPW from China in 2022. According to estimates requested of the responding producers in China, the production of GPPW in China reported in questionnaires accounts for approximately *** percent of overall production of GPPW in China.⁴ Table VII-1 presents information on the GPPW operations of the responding producers and exporters in China.

Table VII-1
GPPW: Summary data for producers in China, 2022

Firm	Production (units)	Share of reported production (percent)	Exports to the United States (units)	Share of reported exports to the United States (percent)	Total shipments (units)	Share of firm's total shipments exported to the United States (percent)
Ducar China	***	***	***	***	***	***
Senci	***	***	***	***	***	***
Techtronic China	***	***	***	***	***	***
All firms	***	***	***	***	***	***

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

Note: ***.

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

Changes in operations

Producers in China were asked to report any change in the character of their operations or organization relating to the production of GPPW since 2020. The three responding producers

³ These firms were identified through a review of information submitted in the petition and presented in third-party sources.

⁴ *** did not provide an estimate of its 2022 share of GPPW production in China.

indicated in their questionnaire that they had experienced such changes. Table VII-2 presents the changes identified by this producer.⁵

Table VII-2

GPPW: Reported changes in operations in China since January 1, 2020, by firm

Item	Firm name and accompanying narrative response
Prolonged shutdowns	***
Production curtailments	***
Relocations	***
Weather-related or force majeure events	***
Other	***

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

Operations on GPPW

Table VII-3 presents information on the Chinese producers' GPPW installed and practical capacity, along with production on the same equipment as subject production. Installed and practical overall capacity and production, both decreased during 2020-2022. This decline was due to ***.⁶

Table VII-4 presents the producers in China's narrative responses regarding practical production constraints.

⁵ ***. *** foreign producer questionnaire, section II-2c.

⁶ *** foreign producer questionnaire, section II-7a.

Table VII-3

GPPW: Producers in China installed and practical capacity and production on the same equipment as subject production, by period

Capacity and production in units; utilization in percent

Item	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
Installed overall	Capacity	***	***	***	***	***
Installed overall	Production	***	***	***	***	***
Installed overall	Utilization	***	***	***	***	***
Practical overall	Capacity	***	***	***	***	***
Practical overall	Production	***	***	***	***	***
Practical overall	Utilization	***	***	***	***	***
Practical GPPWs	Capacity	***	***	***	***	***
Practical GPPWs	Production	***	***	***	***	***
Practical GPPWs	Utilization	***	***	***	***	***

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

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

Table VII-4

GPPW: Foreign producers’ narrative response regarding practical production constraints

Item	Firm name and narrative response on constraints to practical overall capacity
Existing labor force	***
Existing labor force	***
Supply of material inputs	***
Logistics/transportation	***

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

Table VII-5 presents information on the GPPW operations of the responding producers and exporters in China. During 2020-22, the Chinese producers' capacity decreased by *** percent, but was higher during interim 2023 than during interim 2022 by *** percent. During 2020-22, the Chinese producers' production decreased by *** percent overall, ***, but was higher by *** percent during interim 2023 than during interim 2022. During 2020-22, the Chinese producers' end-of-period inventories decreased by *** percent, and were lower during interim 2023 than during interim 2022 by *** percent. The Chinese producers reported no internal consumption 2020-22, or the interim periods. During 2020-22, the Chinese producers' home market shipments decreased by *** percent, but were higher during interim 2023 than during interim 2022 by ***. During 2020-22, exports to the United States decreased by *** percent, and were lower by *** percent in interim 2023 than during interim 2022.

The Chinese producers' capacity utilization increased by *** percentage points during 2020-22, and was higher during interim 2023 than during interim 2022, by *** percentage points. Exports to the United States as a share of total shipments decreased by *** percentage points during 2020-22, and was lower by *** percentage points during interim 2023 than during interim 2022. Inventories as a ratio to production and to total shipments both decreased during 2020-22, and was lower during interim 2023 than during interim 2022.

Chinese producers' 2023 and 2024 capacity and production ***. The Chinese producers' exports to all other markets are also projected to *** compared to 2022, while exports to the United States ***.

Table VII-5
GPPW: Data on industry in China, by period

Quantity in units

Item	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023	Projection 2023	Projection 2024
Capacity	***	***	***	***	***	***	***
Production	***	***	***	***	***	***	***
End-of- period inventories	***	***	***	***	***	***	***
Internal consumption	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Home market shipments	***	***	***	***	***	***	***
Exports to the United States	***	***	***	***	***	***	***
Exports to all other markets	***	***	***	***	***	***	***
Export shipments	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***

Table continued.

Table VII-5 Continued
GPPW: Data on industry in China, by period

Shares and ratio in percent

Item	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023	Projection 2023	Projection 2024
Capacity utilization ratio	***	***	***	***	***	***	***
Inventory ratio to production	***	***	***	***	***	***	***
Inventory ratio to total shipments	***	***	***	***	***	***	***
Internal consumption share	***	***	***	***	***	***	***
Commercial home market shipments share	***	***	***	***	***	***	***
Home market shipments share	***	***	***	***	***	***	***
Exports to the United States share	***	***	***	***	***	***	***
Exports to all other markets share	***	***	***	***	***	***	***
Export shipments share	***	***	***	***	***	***	***
Total shipments share	***	***	***	***	***	***	***

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

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

Alternative products

As shown in table VII-6, responding firms in China produced other products on the same equipment and machinery used to produce GPPW. *** reported producing other products on the same equipment and machinery used to produce GPPW, which included ***.

Table VII-6
GPPW: Producers in China overall capacity and production on the same equipment as subject production, by period

Quantity in units; share in percent

Product type	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
GPPWs	Quantity	***	***	***	***	***
Electric powered pressure washers	Quantity	***	***	***	***	***
Other products	Quantity	***	***	***	***	***
All out-of-scope products	Quantity	***	***	***	***	***
All products	Quantity	***	***	***	***	***
GPPWs	Share	***	***	***	***	***
Electric powered pressure washers	Share	***	***	***	***	***
Other products	Share	***	***	***	***	***
All out-of-scope products	Share	***	***	***	***	***
All products	Share	***	***	***	***	***

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

Exports

According to GTA, the leading export markets for steam or sandblasting machines and similar jet projecting machines and parts for mechanical appliances for projecting, dispersing, or spraying from China, based on value, are the United States, Vietnam, and Canada (table VII-7). During 2022, the United States was the top export market for steam or sandblasting machines and similar jet projecting machines and parts for mechanical appliances for projecting, dispersing, or spraying from China, accounting for 24.2 percent, followed by Vietnam and India, accounting for 5.3 percent and 4.9 percent, respectively.

Table VII-7

Steam or sandblasting machines and similar jet projecting machines and parts for mechanical appliances for projecting, dispersing, or spraying: Exports from China, by destination market and period

Value in 1,000 dollars; share in percent

Destination market	Measure	2020	2021	2022
United States	Value	542,085	588,351	427,999
Vietnam	Value	97,291	120,981	93,592
India	Value	47,913	65,749	85,959
Canada	Value	46,430	79,765	59,905
Russia	Value	36,331	52,191	56,075
Australia	Value	41,307	55,533	53,550
Netherlands	Value	17,792	45,757	49,132
United Kingdom	Value	50,365	71,451	49,001
Japan	Value	44,486	53,128	48,509
All other destination markets	Value	679,257	965,065	842,287
All destination markets	Value	1,603,257	2,097,971	1,766,008
United States	Share of value	33.8	28.0	24.2
Vietnam	Share of value	6.1	5.8	5.3
India	Share of value	3.0	3.1	4.9
Canada	Share of value	2.9	3.8	3.4
Russia	Share of value	2.3	2.5	3.2
Australia	Share of value	2.6	2.6	3.0
Netherlands	Share of value	1.1	2.2	2.8
United Kingdom	Share of value	3.1	3.4	2.8
Japan	Share of value	2.8	2.5	2.7
All other destination markets	Share of value	42.4	46.0	47.7
All destination markets	Share of value	100.0	100.0	100.0

Source: Official exports statistics under HS subheading 8424.30 and 8424.90 as reported by China Customs in the Global Trade Atlas Suite database, accessed July 6, 2023.

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---". United States is shown at the top, all remaining top export destinations shown in descending order of 2020 data.

The industry in Vietnam

The Commission issued foreign producers' or exporters' questionnaires to 15 firms believed to produce and/or export GPPW from Vietnam.⁷ Usable responses to the Commission's questionnaire were received from three firms: Ampride Electric Machinery Co., Ltd., ("Ampride Vietnam"), Ducar Technology Co., Ltd., ("Ducar Vietnam"), and Techtronic Industries Vietnam Manufacturing Company Limited ("Techtronic Vietnam"). These firms' exports to the United States accounted for approximately *** percent of U.S. imports (based on questionnaire data) of GPPW from Vietnam in 2022. According to estimates requested of the responding producers in Vietnam, the production of GPPW in Vietnam reported in questionnaires accounts for approximately *** of overall production of GPPW in Vietnam.⁸ Table VII-8 presents information on the GPPW operations of the responding producers and exporters in Vietnam.

Table VII-8
GPPW: Summary data for producers in Vietnam, 2022

Firm	Production (units)	Share of reported production (percent)	Exports to the United States (units)	Share of reported exports to the United States (percent)	Total shipments (units)	Share of firm's total shipments exported to the United States (percent)
Ampride Vietnam	***	***	***	***	***	***
Ducar Vietnam	***	***	***	***	***	***
Techtronic Vietnam	***	***	***	***	***	***
All firms	***	***	***	***	***	***

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

⁷ These firms were identified through a review of information submitted in the petition and presented in third-party sources.

⁸ ***, **. Preliminary confidential report, p. VII-10.

Changes in operations

Producers in Vietnam were asked to report any change in the character of their operations or organization relating to the production of GPPW since 2020. The three responding producers indicated in their questionnaire that they had experienced such changes. Table VII-9 presents the changes identified.

Table VII-9
GPPW: Reported changes in operations in Vietnam since January 1, 2020, by firm

Item	Firm name and accompanying narrative response
Plant openings	***
Production curtailments	***
Relocations	***
Other	***

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

Operations on GPPW

Table VII-10 presents information on the Vietnamese producers' GPPW installed and practical capacity, along with production on the same equipment as subject production. Installed and practical overall capacity and production were both higher during 2020-2022 ***, but production was lower during interim 2023 than during interim 2022. Similarly, practical in-scope capacity and production were higher during 2020-22, but were lower during interim 2023 than during interim 2022.

