

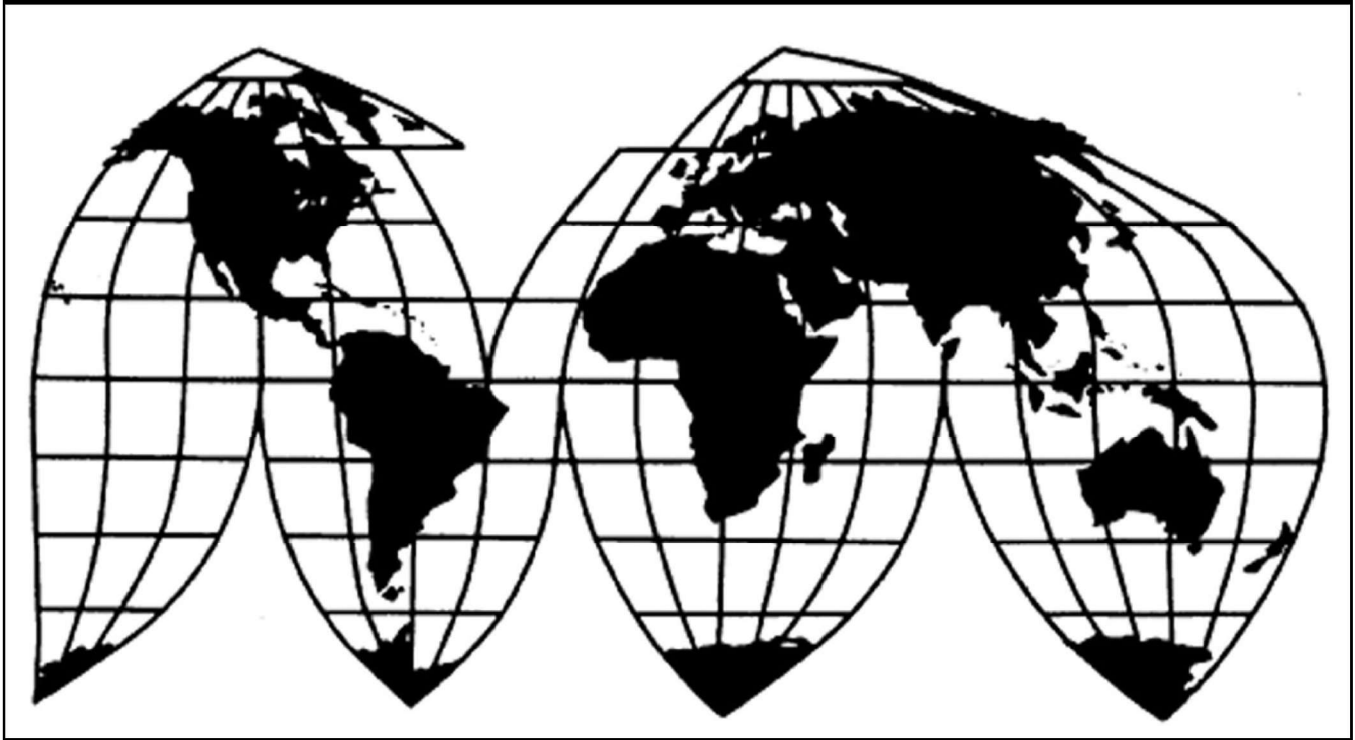
Gas Powered Pressure Washers from China and Vietnam

Investigation Nos. 701-TA-684 and 731-TA-1597-1598 (Preliminary)

Publication 5409

February 2023

U.S. International Trade Commission



Washington, DC 20436

U.S. International Trade Commission

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CONTENTS

	Page
Determinations	1
Views of the Commission.....	3
Part I: Introduction	I-1
Background.....	I-1
Statutory criteria	I-2
Organization of report.....	I-3
Market summary	I-3
Summary data and data sources.....	I-4
Previous and related countervailing and antidumping duty investigations	I-4
Nature and extent of alleged subsidies and alleged sales at LTFV	I-4
Subsidies	I-4
Sales at LTFV	I-4
The subject merchandise	I-5
Commerce’s scope	I-5
Tariff treatment.....	I-6
Section 232	I-6
Section 301	I-6
The product.....	I-7
Description and applications.....	I-7
Manufacturing processes	I-10
Domestic like product issues.....	I-11
Intermediate product analysis	I-12

CONTENTS

Page

Part II: Conditions of competition in the U.S. market.....	II-1
U.S. market characteristics.....	II-1
Impact of 301 tariffs.....	II-2
Channels of distribution.....	II-3
Geographic distribution.....	II-3
Supply and demand considerations.....	II-4
U.S. supply.....	II-4
U.S. demand.....	II-6
Substitutability issues.....	II-8
Factors affecting purchasing decisions.....	II-9
Comparison of U.S. produced and imported GPPW.....	II-10
Part III: U.S. producers' production, shipments, and employment.....	III-1
U.S. producers.....	III-1
U.S. production, capacity, and capacity utilization.....	III-3
Alternative products.....	III-7
U.S. producers' U.S. shipments and exports.....	III-8
U.S. producers' inventories.....	III-9
U.S. producers' imports from subject sources.....	III-10
U.S. producers' purchases from subject sources.....	III-11
U.S. employment, wages, and productivity.....	III-12

CONTENTS

	Page
Part IV: U.S. imports, apparent U.S. consumption, and market shares	IV-1
U.S. importers.....	IV-1
U.S. imports.....	IV-2
Negligibility.....	IV-7
Cumulation considerations	IV-8
Fungibility	IV-8
Geographical markets	IV-11
Presence in the market	IV-13
Apparent U.S. consumption and market shares	IV-16
Quantity.....	IV-16
Value.....	IV-18
Markets for residential and commercial GPPW units.....	IV-20
Part V: Pricing data	V-1
Factors affecting prices	V-1
Raw material costs	V-1
U.S. inland transportation costs.....	V-2
Pricing practices	V-2
Pricing methods.....	V-2
Sales terms and discounts	V-3
Price data.....	V-4
Price trends.....	V-13
Price comparisons	V-14
Other price information	V-15
Lost sales and lost revenue	V-15
Changes in purchasing patterns	V-18

CONTENTS

	Page
Part VI: Financial experience of U.S. producers	VI-1
Background.....	VI-1
Operations on GPPW.....	VI-2
Net sales	VI-11
Cost of goods sold and gross profit or loss.....	VI-12
SG&A expenses and operating income or loss.....	VI-14
All other expenses and net income or loss	VI-15
Capital expenditures and research and development expenses.....	VI-16
Assets and return on assets	VI-17
Capital and investment	VI-18
Part VII: Threat considerations and information on nonsubject countries.....	VII-1
The industry in China.....	VII-3
Changes in operations	VII-4
Operations on GPPW.....	VII-4
Alternative products.....	VII-8
Exports.....	VII-8
The industry in Vietnam	VII-10
Changes in operations.....	VII-10
Operations on GPPW.....	VII-11
Alternative products.....	VII-14
Exports.....	VII-15
Subject countries combined.....	VII-16
U.S. inventories of imported merchandise	VII-18
U.S. importers' outstanding orders.....	VII-19
Third-country trade actions	VII-20
Information on nonsubject countries	VII-20

CONTENTS

Page

Appendixes

A. Federal Register notices.....	A-1
B. List of staff conference witnesses	B-1
C. Summary data	C-1
D. U.S. producers' and U.S. importers' like product narratives	D-1
E. Semi-finished product analysis	E-1
F. U.S shipments by type and period.....	F-1
G. U.S official import stats adjusted by source and period.....	G-1
H. U.S. producers' excluded party data.....	H-1
J. Price data with excluded party data	J-1
K. U.S. producers' excluded party financial data	K-1

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

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 701-TA-684 and 731-TA-1597-1598 (Preliminary)

Gas Powered Pressure Washers from China and Vietnam

DETERMINATIONS

On the basis of the record¹ developed in the subject investigations, the United States International Trade Commission (“Commission”) determines, pursuant to the Tariff Act of 1930 (“the Act”), that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of gas powered pressure washers from China and Vietnam, provided for in subheading 8424.30.90 and 8424.90.90 of the Harmonized Tariff Schedule of the United States, that are alleged to be sold in the United States at less than fair value (“LTFV”) and to be subsidized by the government of China.²

COMMENCEMENT OF FINAL PHASE INVESTIGATIONS

Pursuant to section 207.18 of the Commission’s rules, the Commission also gives notice of the commencement of the final phase of its investigations. The Commission will issue a final phase notice of scheduling, which will be published in the *Federal Register* as provided in § 207.21 of the Commission’s rules, upon notice from the U.S. Department of Commerce (“Commerce”) of affirmative preliminary determinations in the investigations under §§ 703(b) or 733(b) of the Act, or, if the preliminary determinations are negative, upon notice of affirmative final determinations in those investigations under §§ 705(a) or 735(a) of the Act. Parties that filed entries of appearance in the preliminary phase of the investigations need not enter a separate appearance for the final phase of the investigations. Industrial users, and, if the merchandise under investigation is sold at the retail level, representative consumer organizations have the right to appear as parties in Commission antidumping and countervailing duty investigations. The Secretary will prepare a public service list containing the names and addresses of all persons, or their representatives, who are parties to the investigations.

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 4807 and 88 FR4812 (January 25, 2023).

BACKGROUND

On December 30, 2022, FNA Group, Inc., Pleasant Prairie, Wisconsin filed petitions with the Commission and Commerce, alleging that an industry in the United States is materially injured or threatened with material injury by reason of subsidized imports of gas powered pressure washers from China and LTFV imports of gas powered pressure washers from China and Vietnam. Accordingly, effective December 30, 2022, the Commission instituted countervailing duty investigation No.701-TA-684 and antidumping duty investigation Nos. 731-TA-1597-1598 (Preliminary).

Notice of the institution of the Commission's investigations and of a public conference to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* of January 6, 2023 (88 FR 1093). The Commission conducted its conference on January 20, 2023. All persons who requested the opportunity were permitted to participate.

Views of the Commission

Based on the record in the preliminary phase of these investigations, we determine that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of gas powered pressure washers (“GPPW”) from China and Vietnam that are allegedly sold in the United States at less than fair value and imports of GPPW from China that are allegedly subsidized by the government of China.

I. The Legal Standard for Preliminary Determinations

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

II. Background

Petitioner FNA Group, Inc. (“Petitioner” or “FNA Group”) filed the petitions in these investigations on December 30, 2022. Petitioner is a U.S. producer of GPPW. It submitted testimony and appeared at the staff conference accompanied by counsel, and submitted a postconference brief.

One respondent entity actively participated in these investigations. MWE Investments LLC, DBA Westinghouse Power Equipment and Midwest Equipment LLC (“MWE” or “Respondent”), a U.S. importer of subject merchandise from China and Vietnam, submitted testimony and appeared at the staff conference accompanied by counsel, and submitted a postconference brief.

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

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

U.S. industry data are based on the questionnaire responses of two U.S. producers accounting for *** of U.S. production of GPPW in 2021.³ U.S. import data are based on questionnaire responses from ten U.S. importers, accounting for approximately *** percent of U.S. imports from China, and approximately *** percent of U.S. imports from Vietnam in 2021.⁴ Foreign industry data and related information are based on the questionnaire responses of two producers/exporters of GPPW in China, accounting for approximately *** percent of GPPW production in China and approximately *** percent of U.S. imports of subject merchandise from China in 2021,⁵ and two producers/exporters of GPPW in Vietnam, accounting for *** percent of GPPW production in Vietnam and approximately *** percent of U.S. imports of subject merchandise from Vietnam in 2021.⁶ None of the subject producers/exporters of GPPW in China or Vietnam submitted testimony and/or appeared at the staff conference, or submitted a postconference brief.

III. Domestic Like Product

In determining whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of imports of the subject merchandise, the Commission first defines the “domestic like product” and the “industry.”⁷ 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.”⁸ 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.”⁹

By statute, the Commission’s “domestic like product” analysis begins with the “article subject to an investigation,” *i.e.*, the subject merchandise as determined by the U.S. Department of Commerce (“Commerce”).¹⁰ Therefore, Commerce’s determination as to the

³ Confidential Staff Report, INV-VV-009 (Feb. 6, 2023) (“CR”); *Gas Powered Pressure Washers from China and Vietnam*, Inv. Nos. 701-TA-684 and 731-TA-1597-1598 (Preliminary), USITC Pub. 5409 (Feb. 2023) (“PR”) at I-4.

⁴ CR/PR at I-4 & IV-1. Because HTS subheadings 8424.30.9000 and 8424.90.9040 are “basket” categories that contain out-of-scope merchandise, we do not rely on official import statistics to measure imports of GPPW. CR/PR at IV-1 n.3 & Table IV-2.

⁵ CR/PR at VII-3.

⁶ CR/PR at VII-10.

⁷ 19 U.S.C. § 1677(4)(A).

⁸ 19 U.S.C. § 1677(4)(A).

⁹ 19 U.S.C. § 1677(10).

¹⁰ 19 U.S.C. § 1677(10). The Commission must accept Commerce’s determination as to the
(Continued...)

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.”¹¹ The Commission then defines the domestic like product in light of the imported articles Commerce has identified.¹² 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.¹³ No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.¹⁴ The Commission looks for clear dividing lines among possible like products and disregards minor variations.¹⁵ The Commission may, where appropriate, include domestic articles in the domestic like product in addition to those described in the scope.¹⁶

(...Continued)

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).

¹¹ *Cleo Inc. v. United States*, 501 F.3d 1291, 1298 (Fed. Cir. 2007); *see also Hitachi Metals, Ltd. v. United States*, 949 F.3d 710, 717 (Fed. Cir. 2020) (the statute requires the Commission to start with Commerce’s subject merchandise in reaching its own like product determination).

¹² *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).

¹³ *See, e.g., Cleo Inc. v. United States*, 501 F.3d 1291, 1299 (Fed. Cir. 2007); *NEC Corp. v. Dep’t of Commerce*, 36 F. Supp. 2d 380, 383 (Ct. Int’l Trade 1998); *Nippon Steel Corp. v. United States*, 19 CIT 450, 455 (1995); *Torrington Co. v. United States*, 747 F. Supp. 744, 749 n.3 (Ct. Int’l Trade 1990), *aff’d*, 938 F.2d 1278 (Fed. Cir. 1991) (“every like product determination ‘must be made on the particular record at issue’ and the ‘unique facts of each case’”). The Commission generally considers a number of factors including the following: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) customer and producer perceptions of the products; (5) common manufacturing facilities, production processes, and production employees; and, where appropriate, (6) price. *See Nippon*, 19 CIT at 455 n.4; *Timken Co. v. United States*, 913 F. Supp. 580, 584 (Ct. Int’l Trade 1996).

¹⁴ *See, e.g., S. Rep. No. 96-249 at 90-91 (1979).*

¹⁵ *See, e.g., Nippon*, 19 CIT at 455; *Torrington*, 747 F. Supp. at 748-49; *see also S. Rep. No. 96-249 at 90-91* (Congress has indicated that the like product standard should not be interpreted in “such a narrow fashion as to permit minor differences in physical characteristics or uses to lead to the conclusion that the product and article are not ‘like’ each other, nor should the definition of ‘like product’ be interpreted in such a fashion as to prevent consideration of an industry adversely affected by the imports under consideration.”).

¹⁶ *See, e.g., Pure Magnesium from China and Israel*, Inv. Nos. 701-TA-403 and 731-TA-895-96 (Final), USITC Pub. 3467 at 8 n.34 (Nov. 2001); *Torrington*, 747 F. Supp. at 748-49 (holding that the (Continued...))

A. Scope Definition

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

. . . {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 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.

(...Continued)

Commission is not legally required to limit the domestic like product to the product advocated by the petitioner, co-extensive with the scope).

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).¹⁷

GPPW 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.¹⁸ GPPW have three main components: an internal combustion engine, a power take-off shaft, and a positive displacement pump.¹⁹ Together, these components are known as the "power unit."²⁰ 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").²¹ Unfinished GPPW include the power unit or components of the power unit.²² Finished GPPW include the frame and may include wheels and accessories such as spray guns, nozzles, and hoses.²³ The manufacturing process for GPPW 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

B. Arguments of the Parties

Petitioner's Arguments. Petitioner argues that the Commission should define a single domestic like product consisting of all GPPW, coextensive with Commerce's scope in these preliminary phase investigations.²⁵ It contends that all domestically produced GPPW 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

¹⁷ *Gas-Powered Pressure Washers from the People's Republic of China and the Socialist Republic of Vietnam: Initiation of Less-Than-Fair-Value Investigations*, 88 Fed. Reg. 4807, 4808 (Jan. 25, 2023); *Gas-Powered Pressure Washers from the People's Republic of China: Initiation of Countervailing Duty Investigation*, 88 Fed. Reg. 4812, 4813 (Jan. 25, 2023).

¹⁸ CR/PR at I-7.

¹⁹ CR/PR at I-7.

²⁰ CR/PR at I-7.

²¹ CR/PR at I-7-8.

²² CR/PR at I-7.

²³ CR/PR at I-7; Petition, Exh. I-4 at 2.

²⁴ CR/PR at I-10-11.

²⁵ Petitioner's Postconf. Br. at 3-10.

prices.²⁶ It maintains that there is a clear dividing line between in-scope GPPW and out-of-scope EPPW.²⁷ Employing the Commission's semi-finished products analysis, Petitioner also contends that in-scope domestically produced GPPW subassemblies are not a separate domestic like product from in-scope domestically produced finished GPPW.²⁸

Respondent's Arguments. Respondent does not object to Petitioner's proposed domestic like product definition for purposes of these preliminary determinations.²⁹

C. Analysis

1. Whether to define a single domestic like product consisting of GPPW

Physical Characteristics and Uses. All domestically produced GPPW within the scope are mobile structures made primarily from steel.³⁰ While there are differences in size and design among in-scope GPPW, all domestically produced GPPW within the scope generally share certain common physical characteristics, including a gas-powered engine, a power take-off shaft, and a positive displacement pump, which are mounted on a frame with wheels.³¹ All domestically produced GPPW within the scope are used to clean surfaces, most frequently in residential or commercial areas.³²

Petitioner maintains that out-of-scope EPPW are typically smaller in size and have less powerful engines than in-scope GPPW.³³ According to Petitioner, out-of-scope EPPW generally are used for lighter duty cleaning involving smaller clearance areas compared to in-scope GPPW.³⁴ Specifically, EPPW have shorter runtimes compared to GPPW, and EPPW also require a nearby plug-in source of power to operate.³⁵

Manufacturing Facilities, Production Processes, and Employees. All domestically produced GPPW within the scope are manufactured using the same general production process, which includes 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.³⁶ Petitioner reports that it produces all in-scope GPPW at the same facilities, using the same production processes and

²⁶ Petitioner's Postconf. Br. 3-5.

²⁷ Petitioner's Postconf. Br. at 5-10.

²⁸ Petitioner's Postconf. Br. at 10-12.

²⁹ Conf. Tr. at 145 (Kahn).

³⁰ CR/PR at I-10; Petitioner's Postconf. Br. at 3.

³¹ CR/PR at I-7 & I-10; Petitioner's Postconf. Br. at 3.

³² CR/PR at I-7 & I-10; Petitioner's Postconf. Br. at 3.

³³ Petitioner's Postconf. Br. at 6.

³⁴ Petitioner's Postconf. Br. at 6.

³⁵ Petitioner's Postconf. Br. at 6.