Table VII-10

GPPW: Producers in Vietnam installed and practical capacity and production on the same equipment as subject production, by period

Capacity and production in units; utilization in percent

Item	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
Installed overall	Capacity	***	***	***	***	***
Installed overall	Production	***	***	***	***	***
Installed overall	Utilization	***	***	***	***	***
Practical overall	Capacity	***	***	***	***	***
Practical overall	Production	***	***	***	***	***
Practical overall	Utilization	***	***	***	***	***
Practical GPPWs	Capacity	***	***	***	***	***
Practical GPPWs	Production	***	***	***	***	***
Practical GPPWs	Utilization	***	***	***	***	***

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

Table VII-11 presents the producers in Vietnam's narrative responses regarding practical production constraints.

Table VII-11

GPPW: Foreign producers' in Vietnam narrative response regarding practical production constraints

Item	Firm name and narrative response on constraints to practical overall capacity
Production bottlenecks	***
Supply of material inputs	***
Supply of material inputs	***
Logistics/transportation	***
Logistics/transportation	***
Other constraints	***
Other constraints	***

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

Table VII-12 presents information on the GPPW operations of the responding producers and exporters in Vietnam. During 2020-22, the Vietnamese producers' capacity increased by *** percent, but was *** percent lower during interim 2023 than during interim 2022. The Vietnamese producers' production of GPPW fluctuated year to year, increasing by *** percent from 2020 to 2021, then decreasing by *** percent from 2021 to 2022, for an overall increase of *** percent during 2020-22. Production of GPPW was lower by *** percent in interim 2023 than in interim 2022. During 2020-22, the Vietnamese producers' end-of-period inventories decreased by *** percent, and were *** percent lower during interim 2023 than during interim 2022. The Vietnamese producers reported *** internal consumption during 2020-22, and during the interim periods. Home market shipments were *** of total shipments based on quantity and value during 2020-22, and during the interim periods. The Vietnamese producers' exports to the United States fluctuated year to year, increasing by *** percent from 2020 to 2021, then decreasing by *** percent from 2021 to 2022, for an overall increase of *** percent during 2020-22. Exports to the United States of GPPW were lower by *** percent in interim 2023 than in interim 2022.

The Vietnamese producers' capacity utilization for GPPW fluctuated year to year, increasing by *** percentage points from 2020 to 2021, then decreasing by *** percentage points from 2021 to 2022, for an overall decrease of *** percentage points between 2020 and 2022. Capacity utilization for GPPW was lower by *** percentage points in interim 2023 than in interim 2022. Exports to the United States were nearly all total shipments during 2020-22, and during interim periods. Inventories as a ratio to production and to total shipments both decreased during 2020-22, and were lower during interim 2023 than during interim 2022.

Vietnamese producers' 2023 and 2024 capacity and production ***. The Vietnamese producers' exports to the United States are projected to ***.⁹

⁹ ***. *** foreign producer questionnaire, section II-9.

Table VII-12
GPPW: Data on industry in Vietnam, by period

Quantity in units

Item	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023	Projection 2023	Projection 2024
Capacity	***	***	***	***	***	***	***
Production	***	***	***	***	***	***	***
End-of- period inventories	***	***	***	***	***	***	***
Internal consumption	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Home market shipments	***	***	***	***	***	***	***
Exports to the United States	***	***	***	***	***	***	***
Exports to all other markets	***	***	***	***	***	***	***
Export shipments	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***

Table continued.

Table VII-12 Continued
GPPW: Data on industry in Vietnam, by period

Share in ratios and in percent

Item	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023	Projection 2023	Projection 2024
Capacity utilization ratio	***	***	***	***	***	***	***
Inventory ratio to production	***	***	***	***	***	***	***
Inventory ratio to total shipments	***	***	***	***	***	***	***
Internal consumption share	***	***	***	***	***	***	***
Commercial home market shipments share	***	***	***	***	***	***	***
Home market shipments share	***	***	***	***	***	***	***
Exports to the United States share	***	***	***	***	***	***	***
Exports to all other markets share	***	***	***	***	***	***	***
Export shipments share	***	***	***	***	***	***	***
Total shipments share	***	***	***	***	***	***	***

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

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

Alternative products

As shown in table VII-13, responding firms in Vietnam produced other products on the same equipment and machinery used to produce GPPW. *** reported producing other products on the same equipment and machinery used to produce GPPW, which included ***.

Table VII-13

GPPW: Producers' in Vietnam overall capacity and production on the same equipment as subject production, by period

Quantity in units; ratio and share in percent

Product type	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
GPPWs	Quantity	***	***	***	***	***
Electric powered pressure washers	Quantity	***	***	***	***	***
Other products	Quantity	***	***	***	***	***
All out-of-scope products	Quantity	***	***	***	***	***
All products	Quantity	***	***	***	***	***
GPPWs	Share	***	***	***	***	***
Electric powered pressure washers	Share	***	***	***	***	***
Other products	Share	***	***	***	***	***
All out-of-scope products	Share	***	***	***	***	***
All products	Share	***	***	***	***	***

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

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

Exports

According to GTA, the leading export markets for steam or sandblasting machines and similar jet projecting machines and parts for mechanical appliances for projecting, dispersing, or spraying from Vietnam, based on value, are the United States, Canada, and Italy (table VII-14). During 2022, the United States was the top export market for steam or sandblasting machines and similar jet projecting machines and parts for mechanical appliances for projecting, dispersing, or spraying from Vietnam, accounting for 92.3 percent, followed by Canada and Italy, accounting for 2.3 percent and 1.7 percent, respectively.

Table VII-14

Steam or sandblasting machines and similar jet projecting machines and parts for mechanical appliances for projecting, dispersing, or spraying: Exports from Vietnam, by destination market and period

Value in 1,000 dollars; share in percent

Destination market	Measure	2020	2021	2022
United States	Value	180,062	447,526	310,440
Canada	Value	670	5,344	7,683
Italy	Value	8,855	9,484	5,856
Japan	Value	2,809	3,836	3,523
Australia	Value	51	896	2,114
South Korea	Value	1,650	1,692	1,727
Netherlands	Value	148	213	1,485
United Kingdom	Value	---	273	613
Mexico	Value	2	634	496
All other destination markets	Value	12,922	3,112	2,301
All destination markets	Value	207,170	473,010	336,239
United States	Share of value	86.9	94.6	92.3
Canada	Share of value	0.3	1.1	2.3
Italy	Share of value	4.3	2.0	1.7
Japan	Share of value	1.4	0.8	1.0
Australia	Share of value	0.0	0.2	0.6
South Korea	Share of value	0.8	0.4	0.5
Netherlands	Share of value	0.1	0.0	0.4
United Kingdom	Share of value	---	0.1	0.2
Mexico	Share of value	0.0	0.1	0.1
All other destination markets	Share of value	6.2	0.7	0.7
All destination markets	Share of value	100.0	100.0	100.0

Source: Official imports statistics of imports from Vietnam (constructed export statistics for Vietnam) under HS subheading 8424.30 and 8424.90 as reported by various statistical reporting authorities in the Global Trade Atlas Suite database, accessed July 6, 2023.

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---". United States is shown at the top, all remaining top export destinations shown in descending order of 2020 data.

Subject countries combined

Table VII-15 presents summary data on GPPW operations of the reporting subject producers in the aggregated subject countries. During 2020-22, the combined subject countries' overall capacity decreased by *** percent, and was lower by *** percent during interim 2023 than during interim 2022. During 2020-22, the combined subject countries overall production of GPPW decreased by *** percent, and was lower by *** percent during interim 2023 than during interim 2022. Exports of GPPW from subject countries to the United States decreased by

*** percent during 2020-22, and was lower by *** percent during interim 2023 than during interim 2022.

Table VII-15

GPPW: Data on the industry in the aggregated subject countries, by period

Quantity in units

Item	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023	Projection 2023	Projection 2024
Capacity	***	***	***	***	***	***	***
Production	***	***	***	***	***	***	***
End-of- period inventories	***	***	***	***	***	***	***
Internal consumption	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Home market shipments	***	***	***	***	***	***	***
Exports to the United States	***	***	***	***	***	***	***
Exports to all other markets	***	***	***	***	***	***	***
Export shipments	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***

Table continued

Table VII-15 Continued
GPPW: Data on the industry in the aggregated subject countries, by period

Share and ratio in percent

Item	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023	Projection 2023	Projection 2024
Capacity utilization ratio	***	***	***	***	***	***	***
Inventory ratio to production	***	***	***	***	***	***	***
Inventory ratio to total shipments	***	***	***	***	***	***	***
Internal consumption share	***	***	***	***	***	***	***
Commercial home market shipments share	***	***	***	***	***	***	***
Home market shipments share	***	***	***	***	***	***	***
Exports to the United States share	***	***	***	***	***	***	***
Exports to all other markets share	***	***	***	***	***	***	***
Export shipments share	***	***	***	***	***	***	***
Total shipments share	***	***	***	***	***	***	***

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

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

U.S. inventories of imported merchandise

Table VII-16 presents data on U.S. importers' reported inventories of GPPW.¹⁰ Inventories of subject imports increased by *** percent between 2020 and 2022, but were *** percent lower in interim 2023 than in interim 2022. ***. The ratio of subject importers' inventories to imports increased from *** percent in 2020 to *** percent in 2022 and were *** percentage points higher in interim 2023 (*** percent) than in interim 2022 (*** percent)

¹⁰ ***.

Table VII-16

GPPW: U.S. importers' inventories and their ratio to select items, by source and period

Quantity in units; ratio in percent

Measure	Source	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
Inventories quantity	China	***	***	***	***	***
Ratio to imports	China	***	***	***	***	***
Ratio to U.S. shipments of imports	China	***	***	***	***	***
Ratio to total shipments of imports	China	***	***	***	***	***
Inventories quantity	Vietnam	***	***	***	***	***
Ratio to imports	Vietnam	***	***	***	***	***
Ratio to U.S. shipments of imports	Vietnam	***	***	***	***	***
Ratio to total shipments of imports	Vietnam	***	***	***	***	***
Inventories quantity	Subject sources	***	***	***	***	***
Ratio to imports	Subject sources	***	***	***	***	***
Ratio to U.S. shipments of imports	Subject sources	***	***	***	***	***
Ratio to total shipments of imports	Subject sources	***	***	***	***	***
Inventories quantity	Nonsubject	***	***	***	***	***
Ratio to imports	Nonsubject	***	***	***	***	***
Ratio to U.S. shipments of imports	Nonsubject	***	***	***	***	***
Ratio to total shipments of imports	Nonsubject	***	***	***	***	***
Inventories quantity	All	***	***	***	***	***
Ratio to imports	All	***	***	***	***	***
Ratio to U.S. shipments of imports	All	***	***	***	***	***
Ratio to total shipments of imports	All	***	***	***	***	***

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

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

U.S. importers' outstanding orders

The Commission requested importers to indicate whether they imported or arranged for the importation of GPPW from China and Vietnam after March 31, 2023. Three of the seven responding firms indicated that they had arranged such imports. All three firms reported arranged imports from subject sources. Their reported data is presented in table VII-17.