³⁶ CR/PR at I-10-11.

equipment, and the same employees.³⁷ According to Petitioner, out-of-scope EPPW are produced using different manufacturing processes and different employees than in-scope GPPW.³⁸ At the conference, however, an industry witness appearing on behalf of Petitioner testified that out-of-scope EPPW can be produced at the same facilities as in-scope GPPW.³⁹

Channels of Distribution. During the period of investigation, domestically produced GPPW of all types were sold almost exclusively to retailers (ranging from *** percent to *** percent of the domestic industry's U.S. shipments) with only very small amounts sold to distributors (ranging from *** percent to *** percent) and other end-users (*** percent to *** percent).⁴⁰ Petitioner acknowledges that in-scope GPPW and out-of-scope EPPW are sold through the same channels of distribution.⁴¹

Interchangeability. According to Petitioner, all domestically produced GPPW within the scope are generally interchangeable.⁴² Petitioner maintains that domestically produced in-scope GPPW and out-of-scope EPPW have limited interchangeability since the out-of-scope products typically have less powerful engines, shorter runtimes, and smaller clearance area and lighter cleaning duty capabilities.⁴³

Producer and Customer Perceptions. The record contains limited information concerning this factor. According to Petitioner, customers and producers perceive domestically-produced GPPW as comprising its own separate and distinct product category compared to out-of-scope EPPW.⁴⁴

Price. The pricing data indicate that there were appreciable variations in quarterly prices among the various pricing products for GPPW during the POI.⁴⁵ According to Petitioner, out-of-scope EPPW are generally much less expensive than domestically produced in-scope GPPW.⁴⁶ However, there is no information on the record concerning the sales prices of out-of-scope EPPW.

Conclusion. Evidence on the record of these preliminary phase investigations indicates that all domestically produced GPPW within the scope are used to clean surfaces. Although there are differences in size, design, and cleaning capabilities among in-scope products, all domestically produced GPPW within the scope are mobile structures made primarily from steel

³⁷ Petitioner's Postconf. Br. at 4.

³⁸ Petitioner's Postconf. Br. at 9-10.

³⁹ Staff Conference Transcript ("Conf. Tr.") at 73 (W. Alexander).

⁴⁰ CR/PR at Table II-1.

⁴¹ Petitioner's Postconf. Br. at 8; Conf. Tr. at 75 (W. Alexander).

⁴² Petitioner's Postconf. Br. at 3-4.

⁴³ Petitioner's Postconf. Br. at 7.

⁴⁴ Petitioner's Postconf. Br. at 4, 8-9.

⁴⁵ CR/PR at Tables V-3 to V-6.

⁴⁶ Petitioner's Postconf. Br. at 10.

and share other physical characteristics, including a gas-powered engine, a power take-off shaft, and a positive displacement pump, a frame, and wheels. All domestically produced GPPW within the scope are produced through the same production processes, are generally interchangeable, are sold overwhelmingly to retailers, albeit at appreciably varying prices, and, according to Petitioner, are perceived to be a single product category by market participants. By contrast, the limited information on the record indicates that a clear dividing line separates in-scope GPPW from out-of-scope EPPW, such that the domestic like product should not be defined to include EPPW.⁴⁷ In light of the above, and in the absence of any contrary argument, we define a single domestic like product consisting of GPPW, coextensive with the scope, for purposes of these preliminary determinations.

2. Whether to define the domestic like product to include GPPW subassemblies and finished GPPW

We consider below whether the upstream product – GPPW subassemblies – and the downstream product – finished GPPW – are part of a single domestic like product, using the Commission’s semi-finished like product analysis.⁴⁸ As discussed above, the scope of these investigations includes both subassemblies and finished GPPW. Based on the current record,

⁴⁷ The limited information on the record indicates that in-scope GPPW and out-of-scope EPPW generally differ in terms of physical characteristics and uses; manufacturing facilities, production processes, and production employees; interchangeability; producer and customer perceptions; and price. According to Petitioner, out-of-scope EPPW are suitable only for small cleaning jobs, due to their smaller size and less powerful engines; are made using different production processes and employees, though possibly in the same manufacturing facilities; are perceived as a separate product category by producers and customers; and command lower prices than in-scope GPPW. See CR/PR at Appendix D, Tables D-1 & D-2; Petitioner’s Postconf. Br. 5-10. Nonetheless, there also appear to be some similarities in terms of use and channels of distribution (*i.e.*, retail) between in-scope GPPW and out-of-scope EPPW. Both types of pressure washers use a pressurized stream of water to clean surfaces and are sold overwhelmingly to retailers. CR/PR at Appendix D, Tables D-1 & D-2; Petitioner’s Postconf. Br. at 6, 8. Based on the preponderance of differences between in-scope GPPW and out-of-scope EPPW, a clear dividing line would appear to separate the two products.

⁴⁸ 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 (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).

we find that upstream subassemblies and downstream finished GPPW belong in a single domestic like product.

Dedication for Use. Petitioner maintains that that GPPW subassemblies are dedicated entirely to the production of in-scope finished GPPW.⁴⁹ Both responding U.S. producers and four of six responding U.S. importers reported that GPPW subassemblies are dedicated entirely or almost entirely to the production of finished GPPW.⁵⁰

Separate Markets. According to Petitioner, since subassemblies are only further processed by U.S. producers to become finished GPPW, there is no separate market for subassemblies that is distinct from the market for finished GPPW.⁵¹ One of two responding domestic producers and four of six responding U.S. importers reported that there is no separate market for GPPW subassemblies that is distinct from the market for finished GPPW.⁵²

Differences in Physical Characteristics and Functions of the Upstream and Downstream Articles. According to Petitioner, there are virtually no differences in physical characteristics and functions between GPPW subassemblies and finished GPPW, particularly since subassemblies are used to form finished GPPW.⁵³ A subassembly typically consists of an internal combustion engine, a power take-off shaft, and a positive displacement pump.⁵⁴ A finished GPPW contains the subassembly as well as the components added to the subassembly to make the finished product, which includes the frame and may include wheels and various accessories (*e.g.*, spray guns, nozzles, and hoses).⁵⁵ U.S. producers and importers were divided on this particular factor in their questionnaire responses. One of two responding U.S. producers and three of six responding U.S. importers reported no differences in physical characteristics and functions between GPPW subassemblies and finished GPPW.⁵⁶ On the other hand, one of two responding U.S. producers and three of six responding U.S. importers reported differences in physical characteristics and functions between GPPW subassemblies and finished GPPW.⁵⁷

Differences in the Costs or Value. According to the Petitioner, subassemblies comprise the most substantial portion of the cost of finished GPPW.⁵⁸ Petitioner estimates that subassemblies accounted for approximately *** percent of the cost of finished GPPW.⁵⁹ Both

⁴⁹ Petitioner's Postconf. Br. at 11.

⁵⁰ CR/PR at Table I-2 & Appendix E.

⁵¹ Petitioner's Postconf. Br. at 11.

⁵² CR/PR at Table I-2 & Appendix E.

⁵³ Petitioner's Postconf. Br. at 11.

⁵⁴ CR/PR at I-7.

⁵⁵ CR/PR at I-7; Petition, Exh. I-4 at 2.

⁵⁶ CR/PR at Table I-2 & Appendix E.

⁵⁷ CR/PR at Table I-2 & Appendix E.

⁵⁸ Petitioner's Postconf. Br. at 11.

⁵⁹ Petitioner's Postconf. Br. at 11.

responding domestic producers and three of five responding importers reported that there was a significant difference in the cost or value between GPPW subassemblies and finished GPPW.⁶⁰

Significance and Extent of Processes Used to Transform Upstream Product into Downstream Product. Petitioner contends that the process for transforming subassemblies into finished GPPW is relatively minor in nature, largely involving the connection of subassemblies to one another to form finished GPPW.⁶¹ One of two responding domestic producers and three of five responding importers described the processes used to transform GPPW subassemblies into finished GPPW as not being labor or capital intensive.⁶² However, the other responding domestic producer and two of five responding importers described the process as labor or capital intensive.⁶³

Conclusion. The evidence on the record of these preliminary phase investigations supports finding that GPPW subassemblies belong in the same domestic like product as finished GPPW. The majority of U.S. producers and importers reported that GPPW subassemblies are dedicated to the production of finished GPPW. In addition, the majority of importers reported that there is no separate market for GPPW subassemblies, and that the extent of the process used to transform GPPW subassemblies into finished GPPW is not labor or capital intensive. 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 GPPW, Petitioner estimates that GPPW subassemblies account for nearly *** of the cost of finished GPPW. The record also indicates that GPPW subassemblies impart essential physical characteristics and functions to finished GPPW, even though responding domestic producers and importers were evenly divided concerning the differences in physical characteristics and functions between GPPW subassemblies and finished GPPW. In light of the information available in the current record and the absence of any contrary argument, we include GPPW subassemblies and finished GPPW in the same domestic like product.

Based on the foregoing, we define a single domestic like product consisting of all domestically produced GPPW, coextensive with the scope of the investigations, for purposes of these preliminary determinations.

IV. Domestic Industry

The domestic industry is defined as the domestic “producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes

⁶⁰ CR/PR at Table I-2 & Appendix E. Two of five responding importers reported no significant difference in the cost or value between GPPW subassemblies and finished GPPW. *Id.*

⁶¹ Petitioner’s Postconf. Br. at 12.

⁶² CR/PR at Table I-2 & Appendix E.

⁶³ CR/PR at Table I-2 & Appendix E.

a major proportion of the total domestic production of the product.”⁶⁴ 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.

We consider whether any producer of the domestic like product should be excluded from the domestic industry pursuant to Section 771(4)(B) of the Tariff Act. This provision allows the Commission, if appropriate circumstances exist, to exclude from the domestic industry producers that are related to an exporter or importer of subject merchandise or which are themselves importers.⁶⁵ Exclusion of such a producer is within the Commission’s discretion based upon the facts presented in each investigation.⁶⁶

The record indicates that two domestic producers are subject to the related parties provision because each imported subject merchandise during the POI: ***.⁶⁷ In addition, *** is related to foreign producers and exporters of the subject merchandise, and is related to U.S. importers of the subject merchandise (***).⁶⁸

Petitioner maintains that appropriate circumstances do not exist to exclude any domestic producers from the domestic industry pursuant to the related parties provision.⁶⁹ Respondent did not address the definition of the domestic industry in these preliminary investigations.

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

⁶⁴ 19 U.S.C. § 1677(4)(A).

⁶⁵ See *Torrington Co. v. United States*, 790 F. Supp. 1161, 1168 (Ct. Int’l Trade 1992), *aff’d mem.*, 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).

⁶⁶ 19 U.S.C. § 1677(4)(B). The primary factors the Commission has examined in deciding whether appropriate circumstances exist to exclude a related party include the following:

- (1) the percentage of domestic production attributable to the importing producer;
- (2) the reason the U.S. producer has decided to import the product subject to investigation (whether the firm benefits from the LTFV sales or subsidies or whether the firm must import in order to enable it to continue production and compete in the U.S. market);
- (3) whether inclusion or exclusion of the related party will skew the data for the rest of the industry;
- (4) the ratio of import shipments to U.S. production for the imported product; and
- (5) whether the primary interest of the importing producer lies in domestic production or importation. *Changzhou Trina Solar Energy Co. v. USITC*, 100 F. Supp.3d 1314, 1326-31 (Ct. Int’l. Trade 2015), *aff’d*, 839 F.3d 1377 (Fed. Cir. 2018); see also *Torrington Co.*, 790 F. Supp. at 1168.

⁶⁷ CR/PR at Tables III-9-11.

⁶⁸ CR/PR at III-2 & Table III-2.

⁶⁹ Conf. Tr. at 77 (McConkey).

***. *** accounted for *** percent of U.S. production in 2021, and was *** domestic producer of GPPW.⁷⁰ It is *** in these investigations.⁷¹ The ratio of its subject imports to U.S. production was *** percent in 2019, *** percent in 2020, *** percent in 2021 and interim 2021, and *** percent in interim 2022.⁷² *** indicated that ***.⁷³

Given *** low ratio of subject imports to U.S. production throughout the POI, its primary interest appears to be in domestic production. Accordingly, we find that appropriate circumstances do not exist to exclude *** from the domestic industry pursuant to the related parties provision.

***. *** accounted for *** percent of U.S. production in 2021, and was *** domestic producer of GPPW.⁷⁴ It *** the petitions.⁷⁵ *** imports of subject merchandise were *** units in 2019, *** units in 2020, *** units in 2021, *** units in interim 2021, and *** units in interim 2022.⁷⁶ The ratio of its subject imports to U.S. production was *** percent in 2019, *** percent in 2020, *** percent in 2021, and *** percent in interim 2022, compared to *** percent in interim 2021.⁷⁷ *** indicated that ***.⁷⁸

*** ratio of subject imports to domestic production increased from 2019 to 2021 to a high level and, although this ratio declined to the lowest level of the POI in interim 2022 compared to interim 2021. ***, *i.e.*, after the period of investigation in these preliminary determinations.⁷⁹ ***, and Petitioner contends that ***.⁸⁰ Pricing product data indicate that there was a substantial volume of subject imports similar to *** domestically produced GPPW.⁸¹ To the extent that subject import competition compelled *** to increase its ratio of subject imports to domestic production, excluding *** from the domestic industry would mask declines in domestic industry market share caused by cumulated subject imports.⁸²

⁷⁰ CR/PR at Table III-1.

⁷¹ CR/PR at Table III-1.

⁷² CR/PR at Table III-9.

⁷³ CR/PR at Table III-11.

⁷⁴ CR/PR at Table III-1.

⁷⁵ CR/PR at Table III-1.

⁷⁶ CR/PR at Table III-10.

⁷⁷ CR/PR at Table III-10.

⁷⁸ CR/PR at Table III-12. *** stated that its' reasons for importing subject merchandise during the POI included: "****." CR/PR at Table III-12; U.S. Importers' Questionnaire Response of *** at II-4.

⁷⁹ CR/PR at III-5 n.5, Table III-11; Domestic Producers' Questionnaire Response of *** at II-3f. *** See CR/PR at Table III-3 (***).

⁸⁰ See Petitioner's Postconf. Br. at 28.

⁸¹ Compare CR/PR at Tables V-3-6 with Domestic Producers' Questionnaire Response of *** at Question IV-2a.

⁸² See, e.g., *Certain 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; *Certain Collated Steel Staples from* (Continued...)

Furthermore, *** produced and shipped significant quantities of GPPW during the POI, and maintained significant production capacity for GPPW throughout the POI.⁸³ Based on this record, including *** reported *** for the petition, and in the absence of any contrary argument, we find, for the purposes of the preliminary phase of these investigations, that appropriate circumstances do not exist to exclude *** from the domestic industry.⁸⁴

For the foregoing reasons, we define the domestic industry to include all U.S. producers of GPPW, which for purposes of these preliminary determinations consists of ***.⁸⁵

V. Cumulation⁸⁶

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:

(...Continued)

China, Inv. Nos. 701-TA-626 and 731-TA-1452 (Final), USITC Pub. 5085 (July 2020) at 12; see also *LG Electronics, Inc. v. USITC*, 26 F. Supp. 3d 1338, 1346 (Ct. Int'l Trade 2014).

⁸³ CR/PR at Table III-5 & TTI's U.S. Producers' Questionnaire at II-3a

⁸⁴ In any final phase of the investigations, we intend to further examine the issue of whether appropriate circumstances exist to exclude *** from the domestic industry pursuant to the related parties provision.

⁸⁵ Nine firms were identified in the petitions as possible U.S. producers of GPPW, but of those firms, only *** confirmed that they had domestically produced GPPW during the POI. CR/PR at III-1 n.2. ***. *Id.* Additionally, ***. *Id.* No other firms responded to staff inquiries concerning their domestic production of GPPW. *Id.* In any final phase of the investigations, we intend to seek information from additional U.S. producers of GPPW.

⁸⁶ Pursuant to Section 771(24) of the Tariff Act, imports from a subject country of merchandise corresponding to a domestic like product shall be deemed negligible if they account for less than three percent of all such merchandise imported into the United States during the most recent 12 months for which data are available preceding the filing of the petition. See 19 U.S.C. §§ 1673b(a), 1677(24)(A)(i).

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 IV-6-7 & Table IV-4. 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 are not negligible, and that imports from Vietnam subject to the antidumping duty investigation are not negligible.

- (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.⁸⁷

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.⁸⁸ Only a “reasonable overlap” of competition is required.⁸⁹

A. Arguments of the Parties

Petitioner’s Arguments. Petitioner argues that the Commission should cumulatively assess imports from both subject countries. It argues that cumulation is mandatory because the petitions for both subject countries were filed on the same day and a reasonable overlap in competition exists between GPPW produced in the subject countries and among GPPW from both subject countries and the domestic like product.⁹⁰ According to Petitioner, subject imports from China and Vietnam are fungible with the domestic like product and each other,

⁸⁷ 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).

⁸⁸ See, e.g., *Wieland Werke, AG v. United States*, 718 F. Supp. 50 (Ct. Int’l Trade 1989).

⁸⁹ 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.”)).

⁹⁰ Petitioner’s Postconf. Br. at 17.

are sold in the same geographic markets, share common channels of distribution, and were both present in the U.S. market in every month during the POI.⁹¹

Respondent's Arguments. Respondent did not address cumulation for purposes of present material injury.

B. Analysis and Conclusion

The initial statutory requirement is satisfied because the Petitioner filed the countervailing duty petition with respect to China and the antidumping duty petitions with respect to China and Vietnam on the same day, December 30, 2022.⁹² As discussed below, we find that there is a reasonable overlap of competition between subject imports from both of the subject countries and between subject imports from each source and the domestic like product.

Fungibility. The record indicates that domestically produced GPPW and imports of GPPW from each subject country are generally fungible.⁹³ All responding U.S. producers and most responding U.S. importers reported that subject imports from each subject country were always or frequently interchangeable with each other as well as with domestically produced GPPW.⁹⁴ Furthermore, responding U.S. producers and importers reported U.S. shipments and shipments of subject imports from each subject country for three of the four pricing products.⁹⁵ Moreover, based on the current record, there is substantial overlap between shipments of the domestic like product and subject imports, and between shipments of imports of GPPW from each subject country, in terms of product type.⁹⁶

In response to questions concerning how often differences other than price were significant in sales of GPPW from different sources, both responding domestic producers reported that such differences were only “sometimes” or “never” significant between the

⁹¹ Petitioner's Postconf. Br. at 17-19.

⁹² CR/PR at I-1.

⁹³ CR/PR at II-8.

⁹⁴ CR/PR at Tables II-6 & II-7. Factors reported by producers and importers that limited interchangeability include product range, quality, and production capacity. CR/PR at II-8.

⁹⁵ CR/PR at Tables V-3-V-6.

⁹⁶ CR/PR at Table IV-6. In 2021, fully completed units of GPPW 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.* Although the majority (*** percent) of U.S. producers' U.S. shipments were of commercial or professional grade GPPW, substantial quantities of U.S. producers' U.S. shipments (*** percent) were of residential or consumer grade in 2021. *Id.* U.S. importers' U.S. shipments of subject merchandise from Vietnam were *** percent residential or consumer grade while *** percent of U.S. importers' U.S. shipments of subject merchandise from China were residential or consumer grade in 2021. *Id.*

domestic like product and subject imports from China and Vietnam, and between subject imports from both subject countries.⁹⁷ Although U.S. importers generally reported that differences other than price were more significant, the vast majority 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 the majority reported that such differences were only “sometimes” or “never” significant in comparisons between subject imports from both subject countries.⁹⁸

Channels of Distribution. During the POI, the domestic like product was sold almost exclusively to retailers, with very small quantities sold to distributors and other end users.⁹⁹ Subject imports from China were sold overwhelmingly to retailers throughout the POI, with appreciable quantities sold to other end users.¹⁰⁰ Subject imports from Vietnam were sold overwhelmingly to retailers during 2021 and in interim 2022, with appreciable quantities sold to other end users in those years.¹⁰¹ In 2020, subject imports from Vietnam were sold predominantly to retailers, with an almost equal quantity sold to other end users.¹⁰²

Geographic Overlap. Domestic producers reported shipping the domestic like product to all six regions of the contiguous United States.¹⁰³ Importers reported shipping imports from each subject country to all six regions as well.¹⁰⁴ The majority of subject imports from China entered through ports located in West, while substantial quantities of subject imports from China also entered through ports located in the East and appreciable quantities of subject imports from China entered through ports located in the North and South.¹⁰⁵ 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.¹⁰⁶

Simultaneous Presence in Market. Domestically produced GPPW and subject imports from China were present in the U.S. market throughout the POI.¹⁰⁷ Subject imports from Vietnam were present in the U.S. market beginning in September 2019 through the end of the POI.¹⁰⁸

⁹⁷ CR/PR at Table II-8.

⁹⁸ CR/PR at Table II-9.

⁹⁹ CR/PR at Table II-1.

¹⁰⁰ CR/PR at Table II-1.

¹⁰¹ CR/PR at Table II-1.

¹⁰² CR/PR at Table II-1. No subject imports from Vietnam were reported in 2019. *Id.*

¹⁰³ CR/PR at Table II-2.

¹⁰⁴ CR/PR at Table II-2.

¹⁰⁵ CR/PR at Table IV-6.

¹⁰⁶ CR/PR at Table IV-6.

¹⁰⁷ CR/PR at Tables IV-7, V-3-6 (showing quarterly shipments of domestic GPPW).

¹⁰⁸ CR/PR at Table IV-7.

Conclusion. The record indicates that subject imports from each subject country and the domestic like product are fungible with each other, and sold through similar channels of distribution and in similar geographic markets. The record also indicates that they were simultaneously present in the U.S. market throughout most of the POI. 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.

Accordingly, for our analysis of whether there is a reasonable indication of material injury by reason of subject imports, we cumulate subject imports from China and Vietnam.

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

A. Legal Standard

In the preliminary phase of antidumping and countervailing duty investigations, the Commission determines whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of the imports under investigation.¹⁰⁹ 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.¹¹⁰ The statute defines “material injury” as “harm which is not inconsequential, immaterial, or unimportant.”¹¹¹ In assessing whether there is a reasonable indication that the domestic industry is materially injured by reason of subject imports, we consider all relevant economic factors that bear on the state of the industry in the United States.¹¹² 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.”¹¹³

Although the statute requires the Commission to determine whether there is a reasonable indication that the domestic industry is “materially injured or threatened with material injury by reason of” unfairly traded imports,¹¹⁴ it does not define the phrase “by reason of,” indicating that this aspect of the injury analysis is left to the Commission’s

¹⁰⁹ 19 U.S.C. §§ 1671b(a), 1673b(a).

¹¹⁰ 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).

¹¹¹ 19 U.S.C. § 1677(7)(A).

¹¹² 19 U.S.C. § 1677(7)(C)(iii).

¹¹³ 19 U.S.C. § 1677(7)(C)(iii).

¹¹⁴ 19 U.S.C. §§ 1671b(a), 1673b(a).

reasonable exercise of its discretion.¹¹⁵ 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.¹¹⁶

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.¹¹⁷ In performing its examination, however, the Commission need not isolate the injury caused by other factors from injury caused by unfairly traded imports.¹¹⁸ Nor does

¹¹⁵ *Angus Chemical Co. v. United States*, 140 F.3d 1478, 1484-85 (Fed. Cir. 1998) (“{T}he statute does not ‘compel the commissioners’ to employ {a particular methodology}.”), *aff’g*, 944 F. Supp. 943, 951 (Ct. Int’l Trade 1996).

¹¹⁶ 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).

¹¹⁷ 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.

¹¹⁸ 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 ... (Continued...)”).

the “by reason of” standard require that unfairly traded imports be the “principal” cause of injury or contemplate that injury from unfairly traded imports be weighed against other factors, such as nonsubject imports, which may be contributing to overall injury to an industry.¹¹⁹ It is clear that the existence of injury caused by other factors does not compel a negative determination.¹²⁰

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.”¹²¹ 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

(...Continued)

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.”).

¹¹⁹ S. Rep. 96-249 at 74-75; H.R. Rep. 96-317 at 47.

¹²⁰ 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.”).

¹²¹ *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 comports with the Court’s guidance in *Mittal*.

sources to the subject imports.”¹²² The Federal Circuit has examined and affirmed various Commission methodologies and has disavowed “rigid adherence to a specific formula.”¹²³

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.¹²⁴ Congress has delegated this factual finding to the Commission because of the agency’s institutional expertise in resolving injury issues.¹²⁵

B. Conditions of Competition and the Business Cycle

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

1. Demand Conditions

Demand for GPPW is driven by end uses – consumer demand for power washing, especially for larger cleaning jobs that require gas powered washers, as opposed to smaller cleaning jobs that can be performed by less powerful washers, such as the electric powered washers.¹²⁶

Both responding U.S. producers reported that U.S. demand for GPPW has increased since January 1, 2019.¹²⁷ However, three out of five responding U.S. importers reported that U.S. demand for GPPW has declined or fluctuated since January 1, 2019, while two reported that U.S. demand for GPPW has increased.¹²⁸

¹²² *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.

¹²³ *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.”).

¹²⁴ We provide in our discussion below a full analysis of other factors alleged to have caused any material injury experienced by the domestic industry.

¹²⁵ *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.”).

¹²⁶ CR/PR at II-6-7. Prior to 2020, housing sales were an indicator of demand for GPPW, but events since then have made housing starts a less reliable indicator of demand for GPPW. *Id.*

¹²⁷ CR/PR at Table II-4.

¹²⁸ CR/PR at Table II-4.

Apparent U.S. consumption of GPPW increased from *** units in 2019 to *** units in 2020, and to *** units in 2021, a level *** percent higher than in 2019.¹²⁹ Apparent U.S. consumption of GPPW was *** lower in interim 2022, at *** units, than in interim 2021, at *** units.¹³⁰

2. Supply Conditions

During the POI, the U.S. market for GPPW was supplied by the domestic industry and cumulated subject imports from China and Vietnam.¹³¹ There were no reported imports from nonsubject sources in the U.S. market during the POI.¹³²

The domestic industry was the largest source of supply to the U.S. market throughout the POI.¹³³ The domestic industry's market share increased from *** percent in 2019 to *** percent in 2020, but then declined to *** percent in 2021, which was *** percentage points lower than the industry's market share in 2019; its market share was *** percentage points higher in interim 2022, at *** percent, than in interim 2021, at *** percent.¹³⁴

In the preliminary phase of the investigations, there were two responding domestic producers, FNA Group and TTI. In 2021, FNA Group accounted for *** percent of domestic production of GPPW, and TTI accounted for *** percent.¹³⁵ Over the course of the POI, FNA Group expanded its operations for producing GPPW by opening a new 400,000 square feet facility in Mesquite, Texas at a cost of \$50 million.¹³⁶ ***.¹³⁷ TTI reported that ***.¹³⁸ Information available in the record indicates that Honda discontinued domestic production of

¹²⁹ CR/PR at Tables IV-9 & C-1. Apparent U.S. consumption includes both full GPPW units and GPPW subassemblies, consistent with the scope and the definition of the domestic like product in these preliminary investigations, as discussed in section III.C., above. U.S. producers had *** of GPPW subassemblies during the POI. See CR/PR at Table F-1. Cumulated subject imports of GPPW subassemblies declined substantially during the POI, and constituted a negligible percentage (*i.e.*, less than *** percent) of total shipments of subject imports in 2021 and just *** percent of such shipments in the interim 2022 period. See CR/PR at Table F-4.

¹³⁰ CR/PR at Tables IV-9 & C-1.

¹³¹ CR/PR at Tables IV-9 & C-1.

¹³² CR/PR at Tables IV-9 & C-1.

¹³³ CR/PR at Tables IV-9 & C-1.

¹³⁴ CR/PR at Tables IV-9 & C-1.

¹³⁵ CR/PR at Table III-1.

¹³⁶ CR/PR at III-3 & Table III-3; *see also* Petitioner's Postconf. Br. at 16, 27, 44, Exh. 1 (Responses to Staff Questions), Answer to Question 12, Conf. Tr. at 6 (McConkey), 16-17 (G. Alexander), & 23 (C. Alexander).

¹³⁷ CR/PR at Table III-3.

¹³⁸ CR/PR at III-5 n.5.

engines for GPPW during the POI, which forced domestic producers of GPPW to shift their sourcing of engines to China and other sources outside the United States.¹³⁹

Cumulated subject imports' market share increased by *** percentage points from 2019 to 2021, declining from *** percent in 2019 to *** percent in 2020, but then increasing to *** percent in 2021; their market share was *** percentage points lower in interim 2022, at *** percent, than in interim 2021, at *** percent.¹⁴⁰

3. Substitutability and Other Conditions

Based on the current record, we find that there is a mostly high degree of substitutability between domestically produced GPPW and cumulated subject imports.¹⁴¹ As previously discussed, all responding U.S. producers and most responding U.S. importers reported that subject imports were always interchangeable with domestically produced GPPW for all comparisons.¹⁴² Factors reported by producers and importers that limited interchangeability include product range, quality, and production capacity.¹⁴³

We also find that price is an important factor in purchasing decisions for GPPW. Purchasers responding to the lost sales and lost revenue survey ranked cost, as well as quality and capacity, as among the three most important factors in purchasing decisions for GPPW.¹⁴⁴ Both responding domestic producers and most responding U.S. importers reported that differences other than price were only sometimes or never important for choosing between purchasing domestically produced GPPW and subject imports.¹⁴⁵

Both responding U.S. producers and two of four responding U.S. importers reported that the U.S. market for GPPW was subject to distinct business cycles.¹⁴⁶ However, two of four

¹³⁹ CR/PR at II-6 n.16; Petitioner's Postconf. Br at 37-38 ("The fact of the matter is that FNA has had, and continues to have, multiple sources for its engines, including ***. Indeed, FNA continues to ***."); Conf. Tr. at 85-86 (G. Alexander) & 132 (Barleycorn).

¹⁴⁰ CR/PR at Tables IV-9 & C-1.

¹⁴¹ CR/PR at II-8 n.21.

¹⁴² CR/PR at Tables II-6 & II-7.

¹⁴³ CR/PR at II-8.

¹⁴⁴ CR/PR at II-9 & Table II-5. Both quality and service network were the most frequently cited first-most important factors (cited by 1 firm each); both quality and capacity were the most frequently reported second-most important factor (1 firm each); and both capacity and cost were the most frequently reported third-most important factor (1 firm each). CR/PR at Table II-5.

¹⁴⁵ CR/PR at Tables II-8 & II-9.

¹⁴⁶ CR/PR at II-7. Petitioner maintains that sales for GPPW begin to grow in January, in advance of the spring and summer cleaning season; level off toward the end of the season in June and July; decline beginning in late summer; and reach a low point in October and November. See Petitioner's Postconf. Br. at 15.

responding importers reported that the U.S. market for GPPW was not subject to distinct business cycles.¹⁴⁷

During the POI, the domestic like product was sold almost exclusively to retailers, with very small quantities sold to distributors and other end users.¹⁴⁸ Subject imports from China were sold overwhelmingly to retailers throughout the POI, with much smaller, but appreciable quantities sold to other end users.¹⁴⁹ Subject imports from Vietnam were sold overwhelmingly to retailers during 2021 and interim 2022, with much smaller, but appreciable quantities sold to other end users in those years.¹⁵⁰ In 2020, subject imports from Vietnam were sold predominantly to retailers and other end users.¹⁵¹

During the POI, U.S. producers primarily sold GPPW using annual contracts, with lesser but substantial quantities sold through spot sales.¹⁵² Importers sold subject imports only via spot sales.¹⁵³

During the POI, domestically produced GPPW were sold primarily from inventory with lead times averaging *** days, while lesser but substantial quantities of domestically produced GPPW were produced to order with lead times averaging *** days.¹⁵⁴ Cumulated subject imports were sold primarily produced to order with lead times averaging *** days, while lesser but substantial quantities of cumulated subject imports were sold from inventory with lead times averaging *** days for product sold from U.S. inventory and *** days for product sold from foreign inventory.¹⁵⁵

Raw materials accounted for *** percent of the cost of goods sold (“COGS”) for GPPW in 2019, *** percent in 2020, *** percent in 2021, and *** percent in interim 2022, compared to *** percent in interim 2021.¹⁵⁶ GPPW are comprised of an internal combustion engine with a power take-off shaft, pumps, hoses, nozzles, and spray guns, with all these parts mounted on a (usually wheeled) steel frame.¹⁵⁷ In 2021, engines and pumps accounted for the largest share of raw material costs for GPPW, accounting for *** percent and *** percent of total raw

¹⁴⁷ CR/PR at II-7.

¹⁴⁸ CR/PR at Table II-1.

¹⁴⁹ CR/PR at Table II-1.

¹⁵⁰ CR/PR at Table II-1.

¹⁵¹ CR/PR at Table II-1. No subject imports from Vietnam were reported in 2019. *Id.*

¹⁵² CR/PR at Table V-2. ***. CR/PR at V-3.

¹⁵³ CR/PR at Table V-2. In any final phase of the investigations, we intend to further investigate the impact of the different types of sales utilized by domestic producers (annual contracts) and subject imports (spot sales) on competition in the U.S. market.

¹⁵⁴ CR/PR at II-9.

¹⁵⁵ CR/PR at II-9.

¹⁵⁶ CR/PR at V-1 and Table VI-1.

¹⁵⁷ CR/PR at V-1.

material costs, respectively.¹⁵⁸ The limited information available in the current record is mixed concerning whether raw material and component costs for GPPW fluctuated or increased during the POI.¹⁵⁹

During the POI, subject merchandise from China became subject to additional duties pursuant to section 301 of the Tariff Act of 1974¹⁶⁰ (“section 301 tariffs”).¹⁶¹ GPPW classified under HTS subheading 9903.88.03 became subject to additional section 301 tariffs of 25 percent *ad valorem*.¹⁶² Some exclusions were granted effective September 24, 2018, for certain components that may be used in GPPW.¹⁶³ These exclusions, however, expired as of August 7, 2020.¹⁶⁴ At the conference, a witness testifying on behalf of Respondent conceded that MWE shifted its GPPW production from China to Vietnam due to the imposition of Section 301 tariffs on subject merchandise from China.¹⁶⁵

GWWP imported from China and Vietnam are not subject to additional duties pursuant to Section 232 of the Trade Expansion Act of 1962¹⁶⁶ (“section 232 tariffs”).¹⁶⁷ However, certain steel and aluminum inputs that are used in the production of GPPW may be subject to additional section 232 tariffs.¹⁶⁸

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.”¹⁶⁹

¹⁵⁸ CR/PR at VI-12 & Table VI-4.

¹⁵⁹ CR/PR at V-1. U.S. importer MWE described GPPW raw material and component costs as fluctuating over 2020 to 2022, peaking in early 2022 and decreasing at least 15 percent since then. *Id.* However, both U.S. producers and two importers (***) indicated that raw material costs increased during the POI, while *** indicated that raw material costs fluctuated. *Id.*

¹⁶⁰ 19 U.S.C. § 2411.

¹⁶¹ CR/PR at I-6.

¹⁶² CR/PR at I-6.

¹⁶³ CR/PR at I-6-7.

¹⁶⁴ CR/PR at I-7.

¹⁶⁵ Conf. Tr. at 131-132 (Barleycorn); *see also* CR/PR at VII-3-VII-4 & Petitioner’s Postconf. Br. at 39. All of the MWE’s GPPW facilities in China still exist, despite utilizing smaller capacity and focusing on non-U.S. markets. Conf. Tr. at 159 (Barleycorn). GPPW imports from China have remained substantial in the U.S. market and those from Vietnam surged with the full implementation of Section 301 duties. *See, e.g.,* CR/PR at Tables IV-2 & C-1.

¹⁶⁶ 19 U.S.C. § 1862.

¹⁶⁷ CR/PR at I-6.

¹⁶⁸ CR/PR at I-6.

¹⁶⁹ 19 U.S.C. § 1677(7)(C)(i).

The volume of cumulated subject imports increased from *** units in 2019 to *** units in 2020 and to *** units in 2021, a level *** percent higher than in 2019.¹⁷⁰ The volume of cumulated subject imports was lower in interim 2022, at *** units, than in interim 2021, at *** units.¹⁷¹

Cumulated subject imports as a share of apparent U.S. consumption increased by *** percentage points from 2019 to 2021, declining from *** percent of apparent U.S. consumption in 2019 to *** percent in 2020, but then increasing to *** percent in 2021.¹⁷² Cumulated subject imports as a share of apparent U.S. consumption were *** percentage points lower in interim 2022, at *** percent, than in interim 2021, at *** percent.^{173 174}

Based on the record in the preliminary phase of these investigations, we conclude that the volume and increase in volume of cumulated subject imports were significant, both in absolute terms and relative to consumption.

D. Price Effects of the Subject Imports

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

(I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and

(II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.¹⁷⁵

As addressed in section IV.B.4. above, we have found a mostly high degree of substitutability between domestically produced GPPW 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 four pricing products.¹⁷⁶ Two domestic producers and four importers provided usable pricing

¹⁷⁰ CR/PR at Table IV-2.

¹⁷¹ CR/PR at Table IV-2. The volume of U.S. importers' shipments of cumulated subject imports increased from *** units in 2019 to *** units in 2020 and to *** units in 2021. CR/PR at Tables IV-9 & C-1. The volume of cumulated subject import shipments was lower in interim 2022, at *** units, than in interim 2021, at *** units. *Id.*

¹⁷² CR/PR at Tables IV-9 & C-1.

¹⁷³ CR/PR at Tables IV-9 & C-1.

¹⁷⁴ The ratio of cumulated subject imports to domestic production declined from *** percent in 2019 to *** percent in 2020, but then increased to *** percent in 2021; it was lower in interim 2022, at *** percent, than in interim 2021, at *** percent. CR/PR at Table IV-2.

¹⁷⁵ 19 U.S.C. § 1677(7)(C)(ii).

¹⁷⁶ The four pricing products are as follows:

(Continued...)

data, although not all firms reported pricing for all products for all quarters.¹⁷⁷ Pricing data reported by these firms accounted for *** percent of U.S. producers' U.S. shipments of GPPW in 2021, *** percent of importers' U.S. shipments of subject merchandise from China in 2021, and *** percent of importers' U.S. shipments of subject merchandise from Vietnam in 2021.¹⁷⁸

The pricing data show pervasive underselling by cumulated subject imports, with the vast majority of reported subject import sales volume in quarters of underselling. Cumulated subject imports undersold domestically produced GPPW in 48 of 69 quarterly comparisons, or 69.6 percent of the comparisons, at margins ranging from 0.5 to 52.2 percent, and averaging 23.7 percent.¹⁷⁹ Cumulated subject imports oversold domestically produced GPPW in 21 of 69 quarterly comparisons, or 30.4 percent of the comparisons, at margins ranging from 2.4 to 200.8 percent, and averaging 37.8 percent.¹⁸⁰ There were 928,067 units of reported subject import sales in quarters of underselling (85.6 percent of the total) and only 156,083 units of reported subject import sales in quarters of overselling (14.4 percent of the total).¹⁸¹ The Commission notes in particular the pervasive underselling by cumulated subject imports for Product 1, which was the highest-volume pricing product for both domestically produced GPPW and cumulated subject imports during the POI.^{182 183}

(...Continued)

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");

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;

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; and

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.

CR/PR at V-8.