Table VII-17
GPPW: U.S. importers' arranged imports, by source and period

Quantity in units

Source	Apr-Jun 2023	Jul-Sept 2023	Oct-Dec 2023	Jan-Mar 2024	Total
China	***	***	***	***	***
Vietnam	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***

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

Third-country trade actions

There are no known antidumping or countervailing duty orders in third-country markets on GPPW.¹¹

Information on nonsubject countries

Table VII-18 presents global exports, by country, of exports of HS subheadings 8424.30 and 8424.90, which include exports of subject and nonsubject merchandise. Of countries not subject to these investigations, Germany is the leading exporter. Germany accounted for 16.6 percent of exports in 2022, followed by Italy, at 8.0 percent in 2022.

¹¹ World Trade Organization, "Trade Remedies Data Portal," <https://trade-remedies.wto.org/en>, retrieved September 8, 2023.

Table VII-18

Steam or sandblasting machines and similar jet projecting machines and parts for mechanical appliances for projecting, dispersing, or spraying: Global exports by reporting country and period

Value in 1,000 dollars; share in percent

Exporting country	Measure	2020	2021	2022
United States	Value	1,041,138	1,149,200	1,247,859
China	Value	1,603,257	2,097,971	1,766,008
Vietnam	Value	207,170	473,010	336,239
Subject exporters	Value	1,810,426	2,570,982	2,102,247
Germany	Value	1,523,360	1,765,058	1,635,641
Italy	Value	722,219	877,390	788,667
Netherlands	Value	398,634	565,620	549,093
United Kingdom	Value	236,747	286,422	336,833
France	Value	187,446	207,639	209,862
Belgium	Value	185,098	233,394	209,425
Japan	Value	178,704	197,277	197,651
Denmark	Value	157,107	180,488	171,209
Canada	Value	156,278	175,911	164,741
All other exporters	Value	1,958,777	2,286,717	2,227,482
All reporting exporters	Value	8,555,934	10,496,098	9,840,710
United States	Share of value	12.2	10.9	12.7
China	Share of value	18.7	20.0	17.9
Vietnam	Share of value	2.4	4.5	3.4
Subject exporters	Share of value	21.2	24.5	21.4
Germany	Share of value	17.8	16.8	16.6
Italy	Share of value	8.4	8.4	8.0
Netherlands	Share of value	4.7	5.4	5.6
United Kingdom	Share of value	2.8	2.7	3.4
France	Share of value	2.2	2.0	2.1
Belgium	Share of value	2.2	2.2	2.1
Japan	Share of value	2.1	1.9	2.0
Denmark	Share of value	1.8	1.7	1.7
Canada	Share of value	1.8	1.7	1.7
All other exporters	Share of value	22.9	21.8	22.6
All reporting exporters	Share of value	100.0	100.0	100.0

Source: Official exports statistics under HS subheading 8424.30 and 8424.90 as reported by various national statistical authorities in the Global Trade Atlas Suite database, accessed July 6, 2023, and official global imports statistics from Vietnam under HS subheading 8424.30 and 8424.90 as reported by UN comtrade in the Global Trade Atlas Suite database, accessed July 6, 2023.

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---". United States is shown at the top followed by the countries under investigation, all remaining top exporting countries in descending order of 2020 data.

APPENDIX A

FEDERAL REGISTER NOTICES

The Commission makes available notices relevant to its investigations and reviews on its website, www.usitc.gov. In addition, the following tabulation presents, in chronological order, Federal Register notices issued by the Commission and Commerce during the current proceeding.

Citation	Title	Link
88 FR 1093, January 6, 2023	<i>Gas Powered Pressure Washers From China and Vietnam; Institution of Antidumping and Countervailing Duty Investigations and Scheduling of Preliminary Phase Investigations</i>	https://www.govinfo.gov/content/pkg/FR-2023-01-06/pdf/2022-28667.pdf
88 FR 4812, January 25, 2023	<i>Gas Powered Pressure Washers From the People's Republic of China: Initiation of Countervailing Duty Investigation</i>	https://www.govinfo.gov/content/pkg/FR-2023-01-25/pdf/2023-01478.pdf
88 FR 4807, January 25, 2023	<i>Gas Powered Pressure Washers From the People's Republic of China and the Socialist Republic of Vietnam: Initiation of Less-Than-Fair-Value Investigations</i>	https://www.govinfo.gov/content/pkg/FR-2023-01-25/pdf/2023-01477.pdf
88 FR 31677, May 16, 2023	<i>Gas Powered Pressure Washers From the People's Republic of China: Postponement of Preliminary Determination in the Less-Than-Fair-Value Investigation</i>	https://www.govinfo.gov/content/pkg/FR-2023-05-18/pdf/2023-10579.pdf
88 FR 36531, June 5, 2023	<i>Gas Powered Pressure Washers From the People's Republic of China: Preliminary Affirmative Countervailing Duty Determination, Preliminary Affirmative Critical Circumstances Determination, in Part, and Alignment of Final Determination With Final Antidumping Duty Determination</i>	https://www.govinfo.gov/content/pkg/FR-2023-06-05/pdf/2023-11875.pdf

Citation	Title	Link
88 FR 39221, June 15, 2023	<i>Gas Powered Pressure Washers From the Socialist Republic of Vietnam: Preliminary Affirmative Determination of Sales at Less Than Fair Value and Preliminary Determination of Critical Circumstances</i>	https://www.govinfo.gov/content/pkg/FR-2023-06-15/pdf/2023-12766.pdf
88 FR 40865, June 22, 2023	<i>Gas Powered Pressure Washers From China and Vietnam; Scheduling of the Final Phase of Countervailing Duty and Antidumping Duty Investigations</i>	https://www.govinfo.gov/content/pkg/FR-2023-06-22/pdf/2023-13312.pdf
88 FR 51279, August 3, 2023	<i>Gas Powered Pressure Washers From the People's Republic of China: Preliminary Affirmative Determination of Sales at Less-Than-Fair-Value, Preliminary Affirmative Critical Circumstances Determination, in Part, Postponement of Final Determination, and Extension of Provisional Measures</i>	https://www.govinfo.gov/content/pkg/FR-2023-08-03/pdf/2023-16594.pdf
88 FR 59503, August 29, 2023	<i>Gas Powered Pressure Washers From the Socialist Republic of Vietnam: Final Affirmative Determination of Sales at Less Than Fair Value and Final Affirmative Determination of Critical Circumstances</i>	https://www.govinfo.gov/content/pkg/FR-2023-08-29/pdf/2023-18575.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: Gas Powered Pressure Washers from China and Vietnam
Inv. Nos.: 701-TA-684 and 731-TA-1597-1598 (Final)
Date and Time: August 24, 2023 - 9:30 a.m.

Sessions were held in connection with these investigations in the Main Hearing Room (Room 101), 500 E Street, SW., Washington, DC.

OPENING REMARKS:

In Support of Imposition (**Matthew McConkey**, Mayer Brown LLP)
In Opposition to Imposition (**Sarah M. Wyss**, Mowry & Grimson, PLLC)

In Support of the Imposition of the Antidumping and Countervailing Duty Orders:

Mayer Brown LLP
Washington, DC
on behalf of

FNA Group, Inc. ("FNA")

Gus Alexander, Chief Executive Officer, FNA Group, Inc.

Chris Alexander, Executive Vice President, Operations, FNA Group, Inc.

William Alexander, Executive Vice President, Sales and Marketing,
FNA Group, Inc.

Rocky Scalzo, Chief Financial Officer, FNA Group, Inc.

Andrew Szamosszegi, Principal, Capital Trade, Inc.

Nathan Smith, Research Analyst, Capital Trade, Inc.

Matthew McConkey)
Fabian Rivelis) – OF COUNSEL
Warren Payne)

In Opposition to the Imposition of the Antidumping and Countervailing Duty Orders:

Miller & Chevalier Chartered
Law Office of Neil Ellis PLLC
Washington, DC
on behalf of

Harbor Freight Tools USA, Inc.
Central Purchasing, LLC
(collectively “Harbor Freight”)

Jason Sprong, Executive Vice President, Harbor Freight Tools USA, Inc.

Tammy Stafford, Divisional Vice President, Assistant General Counsel,
Harbor Freight Tools USA, Inc.