¹⁷⁷ CR/PR at V-4.

¹⁷⁸ CR/PR at V-4-5.

¹⁷⁹ CR/PR at Table V-8.

¹⁸⁰ CR/PR at Table V-8.

¹⁸¹ CR/PR at Table V-8.

¹⁸² CR/PR at Tables IV-3-8. For Product 1, there were *** units of cumulated subject imports in quarterly comparisons in which cumulated subject imports undersold the domestic like product (85.6 percent of the total volume for Product 1) and only *** units of cumulated subject imports in quarterly comparisons in which cumulated subject imports oversold the domestic like product (14.4 percent of the total volume for Product 1). CR/PR at Table V-8. Prices for cumulated subject imports for Product 1 were below those for the domestically produced GPPW in 17 of 18 (or *** percent of) quarterly comparisons for Product 1, while prices for cumulated subject imports were above those for domestically produced GPPW in 1 of 18 (or *** percent of) quarterly comparisons for Product 1. *Id.*

¹⁸³ We have also considered purchaser lost sales/lost revenue responses. One of two responding purchasers reported that, since 2019, they had purchased subject imports instead of the domestic like product. CR/PR at Tables V-11 & V-12. This sole purchaser reported that cumulated (Continued...)

Given the mostly high degree of substitutability between subject imports and the domestic like product, the importance of price in purchasing decisions, and the pervasive underselling by subject imports in terms of both quarterly comparisons and sales volume, we find that there has been significant underselling by cumulated subject imports during the POI. This underselling caused the domestic industry to lose substantial market share to lower priced subject imports, as subject imports gained *** percentage points of market share during the 2019-2021 period, at the expense of the domestic industry.¹⁸⁴

We have also considered price trends. During the POI, domestic prices generally increased for all four products.¹⁸⁵ Over the course of the POI, domestic prices increased by *** percent for Product 1, *** percent for Product 2, *** percent for Product 3, and *** percent for Product 4.¹⁸⁶ Prices of subject imports from China increased by *** percent for Product 1, which was the only pricing product for which cumulated subject imports' pricing data were reported over the course of the entire POI.¹⁸⁷

We have also considered whether cumulated subject imports prevented price increases for domestically produced GPPW which otherwise would have occurred. The record shows that the domestic industry's ratio of COGS to net sales increased irregularly by *** percentage points from 2019 to 2021, increasing from *** percent in 2019 to *** in 2020, but then declining to *** percent in 2021.¹⁸⁸ The domestic industry's ratio of COGS to net sales was *** percentage points higher in interim 2022, at *** percent, than in interim 2021, at *** percent.¹⁸⁹

In any final phase of these investigations, we intend to further examine whether and to what extent cumulated subject imports have depressed U.S. prices to a significant degree or prevented price increases, which otherwise would have occurred to a significant degree.

(...Continued)

subject import prices were lower than prices of the domestic like product; however, it also reported that price was not a primary reason for purchasing subject imports instead of domestically produced GPPW. *Id.* In any final phase of these investigations, we intend to further examine purported non-price reasons for purchasing subject imports rather than domestically produced GPPW.

¹⁸⁴ CR/PR at Table C-1. The domestic industry's market share declined irregularly from *** percent of apparent U.S. consumption in 2019 to *** percent in 2021, a decline of *** percentage points over that period. *Id.* In contrast, cumulated subject imports' market share increased irregularly from *** percent in 2019 to *** percent in 2021, an increase of *** percentage points over that same period. *Id.*

¹⁸⁵ CR/PR at Tables V-3-7.

¹⁸⁶ CR/PR at Revised Table V-7.

¹⁸⁷ CR/PR at Revised Table V-7.

¹⁸⁸ CR/PR at Table VI-1.

¹⁸⁹ CR/PR at Table VI-1.

In sum, based on the record of the preliminary phase of these investigations, we find that cumulated subject imports significantly undersold the domestic like product, leading to a shift in market share from the domestic industry to subject imports from 2019 to 2021. Therefore, we find that cumulated subject imports had significant price effects.¹⁹⁰

E. Impact of the Subject Imports¹⁹¹

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

The domestic industry’s performance generally improved from 2019 to 2021 as apparent U.S. consumption increased by *** percent, but weakened as apparent U.S. consumption declined in interim 2022 compared to interim 2021.¹⁹³ As the industry lost substantial market share, lower priced subject imports gained *** percentage points of market share from 2019 to 2021, while the industry was unable to fully capitalize on strong demand growth and its performance was weaker than we would have expected.¹⁹⁴

Despite strong and growing demand for demand for GPPW during the 2019-2021 period, the domestic industry’s output indicia lagged the growth in apparent U.S. consumption over the period, and were generally lower in interim 2022 compared to interim 2021. The

¹⁹⁰ In any final phase of these investigations, we intend to further examine whether and to what extent cumulated subject imports have impacted U.S. prices during the POI, including with respect to both price suppression and price depression.

¹⁹¹ Commerce initiated its investigations based on estimated dumping margins of 136.70 to 242.34 percent for subject imports from China and estimated dumping margins of 110.23 to 225.65 percent for subject imports from Vietnam. *Gas-Powered Pressure Washers from the People’s Republic of China and the Socialist Republic of Vietnam: Initiation of Less-Than-Fair-Value Investigations*, 88 Fed. Reg. 4807, 4810 (Jan. 25, 2023).

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

¹⁹³ CR/PR at Table C-1.

¹⁹⁴ See CR/PR at Table VI-13 (***); see also Petitioner’s Postconf. Br. at 44 (Petitioner asserts that as a result of “significant underselling by subject imports,” FNA Group could not “fully capitalize on its investments at its Mesquite, Texas production facility, and the company could not increase prices of domestic like product even in periods of high demand, like 2020 and 2021.”).

domestic industry's capacity declined by *** percent from 2019 to 2021; its capacity was *** percent lower in interim 2022 than in interim 2021.¹⁹⁵ The industry's production increased by *** percent from 2019 to 2021; it was *** percent lower in interim 2022 than in interim 2021.¹⁹⁶ Its capacity utilization increased by *** percentage points from 2019 to 2021, but was *** percentage points lower in interim 2022 than in interim 2021.¹⁹⁷

The domestic industry's number of production and related workers ("PRWs"), total hours worked, and wages paid, were all higher in 2021 than in 2019, but lower in interim 2022 than in interim 2021.¹⁹⁸ The industry's productivity was lower in 2021 than in 2019, but higher in interim 2022 than in interim 2021.¹⁹⁹ Its hourly wages were higher in 2021 than in 2019, and also higher in interim 2022 than in interim 2021.²⁰⁰

The domestic industry's U.S. shipments increased by *** percent from 2019 to 2021, but were *** percent lower in interim 2022 than in interim 2021.²⁰¹ The industry's market share increased from *** percent in 2019 to *** percent in 2020, but then declined to *** percent in 2021, for an overall decline of *** percentage points during 2019-2021; its market share was *** percentage points higher in interim 2022, at *** percent, than in interim 2021, at *** percent.²⁰² The entire decline in the domestic industry's market share over the POI resulted from ***.²⁰³

¹⁹⁵ CR/PR at Table C-1. The domestic industry's capacity was *** units in 2019, *** units in 2020, and *** units in 2021. *Id.* Its capacity was *** units in interim 2021 and *** units in interim 2022. *Id.*

¹⁹⁶ CR/PR at Table C-1. The domestic industry's production was *** units in 2019, *** units in 2020, and *** units in 2021. *Id.* Its production was *** units in interim 2021 and *** units in interim 2022. *Id.*

¹⁹⁷ CR/PR at Table C-1. The domestic industry's capacity utilization was *** percent in 2019, *** percent in 2020, and *** percent in 2021. *Id.* Its capacity utilization was *** percent in interim 2021 and *** percent in interim 2022. *Id.*

¹⁹⁸ The domestic industry's number of PRWs totaled *** in 2019, *** in 2020, *** in 2021, *** in interim 2021, and *** in interim 2022. Total hours worked were *** in 2019, *** in 2020, *** in 2021, *** in interim 2021, and *** in interim 2022. Wages paid were \$*** in 2019, \$*** in 2020, \$*** in 2021, \$*** in interim 2021, and \$*** in interim 2022. CR/PR at Table C-1.

¹⁹⁹ Productivity was *** units per 1,000 hours in 2019, *** units per 1,000 hours in 2020, *** units per 1,000 hours in 2021, *** units per 1,000 hours in interim 2021, and *** units per 1,000 hours in interim 2022. CR/PR at Table C-1.

²⁰⁰ Hourly wages were \$*** per hour in 2019, \$*** per hour in 2020, \$*** per hour in 2021, \$*** per hour in interim 2021, and \$*** per hour in interim 2022. CR/PR at Table C-1.

²⁰¹ CR/PR at Table C-1. The domestic industry's U.S. shipments were *** units in 2019, *** units in 2020, and *** units in 2021; they were *** units in interim 2021 and *** units in interim 2022. *Id.*

²⁰² CR/PR at Table C-1.

²⁰³ CR/PR at Tables III-5, III-12, & C-1. TTI's reported capacity utilization was *** percent in 2019, *** percent in 2020, *** percent in 2021, *** percent in interim 2021, and *** percent in interim 2022. CR/PR at Table III-5.

The domestic industry's end-of-period inventories increased by *** percent from 2019 to 2021; they were *** percent higher in interim 2022 than in interim 2021.²⁰⁴ As a ratio to total shipments, the domestic industry's end-of-period inventories declined irregularly, declining from *** percent in 2019 to *** percent in 2020, before increasing to *** percent in 2021, for an overall decrease of *** percentage points from 2019 to 2021; this ratio was *** percentage points lower in interim 2022, at *** percent, than in interim 2021, at *** percent.²⁰⁵

The domestic industry's financial performance indicia generally improved overall from 2019 to 2021, but were weaker in interim 2022 than in interim 2021. The industry's net sales revenues increased by *** percent from 2019 to 2021, but were *** percent lower in interim 2022 than in interim 2021.²⁰⁶ Its gross profit, operating income, and net income all increased overall during the 2019-2021 period, but were lower in interim 2022 than in interim 2021.²⁰⁷ The industry's operating income as a share of net sales increased by *** percentage points from 2019 to 2021, from *** percent in 2019 to *** percent in 2021, but was *** percentage points lower in interim 2022, at *** percent, than in interim 2021, at *** percent.²⁰⁸ Similarly, the industry's net income as a share of net sales increased by *** percentage points from 2019 to 2021, from *** percent in 2019 to *** percent in 2021, but was *** percentage points lower in interim 2022, at *** percent, than in interim 2021, at *** percent.²⁰⁹

The domestic industry's capital expenditures increased by *** percent from 2019 to 2021, but were *** percent lower in interim 2022 than in interim 2021.²¹⁰ Its R&D expenses

²⁰⁴ CR/PR at Tables III-9 & C-1. The domestic industry's end-of-period inventories were *** units in 2019, *** units in 2020, and *** units in 2021. *Id.* Its end-of-period inventories were *** units in interim 2021 and *** units in interim 2022. *Id.*

²⁰⁵ CR/PR at Tables III-9 & C-1.

²⁰⁶ The domestic industry's net sales by value increased from \$*** in 2019 to \$*** in 2020 and \$*** in 2021. Its net sales by value were lower in interim 2022, at \$***, than in interim 2021, at \$***. CR/PR at Table C-1.

²⁰⁷ The domestic industry's gross profit increased from \$*** in 2019 to \$*** in 2020 and \$*** in 2021. Its gross profit was lower in interim 2022, at \$***, than in interim 2021, at \$***. The domestic industry's operating income increased from \$*** in 2019 to \$*** in 2020 and \$*** in 2021. Its operating income was lower in interim 2022, at \$***, than in interim 2021, at \$***. The domestic industry's net income increased from \$*** in 2019 to \$*** in 2020 and \$*** in 2021. Its net income was lower in interim 2022, at \$***, than in interim 2021, at \$***. CR/PR at Table C-1.

²⁰⁸ As a ratio to net sales, the domestic industry's operating income was *** percent in 2019, *** percent in 2020, *** percent in 2021, *** percent in interim 2021, and *** percent in interim 2022. CR/PR at Table C-1.

²⁰⁹ As a ratio to net sales, the domestic industry's net income was *** percent in 2019, *** percent in 2020, *** percent in 2021, *** percent in interim 2021, and *** percent in interim 2022. CR/PR at Table C-1.

²¹⁰ The domestic industry's capital expenditures were \$*** in 2019, \$*** in 2020, \$*** in 2021, \$*** in interim 2021 and \$*** in interim 2022. CR/PR at Table C-1.

decreased by *** percent from 2019 to 2021, and were *** percent lower in interim 2022 than in interim 2021.²¹¹ The domestic industry's operating return on assets declined by *** percentage points from 2019 to 2021, from *** percent in 2019 to *** percent in 2021.²¹² *** reported negative effects on investment and on growth and development due to cumulated subject imports.²¹³

Based on the record of the preliminary phase of the investigations, we find that cumulated subject imports materially contributed to the domestic industry's inability to fully capitalize on the *** percent increase in apparent U.S. consumption from 2019 to 2021. Given the mostly high degree of substitutability between subject imports and the domestic like product and the importance of price to purchasing decisions, the significant and increasing volume of low-priced cumulated subject imports contributed to ***, leading to a *** percentage point shift in market share from the domestic industry to cumulated subject imports from 2019 to 2021.²¹⁴ As the domestic industry's market share declined during the 2019-2021 period, the industry's production, capacity utilization, employment, U.S. shipments, revenues, and profits were lower than they otherwise would have been in light of strong demand growth. Although apparent U.S. consumption was *** percent lower in interim 2022 than in interim 2021, the decline in the domestic industry's performance over the interim periods was exacerbated by the significant volume of low-priced cumulated subject imports in interim 2022. Moreover, the largest domestic producer, FNA Group, reported ***.²¹⁵ Accordingly, we find that cumulated subject imports had a significant impact on the domestic industry.

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

Demand trends cannot explain the injury that we have attributed to cumulated subject imports. Apparent U.S. consumption increased by *** percent during 2019-2021, and we have found that low-priced cumulated subject imports prevented the domestic industry from fully capitalizing on strong demand growth during the period by causing a *** percentage point shift in market share from the domestic industry to cumulated subject imports. We have also found that the effect of lower demand in interim 2022 compared to interim 2021 on the domestic

²¹¹ The industry reported R&D expenses of \$*** in 2019, \$*** in 2020, \$*** in 2021, \$*** in interim 2021, and \$*** in interim 2022. CR/PR at Table C-1.

²¹² CR/PR at Table VI-10.

²¹³ CR/PR at Tables VI-12-13.

²¹⁴ We recognize that ***. See CR/PR at V-15, VI-1 n.2, Table VI-12 note. In any final phase of the investigations, we intend to further investigate ***.

²¹⁵ CR/PR at Tables VI-12-13.

industry was exacerbated by the significant volume of low-priced cumulated subject imports in interim 2022. We intend to further examine the effect of the demand decline towards the end of the POI on the domestic industry, as well as any other factors that may have affected the industry's performance, as detailed below, in any final phase of these investigations.²¹⁶

VII. Conclusion

For the reasons stated above, we determine that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of GPPW from China and Vietnam that are allegedly sold in the United States at less than fair value and imports of GPPW from China that are allegedly subsidized by the government of China.

²¹⁶ Respondent argues that any injury suffered by the domestic industry during the POI was attributable to Petitioner's own business model rather than subject import competition. In particular, Respondent claims that Petitioner's business model relies too heavily on "brick and mortar" distribution, which is inherently inefficient, in its view, compared to the e-Commerce business model used by respondent that has significantly fewer "touchpoints" and lower costs. MWE Postconf. Br. at 13-14. According to Respondent, the inefficiencies of Petitioner's "brick-and-mortar" business model became even more of a liability to the domestic industry during the COVID-19 pandemic. *Id.* Disputing Respondent's argument, Petitioner contends that it sells GPPW not only through brick and mortar stores, but also through multiple channels of distribution, including e-Commerce. Petitioner's Postconf. Br. at 30-35. Petitioner also maintains that e-Commerce is not always more efficient than selling through brick and mortar stores, as Respondent claims. *Id.* at 32.

Respondent further argues that EPPW represents a large and growing segment of the U.S. pressure washer market, and that Petitioner has largely ignored this sector of the market by focusing too heavily on GPPW. MWE Postconf. Br. at 14-17. In response, Petitioner argues that the growing U.S. market for EPPW and environmental regulations have not significantly constrained growth in sales for GPPW. Petitioner's Postconf. Br. at 38-40.

Respondent also contends that Honda's cessation of engine production for GPPW in 2021 has had a "devastating" impact on the domestic industry, by eliminating the various advantages the industry enjoyed from having Honda as an engine supplier, including price premiums. MWE Postconf. Br. at 17-19. Petitioner counters that its business decision to source engines for GPPW from Honda does not constitute an alternative cause of injury as it had alternative source supplies for GPPW engines. Petitioner's Postconf. Br. at 36-37.

Finally, Respondent highlights various other factors that allegedly contributed to the domestic industry's reduced profitability and increased costs during the POI, including costs and any production supply issues associated with the COVID-19 pandemic, increasing transportation and freight costs, and Petitioner's increased operating expenses since building a new facility in Mesquite, Texas in 2020 at a cost of \$50 million. MWE Postconf. Br. at 22-25 & Answers to Staff Questions at 10-11. In response to the latter point, Petitioner argues that it has realized various cost efficiencies from opening its facility in Mesquite, Texas. Petitioner's Postconf. Br., Exh. 1, Answers to Staff Questions at 11-12.

As noted, in any final phase of the investigations, we intend to further examine these several "nonattribution issues."

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 Group”), 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 20, 2023	Commission’s conference
January 19, 2023	Commerce’s notice of initiation (88 FR 4807 and 88 FR 4812, January 25, 2023)
February 10, 2023	Commission’s vote
February 13, 2023	Commission’s determinations
February 21, 2023	Commission’s views

Statutory criteria

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

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

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

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

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

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

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

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

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

(J) EFFECT OF PROFITABILITY.—The Commission may not determine that there is no material injury or threat of material injury to an industry in the

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

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

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

Market summary

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 *** while leading producers of GPPW outside the United States include *** of China and *** of Vietnam. The leading U.S. importer of GPPW from China is ***, while the leading importer of GPPW from Vietnam is **. U.S. purchasers of GPPW are firms that include national retail stores and locally owned independent dealers that sell to homeowners and other end users; the leading purchasers are **.

Apparent U.S. consumption of GPPW totaled approximately ** in 2021. Currently, two firms are known to produce GPPW in the United States, **. U.S. producers' U.S. shipments of GPPW totaled ** in 2021 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 2021 and accounted for ** percent of apparent U.S. consumption by quantity and ** percent by value. U.S. imports from nonsubject sources totaled ** in 2021.

Summary data and data sources

A summary of data collected in these investigations is presented in appendix C, table C-1. Except as noted, U.S. industry data are based on questionnaire responses of two firms that

accounted for *** of U.S. production of GPPW during 2021. U.S. imports are based on questionnaire responses from 10 firms⁶ and official U.S. import statistics from Commerce, based on landed duty paid value (for border of entry and monthly U.S. imports data presentations).

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 alleged subsidies and sales at LTFV

Alleged subsidies

On January 25, 2023, Commerce published a notice in the Federal Register of the initiation of its countervailing duty investigation on GPPW from China.⁷

Alleged sales at LTFV

On January 25, 2023, Commerce published a notice in the Federal Register of the initiation of its antidumping duty investigations on GPPW from China and Vietnam.⁸ Commerce has initiated antidumping duty investigations based on estimated dumping margins of 136.7 percent to 242.34 percent for GPPW from China and 110.23 percent to 225.65 percent for GPPW from Vietnam.