Jennifer Lutz, Partner, ION Economics, LLC

Rebecca Tuzel, Economic Consultant, ION Economics, LLC

Neil R. Ellis)
Richard Mojica) – OF COUNSEL
Alexandra Prime)

Mowry & Grimson, PLLC
Washington, DC
on behalf of

MWE Investments, LLC DBA Westinghouse Outdoor Power Equipment
Midwest Equipment Sales, LLC
(collectively “MWE Investments”)

James Cline (remote witness), Chief Executive Officer, MWE Investments

Jon Barleycorn, Chief Operating Officer, MWE Investments

David Muti, Vice President, Product Development, MWE Investments

In Opposition to the Imposition of the
Antidumping and Countervailing Duty Orders (continued):

Jeff Miller, Vice President, Finance, MWE Investments

Sarah M. Wyss)
) – OF COUNSEL
Wyn Bellhouse)

REBUTTAL/CLOSING REMARKS:

In Support of Imposition (**Matthew McConkey**, Mayer Brown LLP)

In Opposition to Imposition (**Neil R. Ellis**, Law Office of Neil Ellis PLLC)

-END-

APPENDIX C
SUMMARY DATA

Table C-1: GPPW: Summary data concerning the total U.S. market C-3

Table C-2: Product: Summary data concerning the U.S. makert excluding two U.S. producers

*** C-5

All producers

Table C-1

GPPW: Summary data concerning the U.S. market, by item and period

Quantity=units; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per unit; Period changes=percent--exceptions noted

Item	Reported data					Period changes			
	2020	Calendar year 2021	2022	Jan-Mar 2022	2023	Comparison years 2020-22	2020-21	2021-22	Jan-Mar 2022-23
U.S. consumption quantity:									
Amount.....	***	***	***	***	***	▼***	▲***	▼***	▼***
Producers' share (fn1).....	***	***	***	***	***	▼***	▼***	▼***	▲***
Importers' share (fn1):									
China.....	***	***	***	***	***	▲***	▼***	▲***	▼***
Vietnam.....	***	***	***	***	***	▲***	▲***	▼***	▲***
Subject sources.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Nonsubject sources.....	***	***	***	***	***	***	***	***	***
All import sources.....	***	***	***	***	***	▲***	▲***	▲***	▼***
U.S. consumption value:									
Amount.....	***	***	***	***	***	▼***	▲***	▼***	▼***
Producers' share (fn1).....	***	***	***	***	***	▼***	▼***	▼***	▲***
Importers' share (fn1):									
China.....	***	***	***	***	***	▲***	▼***	▲***	▼***
Vietnam.....	***	***	***	***	***	▲***	▲***	▼***	▲***
Subject sources.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Nonsubject sources.....	***	***	***	***	***	***	***	***	***
All import sources.....	***	***	***	***	***	▲***	▲***	▲***	▼***
U.S. importers' U.S. shipments of imports from:									
China:									
Quantity.....	***	***	***	***	***	▲***	▼***	▲***	▼***
Value.....	***	***	***	***	***	▲***	▼***	▲***	▼***
Unit value.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Ending inventory quantity.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Vietnam:									
Quantity.....	***	***	***	***	***	▲***	▲***	▼***	▼***
Value.....	***	***	***	***	***	▲***	▲***	▼***	▼***
Unit value.....	***	***	***	***	***	▲***	▼***	▲***	▲***
Ending inventory quantity.....	***	***	***	***	***	▲***	▲***	▼***	▼***
Subject sources:									
Quantity.....	***	***	***	***	***	▲***	▲***	▼***	▼***
Value.....	***	***	***	***	***	▲***	▲***	▼***	▼***
Unit value.....	***	***	***	***	***	▲***	▼***	▲***	▲***
Ending inventory quantity.....	***	***	***	***	***	▲***	▲***	▼***	▼***
Nonsubject sources:									
Quantity.....	***	***	***	***	***	***	***	***	***
Value.....	***	***	***	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***	***	***	***
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***
All import sources:									
Quantity.....	***	***	***	***	***	▲***	▲***	▼***	▼***
Value.....	***	***	***	***	***	▲***	▲***	▼***	▼***
Unit value.....	***	***	***	***	***	▲***	▼***	▲***	▲***
Ending inventory quantity.....	***	***	***	***	***	▲***	▲***	▼***	▼***
U.S. producers:									
Practical capacity quantity.....	***	***	***	***	***	▲***	▲***	▼***	▼***
Production quantity.....	***	***	***	***	***	▼***	▲***	▼***	▼***
Capacity utilization (fn1).....	***	***	***	***	***	▼***	▲***	▼***	▼***
U.S. shipments:									
Quantity.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Value.....	***	***	***	***	***	▼***	▲***	▼***	▼***
Unit value.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Export shipments:									
Quantity.....	***	***	***	***	***	▲***	▲***	▼***	▼***
Value.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Unit value.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Ending inventory quantity.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Inventories/total shipments (fn1).....	***	***	***	***	***	▲***	▲***	▲***	▲***

Table continued.

Table C-1 Continued

GPPW: Summary data concerning the U.S. market, by item and period

Quantity=units; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per unit; Period changes=percent--exceptions noted

Item	Reported data					Period changes			
	Calendar year		Jan-Mar			Comparison years			Jan-Mar
	2020	2021	2022	2022	2023	2020-22	2020-21	2021-22	2022-23
U.S. producers' Continued:									
Production workers.....	***	***	***	***	***	▼***	▲***	▼***	▼***
Hours worked (1,000s).....	***	***	***	***	***	▼***	▲***	▼***	▼***
Wages paid (\$1,000).....	***	***	***	***	***	▲***	▲***	▼***	▼***
Hourly wages (dollars per hour).....	***	***	***	***	***	▲***	▲***	▲***	▼***
Productivity (units per 1,000 hours).....	***	***	***	***	***	▼***	▼***	▼***	▼***
Unit labor costs.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Net sales:									
Quantity.....	***	***	***	***	***	▼***	▲***	▼***	▼***
Value.....	***	***	***	***	***	▼***	▲***	▼***	▼***
Unit value.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Cost of goods sold (COGS).....	***	***	***	***	***	▼***	▲***	▼***	▼***
Gross profit or (loss) (fn2).....	***	***	***	***	***	▼***	▼***	▼***	▼***
SG&A expenses.....	***	***	***	***	***	▼***	▼***	▼***	▲***
Operating income or (loss) (fn2).....	***	***	***	***	***	▼***	▼***	▼***	▼***
Net income or (loss) (fn2).....	***	***	***	***	***	▼***	▲***	▼***	▼***
Unit COGS.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Unit SG&A expenses.....	***	***	***	***	***	▲***	▼***	▲***	▲***
Unit operating income or (loss) (fn2).....	***	***	***	***	***	▼***	▼***	▼***	▼***
Unit net income or (loss) (fn2).....	***	***	***	***	***	▼***	▲***	▼***	▼***
COGS/sales (fn1).....	***	***	***	***	***	▲***	▲***	▲***	▲***
Operating income or (loss)/sales (fn1).....	***	***	***	***	***	▼***	▼***	▼***	▼***
Net income or (loss)/sales (fn1).....	***	***	***	***	***	▼***	▲***	▼***	▼***
Capital expenditures.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Research and development expenses.....	***	***	***	***	***	▼***	▼***	▼***	▲***
Net assets.....	***	***	***	***	***	▲***	▲***	▲***	***

Source: Compiled from data submitted in response to Commission questionnaires. 508-compliant tables containing these data are contained in parts III, IV, VI, and VII of this report.

Note.--Shares and ratios shown as "0.0" percent represent non-zero values less than "0.05" percent (if positive) and greater than "(0.05)" percent (if negative). Zeroes, null values, and undefined calculations are suppressed and shown as "----". Period changes preceded by a "▲" represent an increase, while period changes preceded by a "▼" represent a decrease.

fn1.--Reported data are in percent and period changes are in percentage points.

fn2.--Percent changes only calculated when both comparison values represent profits; The directional change in profitability provided when one or both comparison values represent a loss.

Related party exclusion

Table C-2

GPPW: Summary data concerning the U.S. market excluding two U.S. producers *, by item and period**

Quantity=units; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per unit; Period changes=percent--exceptions noted

Item	Reported data					Period changes			
	2020	Calendar year 2021	2022	Jan-Mar 2022	2023	Comparison years 2020-22	2020-21	2021-22	Jan-Mar 2022-23
U.S. consumption quantity:									
Amount.....	***	***	***	***	***	▼***	▲***	▼***	▼***
Producers' share (fn1):									
Included producers.....	***	***	***	***	***	▼***	▼***	▲***	▲***
Excluded producers.....	***	***	***	***	***	▼***	▼***	▼***	▲***
All producers.....	***	***	***	***	***	▼***	▼***	▼***	▲***
Importers' share (fn1):									
China.....	***	***	***	***	***	▲***	▼***	▲***	▼***
Vietnam.....	***	***	***	***	***	▲***	▲***	▼***	▲***
Subject sources.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Nonsubject sources.....	***	***	***	***	***	***	***	***	***
All import sources.....	***	***	***	***	***	▲***	▲***	▲***	▼***
U.S. consumption value:									
Amount.....	***	***	***	***	***	▼***	▲***	▼***	▼***
Producers' share (fn1):									
Included producers.....	***	***	***	***	***	▼***	▼***	▲***	▲***
Excluded producers.....	***	***	***	***	***	▼***	▼***	▼***	▲***
All producers.....	***	***	***	***	***	▼***	▼***	▼***	▲***
Importers' share (fn1):									
China.....	***	***	***	***	***	▲***	▼***	▲***	▼***
Vietnam.....	***	***	***	***	***	▲***	▲***	▼***	▲***
Subject sources.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Nonsubject sources.....	***	***	***	***	***	***	***	***	***
All import sources.....	***	***	***	***	***	▲***	▲***	▲***	▼***
U.S. importers' U.S. shipments of imports from:									
China:									
Quantity.....	***	***	***	***	***	▲***	▼***	▲***	▼***
Value.....	***	***	***	***	***	▲***	▼***	▲***	▼***
Unit value.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Ending inventory quantity.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Vietnam:									
Quantity.....	***	***	***	***	***	▲***	▲***	▼***	▼***
Value.....	***	***	***	***	***	▲***	▲***	▼***	▼***
Unit value.....	***	***	***	***	***	▲***	▼***	▲***	▲***
Ending inventory quantity.....	***	***	***	***	***	▲***	▲***	▼***	▼***
Subject sources:									
Quantity.....	***	***	***	***	***	▲***	▲***	▼***	▼***
Value.....	***	***	***	***	***	▲***	▲***	▼***	▼***
Unit value.....	***	***	***	***	***	▲***	▼***	▲***	▲***
Ending inventory quantity.....	***	***	***	***	***	▲***	▲***	▼***	▼***
Nonsubject sources:									
Quantity.....	***	***	***	***	***	***	***	***	***
Value.....	***	***	***	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***	***	***	***
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***
All import sources:									
Quantity.....	***	***	***	***	***	▲***	▲***	▼***	▼***
Value.....	***	***	***	***	***	▲***	▲***	▼***	▼***
Unit value.....	***	***	***	***	***	▲***	▼***	▲***	▲***
Ending inventory quantity.....	***	***	***	***	***	▲***	▲***	▼***	▼***
Included U.S. producers:									
Practical capacity quantity.....	***	***	***	***	***	▲***	▲***	▼***	▼***
Production quantity.....	***	***	***	***	***	▼***	▲***	▼***	▼***
Capacity utilization (fn1).....	***	***	***	***	***	▼***	▲***	▼***	▼***
U.S. shipments:									
Quantity.....	***	***	***	***	***	▼***	▲***	▼***	▼***
Value.....	***	***	***	***	***	▼***	▲***	▼***	▼***
Unit value.....	***	***	***	***	***	▲***	▼***	▲***	▲***
Export shipments:									
Quantity.....	***	***	***	***	***	▲***	▲***	▼***	▲***
Value.....	***	***	***	***	***	▲***	▲***	▼***	▲***
Unit value.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Ending inventory quantity.....	***	***	***	***	***	▼***	▲***	▼***	▼***
Inventories/total shipments (fn1).....	***	***	***	***	***	▼***	▲***	▼***	▼***

Table continued.

Table C-2 Continued

GPPW: Summary data concerning the U.S. market excluding two U.S. producers ***, by item and period

Quantity=units; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per unit; Period changes=percent--exceptions noted

Item	Reported data					Period changes			
	Calendar year		Jan-Mar			Comparison years			Jan-Mar
	2020	2021	2022	2022	2023	2020-22	2020-21	2021-22	2022-23
Included U.S. producers' Continued:									
Production workers.....	***	***	***	***	***	▼***	▲***	▼***	▼***
Hours worked (1,000s).....	***	***	***	***	***	▼***	▲***	▼***	▼***
Wages paid (\$1,000).....	***	***	***	***	***	▼***	▲***	▼***	▼***
Hourly wages (dollars per hour).....	***	***	***	***	***	▲***	▲***	▲***	▲***
Productivity (units per 1,000 hours).....	***	***	***	***	***	▼***	▲***	▼***	▼***
Unit labor costs.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Net sales:									
Quantity.....	***	***	***	***	***	▼***	▲***	▼***	▼***
Value.....	***	***	***	***	***	▼***	▲***	▼***	▼***
Unit value.....	***	***	***	***	***	▲***	▼***	▲***	▲***
Cost of goods sold (COGS).....	***	***	***	***	***	▼***	▲***	▼***	▼***
Gross profit or (loss) (fn2).....	***	***	***	***	***	▼***	▲***	▼***	▼***
SG&A expenses.....	***	***	***	***	***	▲***	▲***	▼***	▲***
Operating income or (loss) (fn2).....	***	***	***	***	***	▼***	▼***	▼***	▼***
Net income or (loss) (fn2).....	***	***	***	***	***	▼***	▲***	▼***	▼***
Unit COGS.....	***	***	***	***	***	▲***	▼***	▲***	▲***
Unit SG&A expenses.....	***	***	***	***	***	▲***	▼***	▲***	▲***
Unit operating income or (loss) (fn2).....	***	***	***	***	***	▼***	▼***	▼***	▼***
Unit net income or (loss) (fn2).....	***	***	***	***	***	▼***	▼***	▼***	▼***
COGS/sales (fn1).....	***	***	***	***	***	▲***	▲***	▲***	▲***
Operating income or (loss)/sales (fn1).....	***	***	***	***	***	▼***	▼***	▼***	▼***
Net income or (loss)/sales (fn1).....	***	***	***	***	***	▼***	▼***	▼***	▼***
Capital expenditures.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Research and development expenses.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Net assets.....	***	***	***	***	***	▲***	▲***	▼***	***

Source: Compiled from data submitted in response to Commission questionnaires. 508-compliant tables containing these data are contained in appendix G and K of this report.

Note.--Shares and ratios shown as "0.0" percent represent non-zero values less than "0.05" percent (if positive) and greater than "(0.05)" percent (if negative). Zeroes, null values, and undefined calculations are suppressed and shown as "---". Period changes preceded by a "▲" represent an increase, while period changes preceded by a "▼" represent a decrease.

fn1.--Reported data are in percent and period changes are in percentage points.

fn2.--Percent changes only calculated when both comparison values represent profits; The directional change in profitability provided when one or both comparison values represent a loss.

APPENDIX D

U.S. PRODUCERS' RESPONSES ON PRODUCTION-RELATED ACTIVITIES

This appendix contains tables related to domestic production-related activities from each U.S. producer. Table D-1 presents U.S. producers' narratives regarding complexity of production-related activities. Table D-2 presents U.S. producers' narrative explanations relating to sufficient production-related activities. Table D-3 presents U.S. producers' domestic and raw material costs. Table D-4 presents U.S. producers' estimated greenfield investments.

Table D-1**GPPW: U.S. producers' narratives regarding complexity of production-related activities**

Firm	Rank	Narrative responses regarding complexity of production-related activities
FNA	***	***
Generac	***	***
Northern Tool	***	***
TTI	***	***

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

Note: Ranks are on a scale of 1-5 with 1 being the least complex and 5 the most. ***

Table D-2**GPPW: U.S. producers' narrative explanations relating to the sufficient production-related activities factors as it relates to gas powered pressure operations in the United States, since January 1, 2020**

Factors	Firm name and its narrative responses to the specified sufficient production-related activities factor
Capital investments	***
Technical expertise	***
Value added	***
Employment	***
Quantity, type, and source of parts	***
Costs and activities	***
Capital investments	***
Technical expertise	***
Value added	***
Employment	***
Quantity, type, and source of parts	***
Costs and activities	***
Capital investments	***
Technical expertise	***
Value added	***
Employment	***
Quantity, type, and source of parts	***
Costs and activities	***
Capital investments	***

Factors	Firm name and its narrative responses to the specified sufficient production-related activities factor
Technical expertise	***
Value added	***
Employment	***
Quantity, type, and source of parts	***
Costs and activities	***

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

Table D-3
GPPW: U.S. producers' domestic and imported raw material costs

Values in 1,000 dollars; shares in percent

Item	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
Engines Domestic	Quantity	***	***	***	***	***
Engines Imported	Quantity	***	***	***	***	***
All other raw materials Domestic	Quantity	***	***	***	***	***
All other raw materials Imported	Quantity	***	***	***	***	***
Engines	Quantity	***	***	***	***	***
All other raw materials	Quantity	***	***	***	***	***
Domestic inputs	Quantity	***	***	***	***	***
Imported inputs	Quantity	***	***	***	***	***
All inputs	Quantity	***	***	***	***	***
Engines Domestic	Share	***	***	***	***	***
Engines Imported	Share	***	***	***	***	***
All other raw materials Domestic	Share	***	***	***	***	***
All other raw materials Imported	Share	***	***	***	***	***
Engines	Share	***	***	***	***	***
All other raw materials	Share	***	***	***	***	***
Domestic inputs	Share	***	***	***	***	***
Imported inputs	Share	***	***	***	***	***
All inputs	Share	***	***	***	***	***

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

Note: Other material inputs include: hardware, labels, wheels, foam, packaging, plastic and rubber.

Table D-4

GPPW: U.S. producers' estimated greenfield investment costs to replicate their current production capacities for gas powered pressure washers

Cost in 1,000 dollars

Firm	Investment costs	Narrative responses to investment cost
FNA	***	***
Generac	***	***
Northern Tool	***	***
TTI	***	***
All firms	***	NA

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

APPENDIX E

U.S. PRODUCERS' AND IMPORTERS' U.S. SHIPMENTS

BY PRODUCT TYPE AND PERIOD

Tables E-1 through E-4 present U.S. producers' and U.S. importers' U.S. shipments by product type (residential and commercial units) and period during 2020-22, January-March 2022, and January-March 2023.

Table E-1
GPPW: U.S. producers' U.S. shipments by product type and period

Quantity in units or 1,000 pounds; value in 1,000 dollars

Product type	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
Residential full unit	Quantity (units)	***	***	***	***	***
Commercial full unit	Quantity (units)	***	***	***	***	***
All full units	Quantity (units)	***	***	***	***	***
All components	Quantity (units)	***	***	***	***	***
All product types	Quantity (units)	***	***	***	***	***
Residential full unit	Quantity (1,000 pounds)	***	***	***	***	***
Commercial full unit	Quantity (1,000 pounds)	***	***	***	***	***
All full units	Quantity (1,000 pounds)	***	***	***	***	***
All components	Quantity (1,000 pounds)	***	***	***	***	***
All product types	Quantity (1,000 pounds)	***	***	***	***	***
Residential full unit	Value	***	***	***	***	***
Commercial full unit	Value	***	***	***	***	***
All full units	Value	***	***	***	***	***
All components	Value	***	***	***	***	***
All product types	Value	***	***	***	***	***

Table continued.

Table E-1 Continued
GPPW: U.S. producers' U.S. shipments by product type and period

Unit values in dollars per unit and dollars per 1,000 pounds; share in percent

Product type	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
Residential full unit	Unit value (unit)	***	***	***	***	***
Commercial full unit	Unit value (unit)	***	***	***	***	***
All full units	Unit value (unit)	***	***	***	***	***
All components	Unit value (unit)	***	***	***	***	***
All product types	Unit value (unit)	***	***	***	***	***
Residential full unit	Unit value (1,000 pounds)	***	***	***	***	***
Commercial full unit	Unit value (1,000 pounds)	***	***	***	***	***
All full units	Unit value (1,000 pounds)	***	***	***	***	***
All components	Unit value (1,000 pounds)	***	***	***	***	***
All product types	Unit value (1,000 pounds)	***	***	***	***	***
Residential full unit	Share of quantity (units)	***	***	***	***	***
Commercial full unit	Share of quantity (units)	***	***	***	***	***
All full units	Share of quantity (units)	***	***	***	***	***
All components	Share of quantity (units)	***	***	***	***	***
All product types	Share of quantity (units)	***	***	***	***	***
Residential full unit	Share of quantity (1,000 pounds)	***	***	***	***	***
Commercial full unit	Share of quantity (1,000 pounds)	***	***	***	***	***
All full units	Share of quantity (1,000 pounds)	***	***	***	***	***
All components	Share of quantity (1,000 pounds)	***	***	***	***	***
All product types	Share of quantity (1,000 pounds)	***	***	***	***	***
Residential full unit	Share of value	***	***	***	***	***
Commercial full unit	Share of value	***	***	***	***	***
All full units	Share of value	***	***	***	***	***
All components	Share of value	***	***	***	***	***
All product types	Share of value	***	***	***	***	***

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

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

Table E-2**GPPW: U.S. importers' U.S. shipments of imports from China by product type and period**

Quantity in units or 1,000 pounds; value in 1,000 dollars

Product type	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
Residential full unit	Quantity (units)	***	***	***	***	***
Commercial full unit	Quantity (units)	***	***	***	***	***
All full units	Quantity (units)	***	***	***	***	***
All components	Quantity (units)	***	***	***	***	***
All product types	Quantity (units)	***	***	***	***	***
Residential full unit	Quantity (1,000 pounds)	***	***	***	***	***
Commercial full unit	Quantity (1,000 pounds)	***	***	***	***	***
All full units	Quantity (1,000 pounds)	***	***	***	***	***
All components	Quantity (1,000 pounds)	***	***	***	***	***
All product types	Quantity (1,000 pounds)	***	***	***	***	***
Residential full unit	Value	***	***	***	***	***
Commercial full unit	Value	***	***	***	***	***
All full units	Value	***	***	***	***	***
All components	Value	***	***	***	***	***
All product types	Value	***	***	***	***	***

Table continued.