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

⁷ For further information on the alleged subsidy programs see Commerce's notice of initiation and related CVD Initiation Checklist. 88 FR 4812, January 25, 2023.

⁸ 88 FR 4807, January 25, 2023.

The subject merchandise

Commerce's scope

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

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 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.

⁹ 88 FR 4812, January 25, 2023.

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).

Tariff treatment

Gas powered pressure washers 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, 2018.¹⁰ 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.

Gas powered pressure washers 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.¹¹ Exclusions were granted based on descriptions at the statistical reporting number level and were granted to pressure washers imported under 8424.30.9000 on

¹⁰ 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.

¹¹ See U.S. note 20(f), subchapter III of HTS chapter 99.

October 28, 2019.¹² These exclusions were effective as of the September 24, 2018, the date of the \$200 billion action.¹³ These exclusions were not extended after their expiration on August 7, 2020.¹⁴

The product¹⁵

Description and applications

The products covered by these investigations are cold-water gas powered pressure washers ("GPPW").¹⁶ These machines 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." 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 unit, packaged or imported together."¹⁷ 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.^{18 19} 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

¹² 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).

¹³ *Id.*

¹⁴ 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).

¹⁵ Unless otherwise noted, the information in this section is based on Petition, Vol. I, pp 5-8.

¹⁶ 88 FR 4807, January 25, 2023.

¹⁷ *Id.*

¹⁸ 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.

¹⁹ 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.

area and for tough stains.²⁰ Electric pressure washers are more suited for light-duty use or for light cleaning tasks, such as cleaning outdoor chairs. Electric pressure washers may also be used inside because they do not produce emissions and are generally quieter.

Figure I-1: GPPW (left) vs. Electric 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.²¹ As water flows through the tubular coil, the

²⁰ Conference Transcript, pp 15-16 (G. Alexander).

²¹ 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.

temperature rises to the needed degree.²² 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 systems mount to the frame, taking up more space, and requires parts that a cold water pressure washer would not have.²³

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

²² Spartan Manufacturing Corp, <https://smcwashers.com/guide-hot-water-pressure-washers/>, retrieved January 31, 2023.

²³ Conference transcript, p. 16 (G. Alexander).

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.²⁴ 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.²⁵

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).²⁶ 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.²⁷ Both commercial and residential-grade models for GPPW and electric pressure washers exist.

Manufacturing processes

The manufacturing process for GPPW 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.²⁸

First, manufacturers 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.²⁹ 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. Together, this forms the lower base assembly, which is painted. The lower base assembly is attached to a handle assembly, which involves processing raw steel or bending steel tubing into a handle. The lower base assembly and handle assembly

²⁴ Conference Transcript, pp. 90-91 (G. Alexander).

²⁵ Conference Transcript, p. 20 (C. Alexander).

²⁶ Conference Transcript, pp. 111-113 (C. Alexander).

²⁷ Conference Transcript, pp. 20-21 (C. Alexander).

²⁸ Conference Transcript, p. 19 (C. Alexander); Petitions, at Exhibit I-4.

²⁹ Petitions, at Exhibit I-4.

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.³⁰

Next, manufacturers will couple the positive displacement pump to the internal combustion engine. The engine shaft is connected to the engine. 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.

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.³¹ This packaging may also include material to ensure safe delivery in transport.^{32 33}

Domestic like product issues

The Commission's decision regarding the appropriate domestic product(s) that are "like" the subject imported product is based on a number of factors including: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) common manufacturing facilities, production processes, and production employees; (5) customer and producer perceptions; and (6) price.

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.³⁴ 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.³⁵ It maintains that clear lines divide in-scope GPPWs from out-of-scope electric powered pressure washers.³⁶ Employing the Commission's semi-finished product analysis, Petitioner also

³⁰ Petitions, at Exhibit I-4.

³¹ Petitions, at Exhibit I-4.

³² Petitions, at Exhibit I-4.

³³ 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).

³⁴ Petitions, p. 19; Petitioner's postconference brief, p. 2.

³⁵ Petitioner's postconference brief, pp. 2-5.

³⁶ Petitioner's postconference brief, pp. 5-12.

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).³⁷

No respondents contested the domestic like product definition for the preliminary phase of these investigations but reserve the right to do so in any final phase investigation.³⁸

Appendix D presents a summary of U.S. producers’ and U.S. importers’ responses on the comparability of GPPWs versus electric powered pressure washers and full narrative responses to the questions on the comparability of these products.

Intermediate products

The domestic like product proposed by petitioners includes the intermediate products (power units) as well as downstream products (finished GPPWs). The following presents information on these products relating to the Commission’s semifinished like product analysis. Table I-2 presents U.S. producer and U.S importer responses to the Commissions’ questions regarding semi-finished product analysis comparing in-scope complete GPPW to in-scope pressure washer components.³⁹

Table I-2

GPPW: Count of firms’ responses regarding semi-finished product analysis comparing in-scope complete pressure washers to in-scope pressure washer components

Count in number of firms

Factor	Firm type	No	Yes
Other uses	U.S. producers	2	0
Other uses	U.S. importers	4	2
Separate market	U.S. producers	1	1
Separate market	U.S. importers	4	2
Differences in characteristics	U.S. producers	1	1
Differences in characteristics	U.S. importers	3	3
Differences in cost	U.S. producers	0	2
Differences in cost	U.S. importers	2	3
Transformation intensive	U.S. producers	1	1
Transformation intensive	U.S. importers	3	2

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

³⁷ Petitioner’s postconference brief, p. 12.

³⁸ Conference transcript, p. 147 (Kahn).

³⁹ Appendix E presents U.S. producers’ and importers’ responses regarding the semi-finished product analysis questions.

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.

Petitioner FNA Group sells GPPW under various brand names and under private labels.¹ However, brands may be supplied from both U.S. and imported sources. For example, petitioner’s economist described the Craftsman brand as currently supplied by petitioner FNA Group, but previously supplied by Chinese product. He added that the Ryobi brand is supplied by both domestic producers and subject importers.² Additionally, FNA Group has its own brand names, Simpson and Delco,³ and importer MWE owns the brand name of Westinghouse.⁴

Importer MWE described itself as providing a limited number of types of GPPW, entirely for the consumer (not commercial) market. It characterized FNA Group as having a much wider array of product offerings.⁵

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. Petitioner described CETA as having more stringent de facto standards. However, retailers do not require these certifications when purchasing GPPW.⁶ Importer MWE described CETA’s membership as primarily commercial GPPW end users.⁷

Petitioner described GPPW consumers as particularly concerned with price and the pounds per square inch (PSI) that the GPPW can provide.⁸ The range of PSI that various models of GPPW can produce is higher than that produced by electric power washers (a nonsubject

¹ Conference transcript, pp. 13-15 (G. Alexander) and 20 (C. Alexander).

² Conference transcript, p. 30 (Szamosszegi).

³ Conference transcript, p. 82 (W. Alexander).

⁴ Conference transcript, p. 126 (Barleycorn).

⁵ Conference transcript, pp. 127-128 (Barleycorn).

⁶ Conference transcript, pp. 45-52, 111-113 (C. Alexander, G. Alexander and W. Alexander).

⁷ Conference transcript, p. 168 (Barleycorn).

⁸ Conference transcript, pp. 14 (G. Alexander) and 106 (W. Alexander).

product), although the most powerful electric power washers have PSI that may overlap with the lower end of the GPPW PSI range.⁹

***¹⁰ indicated that there had been no changes to the product range, mix, or marketing of GPPW since January 1, 2019.¹¹

Apparent U.S. consumption of GPPW increased approximately *** percent during 2019-2021, although it was approximately *** percent lower in January-September 2022 compared to January-September 2021.

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. Additionally, both described the section 301 tariffs as driving Chinese producers to relocate GPPW assembly operations to Vietnam.¹² 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.¹³

In response to questionnaires, two *** and three *** stated that the section 301 tariffs had had an impact on the GPPW market.¹⁴ In additional comments, *** stated that the section 301 tariffs caused the costs of producing GPPW to increase, and then subsequently the prices of GPPW increased. *** stated that U.S. customers did not accept price increases for GPPW that were enough to cover the increased costs of producing GPPW due to section 301 tariffs on components. *** described the costs of GPPW rising in 2019 due to the section 301 tariffs, leading to supply chains for GPPW moving out of China. *** stated that GPPW prices steadily increased over 2019 to 2022 due to the section 301 tariffs.

⁹ Conference transcript, p. 21 (C. Alexander).

¹⁰ ***.

¹¹ 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.) See 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>, downloaded January 31, 2023.

¹² Conference transcript, pp. 34 (Szamosszegi), 95 (C. Alexander), and 131 (Barleycorn).

¹³ Conference transcript, p. 94 (C. Alexander).

¹⁴ *** indicated that it did not know whether the section 301 tariffs had affected the U.S. GPPW market.

Channels of distribution

At the conference, petitioner described GPPW as being sold through three main channels of distribution: brick-and-mortar retailers; online stores; and distributors (which primarily sell to professional users). Both petitioner and MWE added that retail sales are final sales from the GPPW supplier to a third-party (the brick-and-mortar or online retailer), which in turn sells to the final consumer.¹⁵

Commission questionnaires requested data on three channels: distributors and wholesalers; retailers (including both brick-and-mortar and online); and other end users (such as commercial firms). Both U.S. producers and importers sold mainly to retailers, as shown in table II-1.

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

Shares in percent

Source	Channel	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
United States	Distributors	***	***	***	***	***
United States	Retailers	***	***	***	***	***
United States	Other end users	***	***	***	***	***
China	Distributors	***	***	***	***	***
China	Retailers	***	***	***	***	***
China	Other end users	***	***	***	***	***
Vietnam	Distributors	***	***	***	***	***
Vietnam	Retailers	***	***	***	***	***
Vietnam	Other end users	***	***	***	***	***
Subject sources	Distributors	***	***	***	***	***
Subject sources	Retailers	***	***	***	***	***
Subject sources	Other end users	***	***	***	***	***
Nonsubject sources	Distributors	***	***	***	***	***
Nonsubject sources	Retailers	***	***	***	***	***
Nonsubject sources	Other end users	***	***	***	***	***
All import sources	Distributors	***	***	***	***	***
All import sources	Retailers	***	***	***	***	***
All import sources	Other end users	***	***	***	***	***

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

¹⁵ Conference transcript, pp. 23 and 84 (W. Alexander) and 151 (Barleycorn).

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	2	5	4	6
Midwest	2	5	4	6
Southeast	2	5	4	6
Central Southwest	2	5	4	6
Mountain	2	5	4	6
Pacific Coast	2	5	4	6
Other	2	4	3	4
All regions (except Other)	2	5	4	6
Reporting firms	2	5	4	6

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.

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 sources
Capacity 2019	Quantity	***	***	***	***
Capacity 2021	Quantity	***	***	***	***
Capacity utilization 2019	Ratio	***	***	***	***
Capacity utilization 2021	Ratio	***	***	***	***
Inventories to total shipments 2019	Ratio	***	***	***	***
Inventories to total shipments 2021	Ratio	***	***	***	***
Home market shipments 2021	Share	***	***	***	***
Non-US export market shipments 2021	Share	***	***	***	***
Ability to shift production (firms reporting "yes")	Count	***	***	***	***

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

Note: Responding U.S. producers accounted for *** of U.S. production of GPPW in 2021. Responding foreign producer/exporter firms accounted for approximately *** of U.S. imports of GPPW from China and for *** of U.S. imports of GPPW from Vietnam during 2021. For additional data on the number of responding firms and their share of U.S. production and of U.S. imports from each subject country, please refer to Part I, "Summary Data and Data Sources."

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, an ability to shift shipments from inventories, and the ability to shift production to or from alternate products (***). Factors mitigating responsiveness of supply include limited ability to shift shipments from alternate markets.

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. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity, the ability to shift shipments from alternate markets, and the ability to shift production to or from alternate products.

Chinese capacity *** over 2019 to 2021, but capacity utilization remains low, and shipments to non-U.S. markets remained a large share of shipments.

Subject imports from Vietnam

Based on available information, producers of GPPW from Vietnam have the ability to respond to changes in demand with 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 some unused capacity, the ability to shift production to or from alternate products, and the demonstrated ability of Vietnamese producers to increase capacity sharply in only two years. Factors mitigating responsiveness of supply include limited inventories and limited ability to shift shipments from alternate markets.

Imports from nonsubject sources

No importers listed any nonsubject imports over January 2019-September 2022.

Supply constraints

*** and four importers reported that they had not experienced supply constraints since January 1, 2019. *** stated that supply constraints included a limited supply of engines in 2021 when a supplier exited the market. *** stated that there were supply constraints, listing the COVID-19 pandemic.¹⁶

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 factors are the somewhat limited range of substitute products as well as any consumer ability to postpone cleaning projects.

End uses and cost share

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 electric powered pressure washers). Petitioner stated that, before 2020, housing sales were

¹⁶ Additionally, at the conference, counsel for MWE stated that Honda ceased production of engines in 2021, allegedly causing financial injury to FNA Group. Conference transcript, p. 10 (Kahn). In its postconference brief, MWE stated that FNA Group's business model depended on using American-made Honda engines. MWE's postconference brief, pp. 17-19. FNA Group denied that Honda's discontinuation of some of its U.S. engine production had affected FNA Group's GPPW production, noting that it sourced engines from a variety of sources. Conference transcript, pp. 85-86 (G. Alexander) and petitioner's postconference brief, p. 37.

one indicator of demand for GPPW, but that events since then have lowered the effectiveness of such indicators.¹⁷ (See “Demand trends” below.)

Business cycles

At the conference, importer MWE described U.S. demand as increasing in late spring of each year and remaining strong until September or October of each year (depending on when the weather becomes colder).¹⁸ In its questionnaire, *** described a similar trend, with sales typically increasing from January to April, leveling off through June and July, and then decreasing to a low in October or November. Overall, *** indicated that the market was subject to seasonal business cycles, while importers *** indicated that the GPPW market was not subject to seasonal business cycles or distinctive conditions of competition. Only *** indicated there were other distinctive conditions of competition, describing environmental regulations and competition from higher-PSI electric power washers.

Demand trends

Most responding firms reported increasing or fluctuating U.S. demand for GPPW since January 1, 2019 (table II-4). *** described demand as increasing in March 2020 when the COVID-19 pandemic began. It continued that strong demand in 2021 pulled some demand forward, resulting in decreased demand in 2022 relative to 2021.¹⁹ However, *** attributed a decrease in demand to the COVID-19 pandemic and environmental concerns and regulations over GPPW.

Table II-4
GPPW: Count of firms’ responses regarding overall domestic and foreign demand, by firm type

Market	Firm type	Increase	No change	Decrease	Fluctuate
Domestic demand	U.S. producers	2	0	0	0
Domestic demand	Importers	2	0	1	2
Foreign demand	U.S. producers	0	0	0	0
Foreign demand	Importers	0	0	1	1

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

¹⁷ Conference transcript, pp. 80-81 (W. Alexander).

¹⁸ Conference transcript, p. 175 (Barleycorn).

¹⁹ ***.

Substitute products

*** indicated that there are substitutes for GPPW, with all of them indicating electric powered pressure washers as the substitute. *** indicated that the prices of electric powered pressure washers had not affected the prices of GPPW, but *** stated that the decreasing prices of electric powered pressure washers had affected the prices of GPPW. *** stated that there were no substitutes for GPPW.

At the conference, petitioner described demand as being in a long-term upward trend before 2019, while importer MWE described electric powered pressure washers as partially replacing GPPWs because of cost concerns and environmental regulations.²⁰

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 mostly high degree of substitutability between domestically produced GPPW and GPPW imported from subject sources.²¹ Firms generally described U.S.-produced GPPW and subject imports as interchangeable, with the main factors limiting substitutability being the wider product range of domestic product than subject imports, at least from import supplier MWE, as well as some purchaser reports that quality and production capacity were important purchasing factors.

²⁰ Conference transcript, pp. 81-82 (W. Alexander) and 131 (Barleycorn).

²¹ 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.).

Factors affecting purchasing decisions

Most important purchase factors

Purchasers responding to lost sales lost revenue allegations²² were asked to identify the main purchasing factors their firm considered in their purchasing decisions for GPPW. The major purchasing factors identified by firms include quality, capacity, and cost.

The most often cited top three factors firms consider in their purchasing decisions for GPPW were quality (two firms) and capacity (two firms), as shown in table II-5.²³ In additional comments, purchaser *** stated that ***.

Table II-5

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

Factor	First	Second	Third	Total
Quality	1	1	0	2
Capacity	0	1	1	2
Service network	1	0	0	1
Cost	0	0	1	1
All other factors	0	0	0	0

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

Lead times

U.S. producers reported that *** percent of their commercial shipments were sold from inventory, with lead times averaging *** days. The remaining *** percent of their commercial shipments were produced-to-order, with lead times averaging *** days.

U.S. importers reported that *** percent of their commercial shipments were produced-to-order, with lead times averaging *** days. An additional *** percent was sold from U.S. inventory, with lead times averaging *** days. The remaining *** percent of their commercial shipments came from foreign inventories, with lead times averaging *** days.

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 and importers were asked whether the products can always, frequently, sometimes, or never be used interchangeably. As

²² This information is compiled from responses by purchasers identified by Petitioner to the lost sales lost revenue allegations. See Part V for additional information.

²³ ***.

shown in tables II-6 to II-7, *** described GPPW from all sources as always interchangeable, while importer *** described GPPW from all sources as sometimes interchangeable.

Table II-6

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	2	0	0	0
U.S. vs. Vietnam	2	0	0	0
U.S. vs. other	2	0	0	0
China vs. Vietnam	1	0	0	0
China vs. Other	1	0	0	0
Vietnam vs. Other	1	0	0	0

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

Table II-7

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	3	0	1	0
U.S. vs. Vietnam	3	0	1	0
U.S. vs. other	3	0	1	0
China vs. Vietnam	2	0	1	0
China vs. Other	2	0	1	0
Vietnam vs. Other	2	0	1	0

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

In addition, U.S. producers and importers 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-8 to II-9, *** described differences between GPPW from different sources as never significant. *** stated that such competition was sometimes significant, noting that it experienced supply constraints obtaining engines in 2021. *** also described such competition as sometimes significant. *** stated that such differences are always significant because commercial quality GPPW are only made in the United States and not available from subject countries.

Table II-8

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	1
U.S. vs. Vietnam	0	0	1	1
U.S. vs. other	0	0	1	1
China vs. Vietnam	0	0	0	1

Country pair	Always	Frequently	Sometimes	Never
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-9

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	1	0	3	1
U.S. vs. Vietnam	1	0	3	1
U.S. vs. other	1	0	3	1
China vs. Vietnam	1	0	1	1
China vs. Other	1	0	1	1
Vietnam vs. Other	1	0	1	1

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

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

The Commission analyzes a number of factors in making injury determinations (see 19 U.S.C. §§ 1677(7)(B) and 1677(7)(C)). Information on the subsidies and dumping margins was presented in Part I of this report and information on the volume and pricing of imports of the subject merchandise is presented in Part IV and Part V. Information on the other factors specified is presented in this section and/or Part VI and (except as noted) is based on the questionnaire responses of two firms that accounted for the majority of U.S. production of GPPW during 2021.

U.S. producers

The Commission issued a U.S. producer questionnaire to nine firms based on information contained in the petition, and staff research. Two firms, FNA Group and TTI, provided usable data on their operations.¹ Staff believes that these responses represent the majority of U.S. production of GPPW.²

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

¹ ***. *** U.S. producer questionnaire response.