Table E-2 Continued**GPPW: U.S. importers' U.S. shipments of imports from China by product type and period**

Unit values in dollars per unit and dollars per 1,000 pounds; share in percent

Product type	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
Residential full unit	Unit value (unit)	***	***	***	***	***
Commercial full unit	Unit value (unit)	***	***	***	***	***
All full units	Unit value (unit)	***	***	***	***	***
All components	Unit value (unit)	***	***	***	***	***
All product types	Unit value (unit)	***	***	***	***	***
Residential full unit	Unit value (1,000 pounds)	***	***	***	***	***
Commercial full unit	Unit value (1,000 pounds)	***	***	***	***	***
All full units	Unit value (1,000 pounds)	***	***	***	***	***
All components	Unit value (1,000 pounds)	***	***	***	***	***
All product types	Unit value (1,000 pounds)	***	***	***	***	***
Residential full unit	Share of quantity (units)	***	***	***	***	***
Commercial full unit	Share of quantity (units)	***	***	***	***	***
All full units	Share of quantity (units)	***	***	***	***	***
All components	Share of quantity (units)	***	***	***	***	***
All product types	Share of quantity (units)	***	***	***	***	***
Residential full unit	Share of quantity (1,000 pounds)	***	***	***	***	***
Commercial full unit	Share of quantity (1,000 pounds)	***	***	***	***	***
All full units	Share of quantity (1,000 pounds)	***	***	***	***	***
All components	Share of quantity (1,000 pounds)	***	***	***	***	***
All product types	Share of quantity (1,000 pounds)	***	***	***	***	***
Residential full unit	Share of value	***	***	***	***	***
Commercial full unit	Share of value	***	***	***	***	***
All full units	Share of value	***	***	***	***	***
All components	Share of value	***	***	***	***	***
All product types	Share of value	***	***	***	***	***

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

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

Table E-3**GPPW: U.S. importers' U.S. shipments of imports from Vietnam by product type and period**

Quantity in units and 1,000 pounds, Value in 1,000 dollars

Product type	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
Residential full unit	Quantity (units)	***	***	***	***	***
Commercial full unit	Quantity (units)	***	***	***	***	***
All full units	Quantity (units)	***	***	***	***	***
All components	Quantity (units)	***	***	***	***	***
All product types	Quantity (units)	***	***	***	***	***
Residential full unit	Quantity (1,000 pounds)	***	***	***	***	***
Commercial full unit	Quantity (1,000 pounds)	***	***	***	***	***
All full units	Quantity (1,000 pounds)	***	***	***	***	***
All components	Quantity (1,000 pounds)	***	***	***	***	***
All product types	Quantity (1,000 pounds)	***	***	***	***	***
Residential full unit	Value	***	***	***	***	***
Commercial full unit	Value	***	***	***	***	***
All full units	Value	***	***	***	***	***
All components	Value	***	***	***	***	***
All product types	Value	***	***	***	***	***

Table continued.

Table E-3 Continued**GPPW: U.S. importers' U.S. shipments of imports from Vietnam by product type and period**

Unit values in dollars per unit and dollars per 1,000 pounds; share in percent

Product type	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
Residential full unit	Unit value (unit)	***	***	***	***	***
Commercial full unit	Unit value (unit)	***	***	***	***	***
All full units	Unit value (unit)	***	***	***	***	***
All components	Unit value (unit)	***	***	***	***	***
All product types	Unit value (unit)	***	***	***	***	***
Residential full unit	Unit value (1,000 pounds)	***	***	***	***	***
Commercial full unit	Unit value (1,000 pounds)	***	***	***	***	***
All full units	Unit value (1,000 pounds)	***	***	***	***	***
All components	Unit value (1,000 pounds)	***	***	***	***	***
All product types	Unit value (1,000 pounds)	***	***	***	***	***
Residential full unit	Share of quantity (units)	***	***	***	***	***
Commercial full unit	Share of quantity (units)	***	***	***	***	***
All full units	Share of quantity (units)	***	***	***	***	***
All components	Share of quantity (units)	***	***	***	***	***
All product types	Share of quantity (units)	***	***	***	***	***
Residential full unit	Share of quantity (1,000 pounds)	***	***	***	***	***
Commercial full unit	Share of quantity (1,000 pounds)	***	***	***	***	***
All full units	Share of quantity (1,000 pounds)	***	***	***	***	***
All components	Share of quantity (1,000 pounds)	***	***	***	***	***
All product types	Share of quantity (1,000 pounds)	***	***	***	***	***
Residential full unit	Share of value	***	***	***	***	***
Commercial full unit	Share of value	***	***	***	***	***
All full units	Share of value	***	***	***	***	***
All components	Share of value	***	***	***	***	***
All product types	Share of value	***	***	***	***	***

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

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

Table E-4**GPPW: U.S. importers' U.S. shipments of imports from subject sources by product type and period**

Quantity in units and 1,000 pounds, value in 1,000 dollars

Product type	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
Residential full unit	Quantity (units)	***	***	***	***	***
Commercial full unit	Quantity (units)	***	***	***	***	***
All full units	Quantity (units)	***	***	***	***	***
All components	Quantity (units)	***	***	***	***	***
All product types	Quantity (units)	***	***	***	***	***
Residential full unit	Quantity (1,000 pounds)	***	***	***	***	***
Commercial full unit	Quantity (1,000 pounds)	***	***	***	***	***
All full units	Quantity (1,000 pounds)	***	***	***	***	***
All components	Quantity (1,000 pounds)	***	***	***	***	***
All product types	Quantity (1,000 pounds)	***	***	***	***	***
Residential full unit	Value	***	***	***	***	***
Commercial full unit	Value	***	***	***	***	***
All full units	Value	***	***	***	***	***
All components	Value	***	***	***	***	***
All product types	Value	***	***	***	***	***

Table continued.

Table E-4 Continued**GPPW: U.S. importers' U.S. shipments of imports from subject sources by product type and period**

Unit values in dollars per unit and dollars per 1,000 pounds; share in percent

Product type	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
Residential full unit	Dollars per unit	***	***	***	***	***
Commercial full unit	Dollars per unit	***	***	***	***	***
All full units	Dollars per unit	***	***	***	***	***
All components	Dollars per unit	***	***	***	***	***
All product types	Dollars per unit	***	***	***	***	***
Residential full unit	Dollars per 1,000 pounds	***	***	***	***	***
Commercial full unit	Dollars per 1,000 pounds	***	***	***	***	***
All full units	Dollars per 1,000 pounds	***	***	***	***	***
All components	Dollars per 1,000 pounds	***	***	***	***	***
All product types	Dollars per 1,000 pounds	***	***	***	***	***
Residential full unit	Share of units	***	***	***	***	***
Commercial full unit	Share of units	***	***	***	***	***
All full units	Share of units	***	***	***	***	***
All components	Share of units	***	***	***	***	***
All product types	Share of units	***	***	***	***	***
Residential full unit	Share of 1,000 pounds	***	***	***	***	***
Commercial full unit	Share of 1,000 pounds	***	***	***	***	***
All full units	Share of 1,000 pounds	***	***	***	***	***
All components	Share of 1,000 pounds	***	***	***	***	***
All product types	Share of 1,000 pounds	***	***	***	***	***
Residential full unit	Share of value	***	***	***	***	***
Commercial full unit	Share of value	***	***	***	***	***
All full units	Share of value	***	***	***	***	***
All components	Share of value	***	***	***	***	***
All product types	Share of value	***	***	***	***	***

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

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

APPENDIX F

U.S. IMPORTS AND APPARENT U.S. CONSUMPTION BASED ON ADJUSTED OFFICIAL U.S. IMPORTS STATISTICS

Tables F-1 (U.S. imports by source), F-2 (Apparent U.S. consumption), and figure F-1 (Apparent U.S. consumption) present U.S. imports of GPPW based on value, which were adjusted to reflect landed duty paid value that was adjusted to remove out of scope imports value as reported in questionnaire responses (based on the U.S. importer questionnaires, specific to out-of-scope imports in questions II-8a and II-8b).

Table F-1
GPPW: U.S. imports, by source and period

Value in 1,000 dollars; share in percent

Source	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
China	Value	***	***	***	***	***
Vietnam	Value	***	***	***	***	***
Subject sources	Value	***	***	***	***	***
Nonsubject sources	Value	***	***	***	***	***
All import sources	Value	***	***	***	***	***
China	Share of value	***	***	***	***	***
Vietnam	Share of value	***	***	***	***	***
Subject sources	Share of value	***	***	***	***	***
Nonsubject sources	Share of value	***	***	***	***	***
All import sources	Share of value	***	***	***	***	***

Source: Official U.S. import statistics of the U.S. Department of Commerce Census Bureau using statistical reporting numbers 8424.30.9000 and 8424.90.9040, accessed July 6, 2023, adjusted to remove out of scope imports value data submitted in response to Commission questionnaires. Imports are based on the imports for consumption data series and reflect landed duty paid value.

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

Table F-2**GPPW: Apparent U.S. consumption and market shares based on value data, by source and period**

Value in 1,000 dollars; share in percent

Source	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
U.S. producers	Value	***	***	***	***	***
China	Value	***	***	***	***	***
Vietnam	Value	***	***	***	***	***
Subject sources	Value	***	***	***	***	***
Nonsubject sources	Value	***	***	***	***	***
All import sources	Value	***	***	***	***	***
All sources	Value	***	***	***	***	***
U.S. producers	Share	***	***	***	***	***
China	Share	***	***	***	***	***
Vietnam	Share	***	***	***	***	***
Subject sources	Share	***	***	***	***	***
Nonsubject sources	Share	***	***	***	***	***
All import sources	Share	***	***	***	***	***
All sources	Share	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires and official U.S. import statistics of the U.S. Department of Commerce Census Bureau using statistical reporting numbers 8424.30.9000 and 8424.90.9040, accessed July 6, 2023, adjusted to remove out of scope imports value data submitted in response to Commission questionnaires. Imports are based on the imports for consumption data series and reflect landed duty paid value.