² In its petitions, nine firms were identified as possible U.S. producers, but of those firms identified ***.

Additionally, ***. No other firms responded to Staff inquiries. Staff believes these two firms constitute *** of the U.S. production of GPPW during 2021.

Table III-1

GPPW: U.S. producers, their positions on the petition, production locations, and shares of reported production, 2021

Share in percent

Firm	Position on petition	Production location(s)	Share of production
FNA Group	Petitioner	Mesquite, TX Decatur, AR Pleasant Prairie, WI Pleasant Prairie, WI Knoxville, TN	***
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 ***, ***.

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 2019. The two responding U.S. producers indicated in their questionnaires that they had experienced such changes. Table III-3 presents the changes identified by these producers. At the Commission’s preliminary conference, the petitioner indicated that it expanded its GPPW production capacity in 2020 with the plant opening of the 40,000 sq. foot Mesquite, Texas facility.³

³ Conference transcript, p. 17 (G. Alexander).

Table III-3
GPPW: U.S. producers' reported changes in operations, since January 1, 2019

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

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

U.S. production, capacity, and capacity utilization

Table III-4 presents U.S. producers installed and practical capacity and production on the same equipment as subject production, by period. During 2019-21, installed, practical, and in-scope capacity fluctuated but ended were lower in 2021 than in 2019, but overall capacity utilization was higher (in the same three categories). During interim January-September 2022 (“interim 2022”) compared to January-September 2021 (“interim 2021”), capacity utilization was lower for installed, practical, and in-scope production. Installed, practical, and in-scope production increased overall during 2019-21, but were all lower in interim 2022 than in interim 2021. *** installed, practical, and in-scope capacity were all lower during 2019-21, but ***.

***.

**Table III-4
GPPW: U.S. producers' overall installed and practical capacity and production, by period**

Item	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Installed overall	Capacity	***	***	***	***	***
Installed overall	Production	***	***	***	***	***
Installed overall	Utilization	***	***	***	***	***
Practical overall	Capacity	***	***	***	***	***
Practical overall	Production	***	***	***	***	***
Practical overall	Utilization	***	***	***	***	***
Practical scope	Capacity	***	***	***	***	***
Practical scope	Production	***	***	***	***	***
Practical scope	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-5 and figure III-1 present U.S. producers' GPPW production, capacity, and capacity utilization. U.S. producers' average capacity fluctuated but decreased overall by *** percent between 2019 and 2021. U.S. GPPW capacity was *** percent lower during Interim 2022 compared with interim 2021. ***, while *** during the same period.⁴

U.S. producers' production increased overall by *** percent from 2019 to 2021. U.S. production was *** percent lower during interim 2022 compared with interim 2021. *** share of production increased by *** percentage points during 2019-21, but was lower by *** percentage points during interim 2022 than interim 2021.

Capacity utilization fluctuated but overall increased by *** percentage points between 2019 and 2021. Capacity utilization was *** percentage points lower in interim 2022 compared with interim 2021. *** percentage points between 2019 and 2021, while FNA Group's capacity utilization increased by *** percentage points over the same period, ending in 2021 at ***

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

percent. In contrast, TTI’s capacity utilization was *** percentage points higher in interim 2022 than in interim 2021, while FNA’s capacity utilization was lower by *** percentage points.⁵

Table III-6 presents U.S. producers’ narrative responses to practical production constraints. *** reported production restraints for its production of GPPW.

Table III-5
GPPW: Firm-by-firm capacity, by period

Capacity

Capacity in units

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
FNA	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

⁵ *** indicated that its reduction in capacity and production of GPPW was due to Honda's exit from that engine market. ***. *** U.S. producer questionnaire response, section II-3a.

Table III-5 Continued
GPPW: Firm-by-firm production, by period

Production

Production in units

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
FNA	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table III-5 Continued
GPPW: Firm-by-firm capacity utilization, by period

Capacity utilization

Ratio in percent

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
FNA	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued

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

Table III-5 Continued
GPPW: Firm-by-firm share of production, by period

Share of production

Share in percent

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
FNA	***	***	***	***	***
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 "---".

Table III-6
GPPW: U.S. producers' narrative responses regarding practical production constraints, since 2019

Item	Firm name and narrative response on production constraints
Production bottlenecks	***
Existing labor force	***
Supply of material inputs	***
Storage capacity	***

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

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

* * * * *

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

Alternative products

As shown in table III-7, *** of the product produced during 2019-21 and the interim periods by U.S. producers was GPPW. One firm (***) reported producing electric powered pressure washers, which accounted for ***. Total production increased by *** percent during 2019-21, but was lower by *** percent during interim 2022 than during interim 2021.

Table III-7
GPPW: U.S. producers’ overall production on the same equipment as subject production, by period

Quantity in units; ratio and share in percent

Production type	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
GPPW	Quantity	***	***	***	***	***
Electric powered pressure washers	Quantity	***	***	***	***	***
Other products	Quantity	***	***	***	***	***
All out-of-scope production	Quantity	***	***	***	***	***
Total production	Quantity	***	***	***	***	***
GPPW	Share	***	***	***	***	***
Electric powered pressure washers	Share	***	***	***	***	***
Other products	Share	***	***	***	***	***
All out-of-scope production	Share	***	***	***	***	***
Total production	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-8 presents U.S. producers’ U.S. shipments, export shipments, and total shipments. In general, nearly all shipments by the U.S. producers were within the United States; exports shipments consistently accounted for less than three percent of total shipments.⁶

The quantity of U.S. producers’ U.S. shipments of GPPW increased by *** percent from 2019 to 2021. The quantity of U.S. producers’ U.S. shipments was *** percent lower in interim 2022 compared with interim 2021.

The value of U.S. producers’ U.S. shipments increased by *** percent from 2019 to 2021, but was *** percent lower in interim 2022 compared with interim 2021.

The unit value of U.S. producers’ U.S. shipments decreased by *** percent from 2019 to 2021 but was *** percent higher in interim 2022 compared with interim 2021.

There was no internal consumption or transfers to related firms during 2019-21 and interim 2021 and interim 2022.

⁶ Approximately three quarters of the U.S. producers’ export shipments, based on quantity, were *** export shipments to ***. *** U.S. producer questionnaire response, section II-8.

Table III-8
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	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
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.

U.S. producers' inventories

Table III-9 presents U.S. producers' end-of-period inventories and the ratio of these inventories to U.S. producers' production, U.S. shipments, and total shipments. U.S. producers' end-of-period inventories increased by *** percent during 2019-21 but were *** percent higher during interim 2022 compared to interim 2021. ***. *** accounted for approximately *** percent of end-of-period inventories during 2021, while *** accounted for approximately *** percent of end-of-period inventories in interim 2022.

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

Quantity in units; ratio in percent

Item	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
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.

U.S. producers' imports from subject sources

U.S. producers' imports of GPPW are presented in tables III-10 (***) , III-11 (***) , and III-12 (reasons for importing).⁷ ***. ***. Additionally, in 2021, ***.⁸

Table III-10
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	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
U.S. production	Quantity	***	***	***	***	***
Imports from China	Quantity	***	***	***	***	***
Imports from China to U.S. production	Ratio	***	***	***	***	***

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

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

⁷ ***.

⁸ Appendix H 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	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
U.S. production	Quantity	***	***	***	***	***
Imports from China	Quantity	***	***	***	***	***
Imports from Vietnam	Quantity	***	***	***	***	***
Imports from subject sources	Quantity	***	***	***	***	***
Imports from China to U.S. production	Ratio	***	***	***	***	***
Imports from Vietnam to U.S. production	Ratio	***	***	***	***	***
Imports from subject sources to U.S. production	Ratio	***	***	***	***	***

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

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

Table III-12**GPPW: U.S. producers' reasons for importing**

Item	Narrative response on reasons 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 imports from subject sources during 2019-21 and both interim periods.

U.S. employment, wages, and productivity

Table III-13 shows U.S. producers' employment-related data. The number of production and related workers ("PRWs") for U.S. producers increased by *** percent from 2019 to 2021.⁹ PRWs were *** percent lower during interim 2022 than in interim 2021.

Hourly wages fluctuated but increased by *** during 2019-21. Hourly wages were *** percent higher during interim 2022 compared with interim 2021. Productivity decreased by *** percent during 2019-21, but was *** percent higher during interim 2022 compared with interim 2021. Unit labor costs increased *** during 2019-21, but were *** percent lower during interim 2022 compared with interim 2021.

⁹ ***. ***. *** producer questionnaires response, section II-11.

Table III-13
GPPW: U.S. producers' employment related information, by period

Item	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
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.

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 ten 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) from China and Vietnam in 2021 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 2021.

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

³ Subject importer 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, and therefore the *** percent coverage of subject imports during 2021 are likely understated.

⁴ Based on the questionnaire responses from the firms that answered questions II-8a and II-8b of the U.S. importers’ questionnaire, the amount of out-of-scope product entering in under HTS statistical reporting numbers 8424.30.9000 and 8424.90.9040 constitutes *** of U.S. imports entering the United States during 2019-21, January-September 2021, and January-September 2022.

Table IV-1
GPPW: U.S. importers, their headquarters, and share of imports within each source, 2021

Share in percent

Firm	Headquarters	China	Vietnam	Subject sources	Nonsubject sources	All import sources
Balkamp	Plainfield, IN	***	***	***	***	***
FNA	Pleasant Prairie, 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.

U.S. imports

Table IV-2 presents data for U.S. imports of GPPW from China, Vietnam, and all other sources.⁵ The quantity of GPPW imports from the subject countries increased by *** percent during 2019-21, but was *** percent lower in interim 2022 than in interim 2021. Similarly, the value of GPPW imports from the subject countries increased by *** percent from 2019 to 2021, but was *** percent lower in interim 2022 than in interim 2021. Imports of GPPW from China were lower in 2021 than in 2019, declining *** percent between 2020 and 2021, and were higher in interim 2022 than in interim 2021, ending above 2021 levels. In contrast, imports of GPPW from Vietnam were higher in 2021 than in 2019, increasing *** percent between 2020 and 2021, and were lower in interim 2022 than in interim 2021.

Average unit values (“AUVs”) of GPPW from subject sources decreased between 2019 and 2021 by *** percent, and were higher for China and Vietnam in 2021 compared to 2019. Subject AUVs were *** percent higher in interim 2022 than in interim 2021. During 2019-21, there were no reported imports from nonsubject sources.

⁵ Appendix G presents 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 U.S. importer questionnaire responses (specific to out-of-scope imports in questions II-8a and II-8b).

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	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
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	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
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; ratio are U.S. imports to production.

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

Changes in percent

Source	Measure	2019-21	2019-20	2020-21	Jan-Sep 2021-22
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.

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 2019-21, interim 2021, and interim 2022. *** imported from subject sources during 2019-21, 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

Source	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
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: 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 "--". The ratios represent the portion of official U.S. import statistics within the specified source that was imported by U.S. producers and/or their affiliates. These ratios are calculated off of data shown in this table (numerators) and in table IV-2 (denominators).

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

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)).

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 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.

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-6 and figure IV-2 present U.S. producers' and U.S. importers' U.S. shipments of GPPW, by product type during 2021.⁹ 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

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

unit, accounting for *** U.S. shipments in 2021. The majority of U.S. producers' and U.S. importers' U.S. shipments of GPPW were of the residential or consumer grade. ***.

Table IV-6
GPPW: U.S. producers' and U.S. importers' U.S. shipments, by source and product type, 2021

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

Table IV-6--Continued
GPPW: U.S. producers' and U.S. importers' U.S. shipments by source and product type, 2021

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-6--Continued
GPPW: U.S. producers' and U.S. importers' U.S. shipments by source and product type, 2021

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-2
GPPW: U.S. producers' and U.S. importers' U.S. shipments, by source and product type, 2021

* * * * *

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

Geographical markets

Table IV-7 presents U.S. imports of GPPW, by source and border of entry in 2021, by value, based on official Commerce statistics.¹⁰ U.S. imports of subject GPPW from China and Vietnam entered multiple U.S. ports of entry across the nation. The largest shares of GPPW from China and Vietnam combined entered through the Eastern border. The majority of GPPW from China entered through the Western border.

¹⁰ 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-7
GPPW: U.S. imports by source and border of entry, 2021

LPD value in 1,000 dollars

Source	East	North	South	West	All borders
China	137,260	53,758	52,400	173,771	417,189
Vietnam	272,607	30,094	31,101	109,715	443,517
Subject sources	409,867	83,852	83,501	283,486	860,706
Nonsubject sources	70,105	85,622	56,470	27,151	239,347
All import sources	479,971	169,474	139,971	310,637	1,100,054

Table continued

Table IV-7--Continued
GPPW: U.S. imports by source and border of entry, 2021

Share across in percent

Source	East	North	South	West	All borders
China	32.9	12.9	12.6	41.7	100.0
Vietnam	61.5	6.8	7.0	24.7	100.0
Subject sources	47.6	9.7	9.7	32.9	100.0
Nonsubject sources	29.3	35.8	23.6	11.3	100.0
All import sources	43.6	15.4	12.7	28.2	100.0

Table continued

Table IV-7--Continued
GPPW: U.S. imports by source and border of entry, 2021

Share down in percent

Source	East	North	South	West	All borders
China	28.6	31.7	37.4	55.9	37.9
Vietnam	56.8	17.8	22.2	35.3	40.3
Subject sources	85.4	49.5	59.7	91.3	78.2
Nonsubject sources	14.6	50.5	40.3	8.7	21.8
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 January 19, 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-8 and figures IV-3 and IV-6 present monthly data for U.S. imports of GPPW from subject and nonsubject sources between January 2019 and November 2022. Subject imports, based on value, 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 September 2019.

Table IV-8
GPPW: U.S. imports, by source and month

LDP value in 1,000 dollars

Year	Month	China	Vietnam	Subject sources	Nonsubject sources	All import sources
2019	January	38,642	---	38,642	18,915	57,557
2019	February	31,659	---	31,659	14,203	45,863
2019	March	47,185	---	47,185	15,816	63,001
2019	April	57,745	---	57,745	19,617	77,363
2019	May	44,103	---	44,103	18,371	62,473
2019	June	34,829	---	34,829	16,614	51,444
2019	July	28,892	---	28,892	22,901	51,793
2019	August	17,494	---	17,494	17,789	35,283
2019	September	14,719	137	14,856	13,784	28,640
2019	October	12,552	599	13,152	15,139	28,291
2019	November	17,207	6,754	23,961	18,447	42,407
2019	December	14,057	10,526	24,582	15,915	40,497
2020	January	27,015	16,129	43,143	20,378	63,521
2020	February	35,199	6,692	41,891	19,690	61,582
2020	March	22,554	7,331	29,886	17,154	47,039
2020	April	43,487	5,936	49,422	15,295	64,717
2020	May	57,896	11,681	69,576	13,634	83,210
2020	June	52,209	15,327	67,536	14,061	81,597
2020	July	57,430	14,110	71,540	13,991	85,531
2020	August	32,858	14,466	47,324	22,040	69,364
2020	September	26,244	24,606	50,850	14,295	65,146
2020	October	18,331	17,198	35,528	19,547	55,075
2020	November	18,936	9,887	28,823	19,273	48,096
2020	December	27,645	24,988	52,634	16,824	69,458

Table continued

Table IV-8 Continued
GPPW: U.S. imports, by source and month

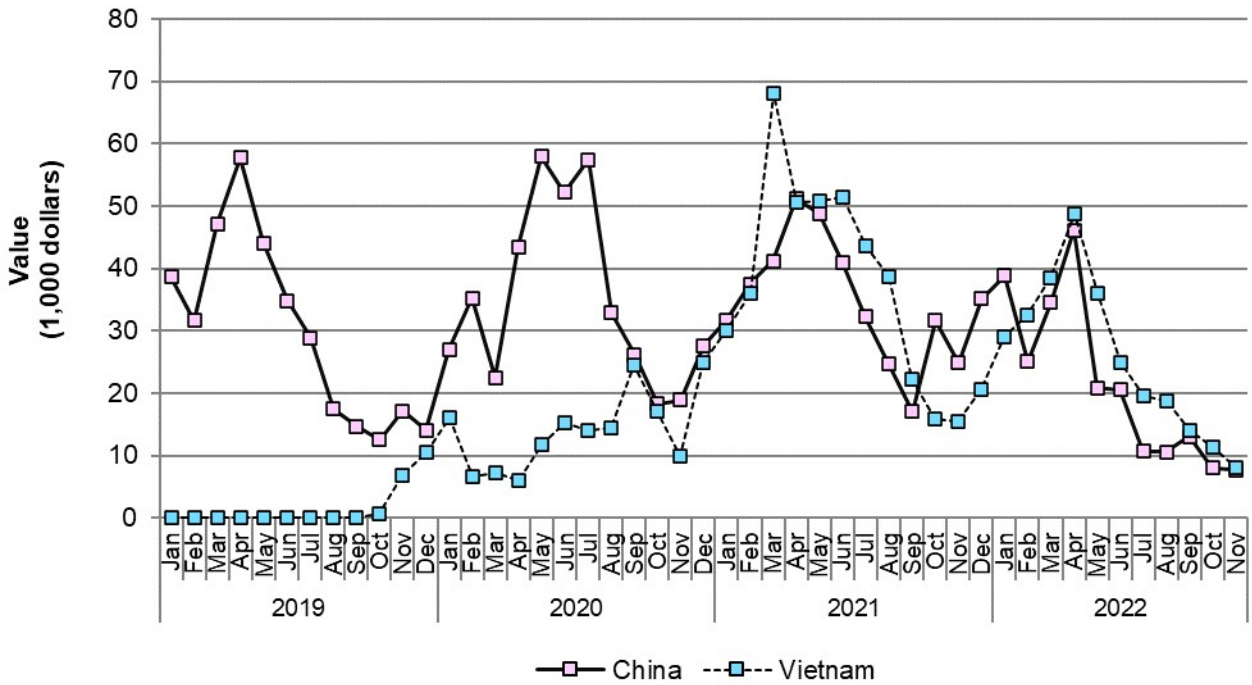
LDP value in 1,000 dollars

Year	Month	China	Vietnam	Subject sources	Nonsubject sources	All import sources
2021	January	31,803	30,043	61,846	15,718	77,564
2021	February	37,482	35,954	73,436	15,131	88,567
2021	March	41,209	68,048	109,258	22,340	131,597
2021	April	51,202	50,543	101,745	21,545	123,290
2021	May	48,836	50,869	99,705	25,928	125,633
2021	June	40,948	51,353	92,301	21,196	113,497
2021	July	32,230	43,693	75,923	22,616	98,539
2021	August	24,722	38,769	63,491	19,396	82,887
2021	September	17,081	22,226	39,307	16,472	55,779
2021	October	31,665	15,929	47,594	17,228	64,822
2021	November	24,882	15,542	40,424	20,999	61,422
2021	December	35,129	20,546	55,675	20,779	76,454
2022	January	38,863	29,059	67,922	14,638	82,560
2022	February	25,066	32,561	57,628	13,868	71,495
2022	March	34,492	38,522	73,014	18,675	91,689
2022	April	46,095	48,670	94,765	17,048	111,813
2022	May	20,866	36,106	56,972	17,627	74,600
2022	June	20,582	24,885	45,466	21,479	66,945
2022	July	10,725	19,486	30,211	21,585	51,796
2022	August	10,605	18,810	29,415	16,853	46,268
2022	September	13,075	14,047	27,122	18,165	45,287
2022	October	8,047	11,458	19,504	19,386	38,890
2022	November	7,754	7,988	15,743	18,490	34,232

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 January 19, 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 "---".