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

Figure F-1
GPPW: Apparent U.S. consumption, based on value data, by source and period

* * * * *

Source: Compiled from data submitted in response to Commission questionnaires and official U.S. import statistics of the U.S. Department of Commerce Census Bureau using statistical reporting numbers 8424.30.9000 and 8424.90.9040, accessed July 6, 2023, adjusted to remove out of scope imports value data submitted in response to Commission questionnaires. Imports are based on the imports for consumption data series and reflect landed duty paid value.

APPENDIX G

U.S. PRODUCERS' DATA, APPARENT U.S. CONSUMPTION AND MARKET SHARES

EXCLUDING ***

Table G-1

GPPW: U.S. producers' capacity, production and capacity utilization excluding *, by period**

Capacity and production in units; ratios in percent

Item	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
Capacity	***	***	***	***	***
Production	***	***	***	***	***
Utilization	***	***	***	***	***

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

Figure G-1

GPPW: U.S. producers' capacity, production and capacity utilization excluding *, by period**

* * * * *

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

Table G-2**GPPW: U.S. producers' total shipments excluding ***, by destination and period**

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

Item	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
U.S. shipments	Quantity	***	***	***	***	***
Export shipments	Quantity	***	***	***	***	***
Total shipments	Quantity	***	***	***	***	***
U.S. shipments	Value	***	***	***	***	***
Export shipments	Value	***	***	***	***	***
Total shipments	Value	***	***	***	***	***
U.S. shipments	Unit value	***	***	***	***	***
Export shipments	Unit value	***	***	***	***	***
Total shipments	Unit value	***	***	***	***	***
U.S. shipments	Share of quantity	***	***	***	***	***
Export shipments	Share of quantity	***	***	***	***	***
Total shipments	Share of quantity	***	***	***	***	***
U.S. shipments	Share of value	***	***	***	***	***
Export shipments	Share of value	***	***	***	***	***
Total shipments	Share of value	***	***	***	***	***

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

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

Table G-3**GPPW: U.S. producers' inventories and their ratio to select items excluding ***, by period**

Quantity in units; inventory ratios in percent

Item	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
End-of-period inventory quantity	***	***	***	***	***
Inventory ratio to U.S. production	***	***	***	***	***
Inventory ratio to U.S. shipments	***	***	***	***	***
Inventory ratio to total shipments	***	***	***	***	***

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

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

Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table G-4**GPPW: U.S. producers' employment related information excluding ***, by item and period**

Item	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
Production and related workers (PRWs) (number)	***	***	***	***	***
Total hours worked (1,000 hours)	***	***	***	***	***
Hours worked per PRW (hours)	***	***	***	***	***
Wages paid (\$1,000)	***	***	***	***	***
Hourly wages (dollars per hour)	***	***	***	***	***
Productivity (units per 1,000 hours)	***	***	***	***	***
Unit labor costs (dollars per unit)	***	***	***	***	***

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

Table G-5**GPPW: Apparent U.S. consumption and market shares based on quantity excluding ***, by source and period**

Quantity in units; shares in percent

Source	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
Included U.S. producers	Quantity	***	***	***	***	***
Excluded U.S. producers	Quantity	***	***	***	***	***
All U.S. producers	Quantity	***	***	***	***	***
China	Quantity	***	***	***	***	***
Vietnam	Quantity	***	***	***	***	***
Subject sources	Quantity	***	***	***	***	***
Nonsubject sources	Quantity	***	***	***	***	***
All import sources	Quantity	***	***	***	***	***
All sources	Quantity	***	***	***	***	***
Included U.S. producers	Share	***	***	***	***	***
Excluded U.S. producers	Share	***	***	***	***	***
All U.S. producers	Share	***	***	***	***	***
China	Share	***	***	***	***	***
Vietnam	Share	***	***	***	***	***
Subject sources	Share	***	***	***	***	***
Nonsubject sources	Share	***	***	***	***	***
All import sources	Share	***	***	***	***	***
All sources	Share	***	***	***	***	***

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

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

Table G-6**GPPW: Apparent U.S. consumption and market shares based on value excluding ***, by source and period**

Value in dollars; shares in percent

Source	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
Included U.S. producers	Value	***	***	***	***	***
Excluded U.S. producers	Value	***	***	***	***	***
All U.S. producers	Value	***	***	***	***	***
China	Value	***	***	***	***	***
Vietnam	Value	***	***	***	***	***
Subject sources	Value	***	***	***	***	***
Nonsubject sources	Value	***	***	***	***	***
All import sources	Value	***	***	***	***	***
All sources	Value	***	***	***	***	***
Included U.S. producers	Share	***	***	***	***	***
Excluded U.S. producers	Share	***	***	***	***	***
All U.S. producers	Share	***	***	***	***	***
China	Share	***	***	***	***	***
Vietnam	Share	***	***	***	***	***
Subject sources	Share	***	***	***	***	***
Nonsubject sources	Share	***	***	***	***	***
All import sources	Share	***	***	***	***	***
All sources	Share	***	***	***	***	***

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

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

APPENDIX H

PRICE DATA EXCLUDING DATA FROM ***

***. This appendix provides pricing data excluding ***.¹

Tables H-1 to H-4 and figures H-1 to H-4 present the price data with the above exclusion. Table H-5 (analogous to table V-7) presents price trends with the above exclusion. As shown in the table, domestic price increases ranged from *** to *** percent during January 2020-March 2023.

Tables H-6 and H-7 (analogous to tables V-8 and V-9, respectively) present instances of underselling and overselling. Prices for product imported from China were below those for U.S.-produced product in *** of *** instances (*** units); margins of underselling ranged from *** to *** percent. In the remaining *** instances (*** units), the price for product from China was *** to *** percent above the price for the domestic product.

Prices for product imported from Vietnam were below those for U.S.-produced product in *** instances (*** units); margins of underselling ranged from *** to *** percent.

¹ As noted in part V, *** explained that ***. Phone call with ***.

Table H-1

GPPW: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 and margins of underselling/(overselling), excluding data from U.S. producer *, by source and quarter**

Price in dollars per unit, quantity in units, margin in percent.

Period	U.S. price	U.S. quantity	China price	China quantity	China margin	Vietnam price	Vietnam quantity	Vietnam margin
2020 Q1	***	***	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***	***	***
2021 Q2	***	***	***	***	***	***	***	***
2021 Q3	***	***	***	***	***	***	***	***
2021 Q4	***	***	***	***	***	***	***	***
2022 Q1	***	***	***	***	***	***	***	***
2022 Q2	***	***	***	***	***	***	***	***
2022 Q3	***	***	***	***	***	***	***	***
2022 Q4	***	***	***	***	***	***	***	***
2023 Q1	***	***	***	***	***	***	***	***

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

Note: Product 1: Consumer grade pressure washer with an axial pump and a pressure rating of 2700 psi up to and including 3100 psi, with a flow of 2.3 or 2.4 gallons per minute ("GPM"). Importer *** reported a small volume of Chinese product in the *** with a ***. Email from ***.

Table H-2

GPPW: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 and margins of underselling/(overselling), excluding data from U.S. producer *, by source and quarter**

Price in dollars per unit, quantity in units, margin in percent.

Period	U.S. price	U.S. quantity	China price	China quantity	China margin	Vietnam price	Vietnam quantity	Vietnam margin
2020 Q1	***	***	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***	***	***
2021 Q2	***	***	***	***	***	***	***	***
2021 Q3	***	***	***	***	***	***	***	***
2021 Q4	***	***	***	***	***	***	***	***
2022 Q1	***	***	***	***	***	***	***	***
2022 Q2	***	***	***	***	***	***	***	***
2022 Q3	***	***	***	***	***	***	***	***
2022 Q4	***	***	***	***	***	***	***	***
2023 Q1	***	***	***	***	***	***	***	***

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

Note: Product 2: Consumer grade pressure washer with an axial pump and a pressure rating of 3200 psi up to and including 3600 psi, with a flow of 2.3 GPM up to and including 2.8 GPM. Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table H-3

GPPW: Weighted-average f.o.b. prices and quantities of domestic and imported product 3 and margins of underselling/(overselling), excluding data from U.S. producer *, by source and quarter**

Price in dollars per unit, quantity in units, margin in percent.

Period	U.S. price	U.S. quantity	China price	China quantity	China margin	Vietnam price	Vietnam quantity	Vietnam margin
2020 Q1	***	***	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***	***	***
2021 Q2	***	***	***	***	***	***	***	***
2021 Q3	***	***	***	***	***	***	***	***
2021 Q4	***	***	***	***	***	***	***	***
2022 Q1	***	***	***	***	***	***	***	***
2022 Q2	***	***	***	***	***	***	***	***
2022 Q3	***	***	***	***	***	***	***	***
2022 Q4	***	***	***	***	***	***	***	***
2023 Q1	***	***	***	***	***	***	***	***

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

Note: Product 3: Professional grade pressure washer with a triplex pump and a pressure rating of 3000 psi up to and including 3700 psi, with a flow of 2.3 GPM up to and including 3.0 GPM. Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table H-4

GPPW: Weighted-average f.o.b. prices and quantities of domestic and imported product 4 and margins of underselling/(overselling), excluding data from U.S. producer *, by source and quarter**

Price in dollars per unit, quantity in units, margin in percent.

Period	U.S. price	U.S. quantity
2020 Q1	***	***
2020 Q2	***	***
2020 Q3	***	***
2020 Q4	***	***
2021 Q1	***	***
2021 Q2	***	***
2021 Q3	***	***
2021 Q4	***	***
2022 Q1	***	***
2022 Q2	***	***
2022 Q3	***	***
2022 Q4	***	***
2023 Q1	***	***

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

Note: Product 4: Professional grade pressure washer with a triplex pump and a pressure rating of 3800 psi up to and including 4400 psi, with a flow of 2.5 GPM up to and including 4.0 GPM

Figure H-1

GPPW: Weighted-average f.o.b. prices and quantities of domestic and imported product 1, excluding data from U.S. producer *, by source and quarter**

Price of product 1

* * * * *

Volume of product 1

* * * * *

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

Note: Product 1: Consumer grade pressure washer with an axial pump and a pressure rating of 2700 psi up to and including 3100 psi, with a flow of 2.3 or 2.4 gallons per minute ("GPM").