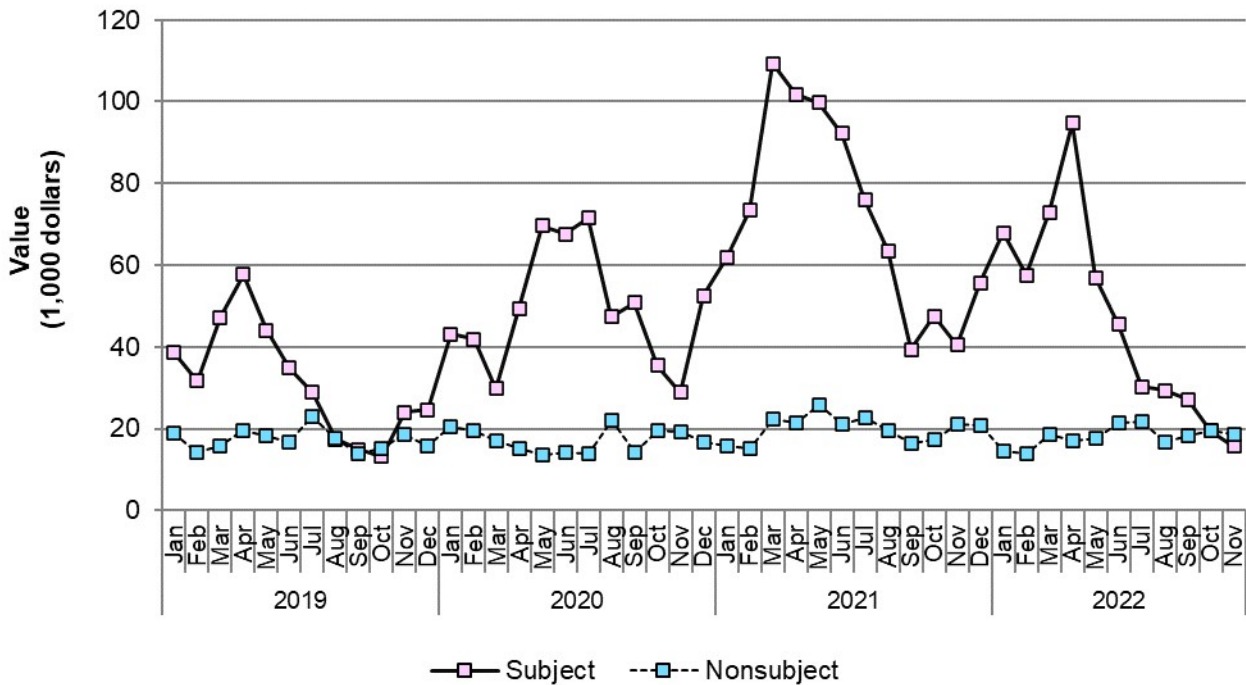
Figure IV-3
GPPW: U.S. imports, by individual subject sources, by value and month



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 January 19, 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 "---".

Figure IV-4
GPPW: U.S. imports, by aggregated subject sources, by value and month



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 January 19, 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 "---".

Apparent U.S. consumption and market shares

Quantity

Table IV-9 presents data on apparent U.S. consumption and U.S. market shares by quantity for GPPW during 2019-21, interim 2021, and interim 2022. The quantity of apparent U.S. consumption increased by *** percent overall during 2019-21. Apparent U.S. consumption was *** percent lower in interim 2022 than in interim 2021. Additionally, market shares by quantity for GPPW for U.S. producers were lower by *** percentage points during 2019-21, and were *** percentage points higher during interim 2022 compared to interim 2021.

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

Quantity in units; shares in percent

Source	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
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	***	***	***	***	***

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-5
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-10 and figure IV-6 presents data on apparent U.S. consumption and U.S. market shares by value for GPPW during 2019-21, interim 2021, and interim 2022. The value of apparent U.S. consumption increased by *** percent overall during 2019-21. Apparent U.S. consumption was *** percent lower in interim 2022 than in interim 2021. Additionally, market shares by value for GPPW for U.S. producers were lower by *** percentage points during 2019-21, and were *** percent lower during interim 2022 compared to interim 2021.

Table IV-10
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	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
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.

Figure IV-6
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-11(residential) and IV-12 (commercial) presents data on the markets for complete units of GPPW for residential and commercial uses during 2019-21, January-September 2021, and January-September 2022.

Table IV-11
GPPW: Market for complete residential units, by source and period

Quantity in units; shares and ratios in percent

Source	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
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 "--".

Table IV-12
GPPW: Market for complete commercial units, by source and period

Quantity in units; shares and ratios in percent

Source	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
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 "--".

Part V: Pricing data

Factors affecting prices

Raw material and component costs

Raw materials (including components such as engines and pumps) comprised approximately *** percent of COGS in 2019 and 2020, before decreasing somewhat to approximately *** percent in 2021 and then decreasing to approximately *** percent in January-September 2022.

GPPW are comprised of an internal combustion engine with a power take-off shaft, pumps, hoses, nozzles, and spray guns, 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 Group obtains its engines from various countries (including the United States) and its pumps from China and Italy. However, FNA Group produces its own hoses.³

At the conference, importer MWE described GPPW raw material and component costs as fluctuating over 2020 to 2022, peaking in early 2022 and decreasing at least 15 percent since then.⁴ In questionnaires, *** indicated that raw material costs had increased, while *** indicated that raw material costs had fluctuated.⁵

Transportation costs to the U.S. market

Transportation costs for GPPW shipped from subject countries to the United States averaged 7.5 percent for China and 3.1 percent for Vietnam during 2021. These estimates were derived from official import data and represent the transportation and other charges on imports.⁶

¹ Conference transcript, pp. 15-16 (G. Alexander).

² Conference transcript, p. 19 (C. Alexander).

³ Conference transcript, p. 37 (C. Alexander).

⁴ Conference transcript, pp. 154-155 (Cline).

⁵ Additionally, FNA Group described numerous specific raw material costs (including those of ***) as increasing during January 2019-September 2022. Petitioner's postconference brief, exhibit 1, pp. 10-11.

⁶ The estimated transportation costs were obtained by subtracting the customs value from the c.i.f. value of the imports for 2021 and then dividing by the customs value based on the HTS statistical reporting numbers 8424.30.9000 and 8424.90.9040.

The petitioner's economist described international transportation costs as falling as bottlenecks are reduced.⁷

U.S. inland transportation costs

*** reported that they typically arrange transportation to their customers, while ***, reported that their purchasers typically arrange transportation. *** reported that *** U.S. inland transportation costs were *** percent,⁸ while two importers reported costs of one to five percent. *** reported that its U.S. inland transportation costs were *** percent.⁹

Pricing practices

Pricing methods

U.S. producers and importers reported setting prices using transaction-by-transaction negotiations and contracts, and importers (***) also used price lists (table V-1). Other methods used included negotiations based on company-specific programs or financial targets.

⁷ Conference transcript, p. 34 (Szamosszegi).

⁸ ***.

⁹ Five importers reported shipping from a U.S. storage facility and one reported shipping from its point of importation.

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

Method	U.S. producers	Importers
Transaction-by-transaction	1	2
Contract	1	1
Set price list	0	3
Other	1	3
Responding firms	2	6

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

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

U.S. producers reported selling most of their GPPW under ***, although they also had ***. (***) Subject importers sold almost entirely *** (table V-2).

Table V-2**GPPW: U.S. producers' and importers' shares of commercial U.S. shipments by type of sale, 2021**

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: 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 "---".

Note: ***.

***.

Sales terms and discounts

One U.S. producer (***) and three importers typically quote prices on an f.o.b. basis, while one U.S. producer (***) and two importers typically quote prices on a delivered basis.¹⁰ *** offer both quantity and total volume discounts, while importers *** have no discount policies. Two U.S. producers and five importers offer other discounts, including those related to payment terms, marketing, direct coupons, special promotions, and/or damage.

¹⁰ Importer *** indicated it did both types of quotes.

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 2019-September 2022.

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”).

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.

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.

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.

At the conference, the petitioner stated that GPPW with axial pumps (such as products 1 and 2) are generally for the consumer market, while GPPW with triplex pumps (such as products 3 and 4) are generally for professional products.¹¹ Two U.S. producers (***) and four importers (***) provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.¹² Pricing data reported by these firms accounted for approximately *** percent of U.S. producers’ U.S. commercial shipments of GPPW,¹³ *** percent of U.S. commercial shipments of subject imports from China in 2021, and *** percent of U.S. commercial shipments of subject imports from Vietnam in 2021.¹⁴ (Such coverage for China was *** percent in 2019 and *** percent in 2020.)

¹¹ Conference transcript, p. 67 (C. Alexander). Importer MWE also described products 1 and 2 as products for consumers, while products 3 and 4 are products for professional users. Conference transcript, p. 173 (Barleycorn).

¹² 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. ***.

¹³ ***.

¹⁴ Pricing coverage is based on U.S. shipments reported in questionnaires.

Price data for products 1-4 are presented in tables V-3 to V-6 and figures V-1 to V-4. Appendix J 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 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
2019 Q1	***	***	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***	***	***
2021 Q2	***	***	***	***	***	***	***	***
2021 Q3	***	***	***	***	***	***	***	***
2021 Q4	***	***	***	***	***	***	***	***
2022 Q1	***	***	***	***	***	***	***	***
2022 Q2	***	***	***	***	***	***	***	***
2023 Q3	***	***	***	***	***	***	***	***

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 V-1
GPPW: Weighted-average f.o.b. prices and quantities of domestic and imported product 1, by source and quarter

Price of product 1

* * * * *

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

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").

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

Price in dollars per 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
2019 Q1	***	***	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***	***	***
2021 Q2	***	***	***	***	***	***	***	***
2021 Q3	***	***	***	***	***	***	***	***
2021 Q4	***	***	***	***	***	***	***	***
2022 Q1	***	***	***	***	***	***	***	***
2022 Q2	***	***	***	***	***	***	***	***
2023 Q3	***	***	***	***	***	***	***	***

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 V-2

GPPW: Weighted-average f.o.b. prices and quantities of domestic and imported product 2, by source and quarter

Price of product 2

* * * * *

Volume of product 2

* * * * *

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

Note: Product 2: 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.

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

Price in dollars per 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
2019 Q1	***	***	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***	***	***
2021 Q2	***	***	***	***	***	***	***	***
2021 Q3	***	***	***	***	***	***	***	***
2021 Q4	***	***	***	***	***	***	***	***
2022 Q1	***	***	***	***	***	***	***	***
2022 Q2	***	***	***	***	***	***	***	***
2023 Q3	***	***	***	***	***	***	***	***

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 V-3

GPPW: Weighted-average f.o.b. prices and quantities of domestic and imported product 3, by source and quarter

Price of product 3

* * * * *

Volume of product 3

* * * * *

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

Note: Product 3: 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.

Table V-6**GPPW: Weighted-average f.o.b. prices and quantities of domestic and imported product 4 and margins of underselling/(overselling), by source and quarter**

Price in dollars per 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
2019 Q1	***	***	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***	***	***
2021 Q2	***	***	***	***	***	***	***	***
2021 Q3	***	***	***	***	***	***	***	***
2021 Q4	***	***	***	***	***	***	***	***
2022 Q1	***	***	***	***	***	***	***	***
2022 Q2	***	***	***	***	***	***	***	***
2023 Q3	***	***	***	***	***	***	***	***

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 V-4

GPPW: Weighted-average f.o.b. prices and quantities of domestic and imported product 4, by source and quarter

Price of product 4

* * * * *

Volume of product 4

* * * * *

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

Note: Product 4: 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.

Price trends

In general, prices increased during January 2019-September 2022. Table V-7 summarizes the price trends, by country and by product. As shown in the table, domestic price increases ranged from *** to *** percent during January 2019-September 2022 while the only import price change over the entire period was a *** percent increase in Chinese prices for product ***. Corresponding trends for Vietnam could not be calculated as firms reported data beginning in 2020.

Table V-7
GPPW: Summary of price data, by product and source, January 2019-September 2022

Quantity 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	Vietnam	***	***	***	***	***	***	***
Product 1	China	***	***	***	***	***	***	***
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: Percent change column is percentage change from the first quarter 2019 to September 2022.

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 25 of 43 instances (***) units); margins of underselling ranged from *** to *** percent. In the remaining 18 instances (***) units), prices for product from China were between *** and *** percent above prices for the domestic product.

Prices for product imported from Vietnam were below those for U.S.-produced product in 23 of 26 instances (***) units); margins of underselling ranged from *** to *** percent. In the remaining 3 instances (***) units), prices for product from Vietnam were between *** and *** percent above prices for the domestic product.

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	17	***	***	***	***
Product 2	Underselling	16	***	***	***	***
Product 3	Underselling	15	***	***	***	***
Product 4	Underselling	---	***	***	***	***
Total, all products	Underselling	48	928,067	23.4	0.5	50.9
Product 1	Overselling	1	***	***	***	***
Product 2	Overselling	9	***	***	***	***
Product 3	Overselling	---	***	***	***	***
Product 4	Overselling	11	***	***	***	***
Total, all products	Overselling	21	156,083	(39.1)	(2.4)	(209.0)

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	25	***	***	***	***
Vietnam	Underselling	23	***	***	***	***
Total, all subject sources	Underselling	48	928,067	23.4	0.5	50.9
China	Overselling	18	***	***	***	***
Vietnam	Overselling	3	***	***	***	***
Total, all subject sources	Overselling	21	156,083	(39.1)	(2.4)	(209.0)

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.

Other price information

At the conference, the petitioner stated that some subject imports have sold at retail for hundreds of dollars per unit less than FNA Group’s GPPW.¹⁵ Importer MWE described FNA Group as needing to sell its products at the same price in both brick-and-mortar retail outlets as at online outlets because brick-and-mortar retailers demand this parity.¹⁶

Lost sales and lost revenue

*** reported that ***, while ***. *** submitted lost sales and lost revenue allegations. *** identified *** firms with which they lost sales or revenue (including 7 lost sales allegations and 12 lost revenue allegations).

Staff contacted *** purchasers and received responses from ***.¹⁷ Responding purchasers reported purchasing *** units of GPPW (approximately *** percent of U.S. apparent consumption of GPPW) during January 2019-September 2022 (table V-10).

¹⁵ Conference transcript, p. 27 (Szamoszegi) and p. 97 (G. Alexander). MWE stated that advertised prices for its products and petitioner’s products show comparable prices. MWE’s postconference brief, pp. 9-10 and exhibit 3.

¹⁶ Conference transcript, p. 129 (Barleycorn). FNA Group stated that prices at brick-and-mortar outlets and online do not have to be the same. Petitioner’s postconference brief, pp. 32-34.

¹⁷ ***.

As shown in tables V-11 and V-12, of the *** responding purchasers, *** reported that, since 2019, it had ***. (***). *** reported that it had done so. It added that subject imports were lower priced than U.S.-produced product. However, it stated that ***.

Of the *** responding purchasers, *** reported that U.S. producers had reduced prices in order to compete with lower-priced imports from subject countries.

Table V-10
GPPW: Purchasers' reported purchases and imports, by firm and source

Quantity in units, share in percent

Purchaser	Domestic quantity	Subject quantity	All other quantity	Change in domestic share	Change in subject country share
***	***	***	***	***	***
***	***	***	***	***	***
All firms	***	***	***	***	***

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

Note: All other includes all other sources and unknown sources. Change is the percentage point change in the share of the firm's total purchases of domestic and/or subject country imports between first and last years.

Table V-11
GPPW: Purchasers' responses to purchasing subject imports instead of domestic product, by firm

Count in number of firms reporting. Quantity in units

Purchaser	Purchased subject imports instead of domestic	Imports priced lower	Choice based on price	Quantity	Explanation
***	***	***	***	***	***
***	***	***	***	***	***
All firms	***	***	***	***	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	Count of purchasers reporting subject instead of domestic	Count of purchasers reported that imports were priced lower	Count of purchasers reporting that price was a primary reason for shift	Quantity
China	***	***	***	***
Vietnam	***	***	***	***
Subject sources	***	***	***	***

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

Changes in purchasing patterns

Purchasers were also asked about changes in their purchasing patterns from different countries since January 1, 2019 (table II-9).^{18 ***}.

Table V-15

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

Source of purchases	Decreased	Increased	Constant	Fluctuated	Did not purchase
United States	0	1	0	0	1
China	2	0	0	0	1
Vietnam	0	2	0	0	1
Nonsubject sources	0	0	1	0	1
Sources unknown	0	0	0	0	2

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

^{18 ***}.

Part VI: Financial experience of U.S. producers

Background¹

FNA and TTI provided usable financial results on their GPPW operations. *** U.S. producers reported financial data on a calendar year basis and on the basis of GAAP.^{2 3}

Figure VI-1 presents each responding firm's share of the total reported net sales quantity in 2021.

¹ The following abbreviations may be used in the tables and/or text of this section: generally accepted accounting principles ("GAAP"), 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 ***. U.S. producers' questionnaire response, section II-3e.

³ ***. Petition, exh. I-10 and staff telephone interview with ***, January 26, 2023.

Figure VI-1
GPPW: Share of net sales quantity in 2021, by firm

* * * * *

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

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: Results of operations of U.S. producers, by item and period

Quantity in units; value in 1,000 dollars; ratios in percent

Item	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
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 on next page.

Table VI-1 Continued
GPPW: Results of operations of U.S. producers, by item and period

Shares in percent; unit values in dollars per unit; count in number of firms reporting

Item	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
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.

Table VI-2
GPPW: Changes in AUVs between comparison periods

Changes in percent

Item	2019-21	2019-20	2020-21	Jan-Sep 2021-22
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	2019-21	2019-20	2020-21	Jan-Sep 2021-22
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.

Table VI-3
GPPW: Firm-by-firm total net sales quantity, by period

Net sales quantity

Quantity in units

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
FNA	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued
GPPW: Firm-by-firm total net sales value, by period

Net sales value

Value in 1,000 dollars

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
FNA	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued
GPPW: Firm-by-firm cost of goods sold (“COGS”), by period

COGS

Value in 1,000 dollars

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
FNA	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued
GPPW: Firm-by-firm gross profit or (loss), by period

Gross profit or (loss)

Value in 1,000 dollars

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
FNA	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued**GPPW: Firm-by-firm selling, general, and administrative (“SG&A”) expenses, by period****SG&A expenses**

Value in 1,000 dollars

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
FNA	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued**GPPW: Firm-by-firm operating income or (loss), by period****Operating income or (loss)**

Value in 1,000 dollars

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
FNA	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued**GPPW: Firm-by-firm net income or (loss), by period****Net income or (loss)**

Value in 1,000 dollars

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
FNA	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued**GPPW: Firm-by-firm ratio of COGS to net sales value, by period****COGS to net sales ratio**

Ratios in percent

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
FNA	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued

GPPW: Firm-by-firm ratio of gross profit or (loss) to net sales value, by period

Gross profit or (loss) to net sales ratio

Ratios in percent

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
FNA	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued

GPPW: Firm-by-firm ratio of SG&A expenses to net sales value, by period

SG&A expenses to net sales ratio

Ratios in percent

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
FNA	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued

GPPW: Firm-by-firm ratio of operating income or (loss) to net sales value, by period

Operating income or (loss) to net sales ratio

Ratios in percent

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
FNA	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued

GPPW: Firm-by-firm ratio of net income or (loss) to net sales value, by period

Net income or (loss) to net sales ratio

Ratios in percent

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
FNA	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued
GPPW: Firm-by-firm unit net sales value, by period

Unit net sales value

Unit values in dollars per unit

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
FNA	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued
GPPW: Firm-by-firm unit raw material cost, by period

Unit raw material costs

Unit values in dollars per unit

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
FNA	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued
GPPW: Firm-by-firm unit direct labor cost, by period

Unit direct labor costs

Unit values in dollars per unit

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
FNA	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued
GPPW: Firm-by-firm unit other factory costs, by period

Unit other factory costs

Unit values in dollars per unit

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
FNA	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued
GPPW: Firm-by-firm unit COGS, by period

Unit COGS

Unit values in dollars per unit

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
FNA	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued
GPPW: Firm-by-firm unit gross profit or (loss), by period

Unit gross profit or (loss)

Unit values in dollars per unit

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
FNA	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued
GPPW: Firm-by-firm unit SG&A expenses, by period

Unit SG&A expenses

Unit values in dollars per unit

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
FNA	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued
GPPW: Firm-by-firm unit operating income or (loss), by period

Unit operating income or (loss)

Unit values in dollars per unit

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
FNA	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

Table continued.