Figure H-2

GPPW: Weighted-average f.o.b. prices and quantities of domestic and imported product 2, excluding data from U.S. producer *, by source and quarter**

Price of product 2

* * * * *

Volume of product 2

* * * * *

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

Note: Product 2: Consumer grade pressure washer with an axial pump and a pressure rating of 3200 psi up to and including 3600 psi, with a flow of 2.3 GPM up to and including 2.8 GPM.

Figure H-3

GPPW: Weighted-average f.o.b. prices and quantities of domestic and imported product 3, excluding data from U.S. producer *, by source and quarter**

Price of product 3

* * * * *

Volume of product 3

* * * * *

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

Note: Product 3: Professional grade pressure washer with a triplex pump and a pressure rating of 3000 psi up to and including 3700 psi, with a flow of 2.3 GPM up to and including 3.0 GPM.

Figure H-4

GPPW: Weighted-average f.o.b. prices and quantities of domestic and imported product 4, excluding data from U.S. producer *, by source and quarter**

Price of product 4

* * * * *

Volume of product 4

* * * * *

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

Note: Product 4: Professional grade pressure washer with a triplex pump and a pressure rating of 3800 psi up to and including 4400 psi, with a flow of 2.5 GPM up to and including 4.0 GPM.

Table H-5

GPPW: Summary of price data, excluding data from U.S. producer *, by product and source, January 2020-March 2023**

Quantity in units, price in dollars per unit, change in percent

Product	Source	Number of quarters	Quantity	Low price	High price	First quarter price	Last quarter price	Change over period
Product 1	United States	***	***	***	***	***	***	***
Product 1	China	***	***	***	***	***	***	***
Product 1	Vietnam	***	***	***	***	***	***	***
Product 2	United States	***	***	***	***	***	***	***
Product 2	China	***	***	***	***	***	***	***
Product 2	Vietnam	***	***	***	***	***	***	***
Product 3	United States	***	***	***	***	***	***	***
Product 3	China	***	***	***	***	***	***	***
Product 3	Vietnam	***	***	***	***	***	***	***
Product 4	United States	***	***	***	***	***	***	***
Product 4	China	***	***	***	***	***	***	***
Product 4	Vietnam	***	***	***	***	***	***	***

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

Note: Percentage change from the first quarter in which data were available in 2020 to the last quarter in which data were available in 2023. The percentage change for product 1 from China was *** percent from the *** to the ***. The volume reported for China for product 1 in the *** was *** with an associated ***. The percentage change for product 1 from Vietnam was *** percent from *** to the ***. There was not enough price data available for product 3 from China, and 2-3 from Vietnam to complete a meaningful analysis of price changes from January 2020-March 2023. Email from ***.

Table H-6

GPPW: Instances of underselling and overselling and the range and average of margins, excluding data from U.S. producer *, by product**

Quantity in units; margin in percent

Products	Type	Number of quarters	Quantity	Average margin	Min margin	Max margin
Product 1	Underselling	***	***	***	***	***
Product 2	Underselling	***	***	***	***	***
Product 3	Underselling	***	***	***	***	***
Product 4	Underselling	***	***	***	***	***
All products	Underselling	***	***	***	***	***
Product 1	Overselling	***	***	***	***	***
Product 2	Overselling	***	***	***	***	***
Product 3	Overselling	***	***	***	***	***
Product 4	Overselling	***	***	***	***	***
All products	Overselling	***	***	***	***	***

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

Note: These data include only quarters in which there is a comparison between the U.S. and subject product.

Table H-7

GPPW: Instances of underselling and overselling and the range and average of margins, excluding data from U.S. producer *, by source**

Quantity in units; margin in percent

Sources	Type	Number of quarters	Quantity	Average margin	Min margin	Max margin
China	Underselling	***	***	***	***	***
Vietnam	Underselling	***	***	***	***	***
All subject sources	Underselling	***	***	***	***	***
China	Overselling	***	***	***	***	***
Vietnam	Overselling	***	***	***	***	***
All subject sources	Overselling	***	***	***	***	***

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

Note: These data include only quarters in which there is a comparison between the U.S. and subject product.

APPENDIX J

PURCHASERS' RESPONSES ON BIDDING SUPPLIERS

Table J-1**GPPWs: Purchasers' bidding suppliers, by firm, rank of bidder size, 2020**

Firm	Rank of bid	Source	Supplier
***	1st	***	***
***	1st	***	***
***	1st	***	***
***	1st	***	***
***	2nd	***	***
***	2nd	***	***
***	2nd	***	***
***	2nd	***	***
***	3rd	***	***
***	3rd	***	***
***	3rd	***	***
***	4th	***	***
***	4th	***	***
***	5th	***	***

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

Table J-2**GPPWs: Purchasers' bidding suppliers, by firm, rank of bidder size, 2021**

Firm	Rank of bid	Source	Supplier
***	1st	***	***
***	1st	***	***
***	1st	***	***
***	1st	***	***
***	2nd	***	***
***	2nd	***	***
***	2nd	***	***
***	2nd	***	***
***	3rd	***	***
***	3rd	***	***
***	3rd	***	***
***	4th	***	***
***	4th	***	***
***	5th	***	***
***	5th	***	***

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

Table J-3

GPPWs: Purchasers' bidding suppliers, by firm, rank of bidder size, 2022

Firm	Rank of bid	Source	Supplier
***	1st	***	***
***	1st	***	***
***	1st	***	***
***	1st	***	***
***	2nd	***	***
***	2nd	***	***
***	2nd	***	***
***	3rd	***	***
***	3rd	***	***
***	3rd	***	***
***	4th	***	***
***	4th	***	***
***	5th	***	***

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

APPENDIX K

U.S. PRODUCERS' FINANCIAL DATA EXCLUDING ***

Table K-1**GPPW: Results of operations of U.S. producers excluding two U.S. producers ***, by item and period**

Quantity in units; Value in 1,000 dollars; Ratios in percent

Item	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
Total net sales	Quantity	***	***	***	***	***
Total net sales	Value	***	***	***	***	***
COGS: Raw materials	Value	***	***	***	***	***
COGS: Direct labor	Value	***	***	***	***	***
COGS: Other factory	Value	***	***	***	***	***
COGS: Total	Value	***	***	***	***	***
Gross profit or (loss)	Value	***	***	***	***	***
SG&A expenses	Value	***	***	***	***	***
Operating income or (loss)	Value	***	***	***	***	***
Interest expense	Value	***	***	***	***	***
All other expenses	Value	***	***	***	***	***
All other income	Value	***	***	***	***	***
Net income or (loss)	Value	***	***	***	***	***
Depreciation/amortization	Value	***	***	***	***	***
Cash flow	Value	***	***	***	***	***
COGS: Raw materials	Ratio to NS	***	***	***	***	***
COGS: Direct labor	Ratio to NS	***	***	***	***	***
COGS: Other factory	Ratio to NS	***	***	***	***	***
COGS: Total	Ratio to NS	***	***	***	***	***
Gross profit	Ratio to NS	***	***	***	***	***
SG&A expense	Ratio to NS	***	***	***	***	***
Operating income or (loss)	Ratio to NS	***	***	***	***	***
Net income or (loss)	Ratio to NS	***	***	***	***	***

Table continued.

Table K-1 Continued**GPPW: Results of operations of U.S. producers excluding two U.S. producers ***, by item and period**

Shares in percent; Unit values in dollars per unit; Count in number of firms reporting

Item	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
COGS: Raw materials	Share	***	***	***	***	***
COGS: Direct labor	Share	***	***	***	***	***
COGS: Other factory	Share	***	***	***	***	***
COGS: Total	Share	***	***	***	***	***
Total net sales	Unit value	***	***	***	***	***
COGS: Raw materials	Unit value	***	***	***	***	***
COGS: Direct labor	Unit value	***	***	***	***	***
COGS: Other factory	Unit value	***	***	***	***	***
COGS: Total	Unit value	***	***	***	***	***
Gross profit or (loss)	Unit value	***	***	***	***	***
SG&A expenses	Unit value	***	***	***	***	***
Operating income or (loss)	Unit value	***	***	***	***	***
Net income or (loss)	Unit value	***	***	***	***	***
Operating losses	Count	***	***	***	***	***
Net losses	Count	***	***	***	***	***
Data	Count	***	***	***	***	***

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

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

Table K-2**GPPW: Changes in average unit values between comparison periods excluding two U.S. producers *****

Changes in percent

Item	2020-22	2020-21	2021-22	Jan-Mar 2022-23
Total net sales	▲ ***	▼ ***	▲ ***	▲ ***
COGS: Raw materials	▼ ***	▼ ***	▲ ***	▲ ***
COGS: Direct labor	▼ ***	▲ ***	▼ ***	▲ ***
COGS: Other factory	▲ ***	▲ ***	▲ ***	▲ ***
COGS: Total	▲ ***	▼ ***	▲ ***	▲ ***

Table continued.

Table K-2 Continued**GPPW: Changes in average unit values between comparison periods excluding two U.S. producers *****

Changes in dollars per unit

Item	2020-22	2020-21	2021-22	Jan-Mar 2022-23
Total net sales	▲ ***	▼ ***	▲ ***	▲ ***
COGS: Raw materials	▼ ***	▼ ***	▲ ***	▲ ***
COGS: Direct labor	▼ ***	▲ ***	▼ ***	▲ ***
COGS: Other factory	▲ ***	▲ ***	▲ ***	▲ ***
COGS: Total	▲ ***	▼ ***	▲ ***	▲ ***
Gross profit or (loss)	▼ ***	▼ ***	▼ ***	▼ ***
SG&A expense	▲ ***	▼ ***	▲ ***	▲ ***
Operating income or (loss)	▼ ***	▼ ***	▼ ***	▼ ***
Net income or (loss)	▼ ***	▼ ***	▼ ***	▼ ***

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

Note: Shares and unit values shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---". Period changes preceded by a "▲" represent an increase, while period changes preceded by a "▼" represent a decrease.

Table K-3**GPPW: Capital expenditures, R&D expense, net assets and operating return on assets of U.S. producers excluding two U.S. producers ***, by item and period**

Value in 1,000 dollars; Ratios in percent

Item	Measure	2020	2021	2022	Jan-Mar 2022	Jan-Mar 2023
Capital expenditures	Value	***	***	***	***	***
R&D expenses	Value	***	***	***	***	***
Net assets	Value	***	***	***	***	***
Return on assets	Ratio	***	***	***	***	***

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