Table VI-3 Continued
GPPW: Firm-by-firm unit net income or (loss), by period

Unit net income or (loss)

Unit values in dollars per unit

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
FNA	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

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

Net sales⁴

As shown in table VI-1, total net sales quantity increased by *** percent from 2019 to 2020 and 2020 to 2021, respectively, with an overall increase of *** percent from 2019 to 2021 (***). Total net sales quantity was lower in interim 2022 compared with interim 2021. Total net sales value followed the same trends as quantity and increased by *** percent from 2019 to 2021, and was lower in interim 2022 compared with interim 2021. As shown in table VI-3, *** U.S. producers reported an increase in sales volumes and revenues from 2019 to 2020, but in 2021 *** reported an increase while *** reported a decrease. *** U.S. producers reported lower sales quantities and values in interim 2022 compared with interim 2021.^{5 6} On an average per-unit basis, sales value decreased irregularly from \$*** in 2019 to \$*** in 2021, and was slightly higher in interim 2022 compared with interim 2021.⁷ On a firm-by-firm basis, unit sales values varied between the two U.S. producers due to the differences in product mix, and also varied in directional trends from 2019 to 2021, and in the interim periods.

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 2021.

Raw material costs the *** component of COGS, increased by *** percent in 2020, then declined by *** percent in 2021, with an overall increase of *** from 2019 to 2021 (largely reflecting the trends of sales volumes). Raw material costs were lower in interim 2022 compared with interim 2021. On an average per-unit basis, raw material costs decreased from \$*** in 2019 to \$*** in 2021, and were lower in interim 2022 compared with interim 2021. As

⁴ The report includes ***.

⁵ ***. Email from ***, January 24, 2023.

⁶ ***. Email from ***, January 24, 2023.

⁷ ***. Email from ***, January 24, 2023.

shown in table VI-3, *** reported a continuous decline in its per-unit costs of raw materials from 2019 to 2021, and lower values in interim 2022 compared with interim 2021, while ***'s raw materials unit values declined from 2019 to 2020 before increasing in 2021, and were higher in interim 2022 compared with interim 2021.⁸ As a ratio to net sales, raw material costs fluctuated between *** and *** percent from 2019 to 2021, and were lower in interim 2022 compared with interim 2021.

Table VI-4 presents details on specific raw material inputs as a share of total material costs in 2021. Engines and pumps accounted for the largest share of raw material costs accounting for *** percent, respectively.

⁸ ***. Petitioner's postconference brief, pp. 5-10.

**Table VI-4
GPPW: Raw material costs in 2021**

Value in 1,000 dollars; share of value in percent

Item	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 and rubber.

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, overall increased by *** percent from 2019 to 2021 (***), and were lower in interim 2022 compared with interim 2021. On an average per-unit basis, direct labor costs fluctuated within a narrow range of \$*** and \$*** from 2019 to 2021, and were higher in interim 2022 compared with interim 2021. As a ratio to net sales, direct labor costs also fluctuated within a narrow range of *** percent from 2019 to 2021, and were slightly higher in interim 2022 compared with interim 2021.

Other factory costs, which represented the *** component of COGS, overall increased by *** percent from 2019 to 2021, and were higher in interim 2022 compared with interim 2021. On an average per-unit basis, other factory costs increased from \$*** in 2019 to \$*** in 2021, and were higher in interim 2022 compared with interim 2021. As a ratio to net sales, other factory costs, increased from *** percent in 2019 to *** percent in 2021, and were higher in interim 2022 compared with interim 2021.⁹

Total COGS increased by *** percent from 2019 to 2021, and were lower in interim 2022 compared with interim 2021. On an average per-unit basis, total COGS decreased from \$*** in 2019 to \$*** in 2020, then increased to \$*** in 2021, and were higher in interim 2022 compared with interim 2021.¹⁰ As a ratio to net sales, total COGS increased from *** percent in 2019 to *** percent in 2021, and were higher in interim 2022 compared with interim 2021.

⁹ ***. Petitioner’s postconference brief, p. 10. and email from ***, January 30, 2022

¹⁰ The higher unit values of COGS in interim 2022 compared with interim 2021, reflect the large decline in sales volume during that period. Even though total COGS declined in interim 2022 compared

(continued...)

As shown in table VI-1, gross profit increased from \$*** in 2019 to \$*** in 2020 and \$*** in 2021, and was lower in interim 2022 at \$*** compared with \$*** in interim 2021. As a ratio to net sales, gross profit declined from *** percent in 2019 to *** percent in 2021, and was lower in interim 2022 compared with in interim 2021. As shown in table VI-3, results between the two U.S. producers varied widely, while *** reported increasing gross profits during the full years ***'s gross profits continuously declined during the same periods, and *** firms reported lower gross profits in interim 2022 compared with interim 2021.¹¹

SG&A expenses and operating income or loss

U.S. producers' SG&A expenses increased by *** percent in 2020 then declined by *** percent in 2021, and were lower in interim 2022 compared with interim 2021. As shown in table VI-3, ***'s SG&A expenses continuously increased from 2019 to 2021, while ***'s SG&A expenses increased from 2019 to 2020 then declined in 2021. *** U.S. producers reported lower SG&A expenses in interim 2022 compared with interim 2021. The corresponding SG&A expense ratio (total SG&A expenses divided by total sales value) decreased from *** percent in 2019 to *** percent in 2021, and was the same in interim 2022 compared with interim 2021.

U.S. producers operating income increased from \$*** in 2019 to \$*** in 2020 and \$*** in 2021, and was lower in interim 2022 at \$*** compared with 2021 at \$***. As a ratio to net sales, operating income decreased from *** percent in 2019 to *** percent in 2020 before increasing to *** percent in 2021, and was lower in interim 2022 compared with interim 2021. Similar to gross profit, the *** U.S. producers reported different trends for operating profits. ***'s operating profits increased overall from 2019 to 2021, while those of *** decreased during the same periods. *** firms reported lower operating profits in interim 2022 compared with interim 2021.¹²

All other expenses and net income or loss

Classified below the operating income level are interest expenses, other expenses, and other income. These items were *** reported by ***. Total interest expenses overall decreased

(...continued)

with interim 2021, the decline was not as steep as the decline in net sales quantity during the same period, which caused total COGS to increase on a per-unit basis.

¹¹ ***. Petition, exh. I-10 (Note -- data presented in this exhibit was prior to the correction of certain errors in reported revenues and COGS).

¹² ***. Petition, exh. I-10. (Note -- data presented in this exhibit was prior to the correction of certain errors in reported revenues and COGS).

from 2019 to 2021 (***) , and were higher in interim 2022 compared with interim 2021; ***. Other expenses (***) increased from 2019 to 2021, and were lower in interim 2022 compared with interim 2021. Other income increased from 2019 to 2021, and none was reported in interim 2022 compared with interim 2021: ***.¹³ Other income in 2021 and interim 2021 offset interest expense and other expenses and increased net income.

Net income increased from \$*** in 2019 to \$*** in 2020 and \$*** in 2021, and was lower in interim 2022 at \$*** compared with interim 2021 at \$***. As a ratio to net sales, net income increased from *** percent in 2019 to *** percent in 2021, and was lower in interim 2022 compared with interim 2021. As shown in table VI-3, the *** U.S. producers reported different trends in net income. ***'net income increased from 2019 to 2021, while that of *** decreased during the same time period. *** firms reported lower net income in interim 2022 compared with interim 2021.¹⁴

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 increased by *** percent from 2019 to 2020 before declining by *** percent in 2021, and were *** percent lower in interim 2022 compared with interim 2021.^{15 16} R&D expenses increased by *** percent from 2019 to 2020, then declined by *** percent in 2021, and were *** percent lower in interim 2022 compared with interim 2021.

Table VI-5
GPPW: U.S. producers' capital expenditures, by firm and period

Value in 1,000 dollars

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
FNA	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

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

¹³ Emails from ***, January 24, and January 30, 2023.

¹⁴ A variance analysis is not presented due to ***.

¹⁵ ***. Email from ***, January 24, 2023.

¹⁶ ***. Email from ***, January 25, 2023.

Table VI-6**GPPW: Narrative descriptions of U.S. producers' capital expenditures, by firm**

Firm	Narrative on capital expenditures
FNA	***
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	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
FNA	***	***	***	***	***
TTI	***	***	***	***	***
All firms	***	***	***	***	***

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

Table VI-8**GPPW: Narrative descriptions of U.S. producers' R&D expenses, by firm**

Firm	Narrative on R&D expenses
FNA	***
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.¹⁷ 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 increased overall from 2019 to 2021. The calculated ROA decreased from *** percent in 2019 to *** percent in 2021.

¹⁷ 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-9
GPPW: U.S. producers' total net assets, by firm and period

Value in 1,000 dollars

Firm	2019	2020	2021
FNA	***	***	***
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	2019	2020	2021
FNA	***	***	***
TTI	***	***	***
All firms	***	***	***

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

Table VI-11
GPPW: Narrative descriptions of U.S. producers' total net assets, by firm

Firm	Narrative on assets
FNA	***
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-12 presents the number of firms reporting an impact in each category and table VI-13 provides the U.S. producers' narrative responses.

Table VI-12**GPPW: Count of firms indicating actual and anticipated negative effects of imports from subject sources on investment, growth, and development since January 1, 2019, by effect**

Number of firms reporting

Effect	Category	Count
Cancellation, postponement, or rejection of expansion projects	Investment	0
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	1
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-13**GPPW: Narratives relating to actual and anticipated negative effects of imports on investment, growth, and development, since January 1, 2019**

Item	Firm name and narrative on impact of imports
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 two firms: Techtronic Industries (Dongguan) Co., Ltd., (“Techtronic China”) and Chongqing Dajiang Power Equipment Co., Ltd., (“Ducar 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 2021. 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, 2021

Quantity in units of GPPW; share in percent

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	***	***	***	***	***	***
Techtronic China	***	***	***	***	***	***
All firms	***	***	***	***	***	***

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

At the Commission’s preliminary conference, MWE Investments stated that due to the imposition of Section 301 Tariffs on China, MWE Investments relocated its gas generator production line to Vietnam in 2019. MWE Investments further noted its GPPW production line remained in China until the expiration of the tariff exclusion in August 2020. MWE Investments

³ These firms were identified through a review of information submitted in the petition and presented in third-party sources.

⁴ *** estimated that its 2021 production of GPPW in China was approximately *** of total production in China. *** did not provide an estimate of its 2021 share of GPPW production in China, but Staff estimates that ***. *** foreign producer questionnaire response, section II-7b.

then transferred its GPPW production line to its existing manufacturing facility (generators) in Vietnam.⁵

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 2019. One of two producers indicated in their questionnaire that they had experienced such changes. Table VII-2 presents the changes identified by this producer.

Table VII-2
GPPW: Reported changes in operations in China since January 1, 2019, by firm

Item	Firm name and accompanying narrative response
Plant openings	***
Relocations	***

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

Operations on GPPW

Table VII-3 presents information on the GPPW operations of the responding producers and exporters in China. During 2019-21, the Chinese producers' capacity decreased by *** percent, and was lower during interim 2022 than during interim 2021 by *** percent. During 2019-21, the Chinese producers' production decreased by *** percent overall, and was lower by *** percent during interim 2022 than during interim 2021. During 2019-21, the Chinese producers' end-of-period inventories fluctuated but ultimately decreased by *** percent, and was higher during interim 2022 than during interim 2021 by *** percent. The Chinese producers' reported *** internal consumption 2019-21, and during the interim periods. Home market shipments were *** of total shipments based on quantity during 2019-21, and during the interim periods. During 2019-21, exports to the United States decreased by *** percent, and were lower by *** percent in interim 2022 than during interim 2021.

The Chinese producers' capacity utilization decreased by *** percentage points during 2019-21, and were higher during interim 2022 than during interim 2021 by *** percentage points. Exports to the United States as a share of total shipments decreased by *** percentage points during 2019-21, but were higher by *** percentage points during interim 2022 than during interim 2021. Inventories as a ratio to production and to total shipments both increased during 2019-21, and were higher during interim 2022 than during interim 2021.

⁵ Conference transcript, p. 130 (Barleycorn).

Chinese producers' 2022 and 2023 capacity and production ***. The Chinese producers' exports to all other markets ***.

Table VII-3
GPPW: Data on industry in China, by period

Quantity in units of GPPW; ratio and share in percent

Item	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022	Pro-jection 2022	Pro-jection 2023
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-3 Continued
GPPW: Data on industry in China, by period

Shares and ratio in percent

Item	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022	Pro-jection 2022	Pro-jection 2023
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 "---".

Table VII-4 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 increased during 2019-2021, but were lower during interim 2022 than during interim 2021. Practical in-scope capacity and production was lower during 2019-2021 and during the interim periods of 2021 and 2022. *** accounted for at least ***, during 2019-21, and during interim 2021 and interim 2022.

Table VII-5 presents the producers' in China's narrative responses regarding practical production constraints.

Table VII-4
GPPW: Producers in China installed and practical capacity and production on the same equipment as subject production, by period

Item	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Installed overall	Capacity	***	***	***	***	***
Installed overall	Production	***	***	***	***	***
Installed overall	Utilization	***	***	***	***	***
Practical overall	Capacity	***	***	***	***	***
Practical overall	Production	***	***	***	***	***
Practical overall	Utilization	***	***	***	***	***
Practical scope	Capacity	***	***	***	***	***
Practical scope	Production	***	***	***	***	***
Practical scope	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-5
GPPW: Foreign producers' narrative response regarding practical production constraints

Item	Firm name and narrative response on production constraints
Existing labor force	***
Supply of material inputs	***

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

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; ratio and share in percent

Item	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
GPPW	Quantity	***	***	***	***	***
Electric powered pressure washers	Quantity	***	***	***	***	***
Other products	Quantity	***	***	***	***	***
All out-of-scope production	Quantity	***	***	***	***	***
Total production	Quantity	***	***	***	***	***
GPPW	Share	***	***	***	***	***
Electric powered pressure washers	Share	***	***	***	***	***
Other products	Share	***	***	***	***	***
All out-of-scope production	Share	***	***	***	***	***
Total production	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 2021, 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 28.0 percent, followed by Vietnam and Canada, accounting for 5.8 percent and 3.8 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

Value in 1,000 dollars; share in percent

Destination market	Measure	2019	2020	2021
United States	Value	426,515	542,085	588,351
Vietnam	Value	51,716	97,291	120,981
Canada	Value	39,033	46,430	79,765
Italy	Value	48,186	44,593	72,275
United Kingdom	Value	39,205	50,365	71,451
India	Value	37,624	47,913	65,749
Germany	Value	44,650	42,311	59,361
Australia	Value	33,125	41,307	55,533
Japan	Value	38,629	44,486	53,128
All other destination markets	Value	567,889	646,476	931,377
All destination markets	Value	1,326,572	1,603,257	2,097,971
United States	Share of value	32.2	33.8	28.0
Vietnam	Share of value	3.9	6.1	5.8
Canada	Share of value	2.9	2.9	3.8
Italy	Share of value	3.6	2.8	3.4
United Kingdom	Share of value	3.0	3.1	3.4
India	Share of value	2.8	3.0	3.1
Germany	Share of value	3.4	2.6	2.8
Australia	Share of value	2.5	2.6	2.6
Japan	Share of value	2.9	2.8	2.5
All other destination markets	Share of value	42.8	40.3	44.4
All destination markets	Share of value	100.0	100.0	100.0

Source: Source: Official exports statistics under HS subheadings 8424.30 and 8424.90 as reported by China Customs in the Global Trade Atlas database, accessed January 20, 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.⁶ Usable responses to the Commission's questionnaire were received from two firms: Techtronic Industries Vietnam Manufacturing Company Limited ("Techtronic Vietnam") and Ducar Technology Co., Ltd., ("Ducar 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 2021. 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.⁷ 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, 2021

Quantity in units; share in percent

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 Vietnam	***	***	***	***	***	***
Techtronic Vietnam	***	***	***	***	***	***
All firms	***	***	***	***	***	***

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

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 2019. *** indicated in their questionnaire that they had experienced such changes. Table VII-9 presents the changes identified.

⁶ These firms were identified through a review of information submitted in the petition and presented in third-party sources.

⁷ *** was the only firm to answer this question. ***. *** Foreign producer questionnaire response, section II-7.

Table VII-9
GPPW: Reported changes in operations in Vietnam since January 1, 2019, by firm

Item	Firm name and accompanying narrative response
Plant openings	***
Relocations	***

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

Operations on GPPW

Table VII-10 presents information on the GPPW operations of the responding producers and exporters in Vietnam. During 2019-21, the Vietnamese producers' capacity increased by more than *** percent, but was *** percent lower during interim 2022 than during interim 2021. During 2019-21, the Vietnamese producers' production increased *** in 2021, but was lower during interim 2022 than during interim 2021. During 2019-21, the Vietnamese producers' end-of-period inventories *** in 2019, increased to highest level in 2020, then decreased in 2021 by *** percent, and were lower during interim 2022 than during interim 2021 by *** percent. The Vietnamese producers' reported *** internal consumption 2019-21, and during the interim periods. Home market shipments were *** of total shipments based on quantity and value during 2019-21, and during the interim periods. During 2019-21, exports to the United States increased by *** percent (from 2020 to 2021), but were lower by *** percent in interim 2022 than during interim 2021.

The Vietnamese producers' capacity utilization increased *** to *** percent in 2021, but were *** percentage points lower during interim 2022 than during interim 2021. Exports to the United States were nearly all total shipments during 2019-21, but were lower by *** percentage points during interim 2022 than during interim 2021. Inventories as a ratio to production and to total shipments both decreased during 2019-21, and were lower during interim 2022 than during interim 2021.

Vietnamese producers' 2022 and 2023 capacity and production ***. The Vietnamese producers' exports to all other markets ***.

Table VII-10
GPPW: Data on industry in Vietnam, by period

Quantity in units; ratio and share in percent

Item	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022	Pro- jection 2022	Pro- jection 2023
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-10 Continued
GPPW: Data on industry in Vietnam, by period

Share in ratios and in percent

Item	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022	Projection 2022	Projection 2023
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 "---".

Table VII-11 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 2019-2021 ***, but production was lower during interim 2022 than during interim 2021. Practical in-scope capacity and production were higher during 2019-21, but were lower during interim 2022 than during interim 2021. *** accounted for at least ***, during 2019-21, and during interim 2021 and interim 2022.

Table VII-11**GPPW: Producers in Vietnam installed and practical capacity and production on the same equipment as subject production, by period**

Item	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Installed overall	Capacity	***	***	***	***	***
Installed overall	Production	***	***	***	***	***
Installed overall	Utilization	***	***	***	***	***
Practical overall	Capacity	***	***	***	***	***
Practical overall	Production	***	***	***	***	***
Practical overall	Utilization	***	***	***	***	***
Practical scope	Capacity	***	***	***	***	***
Practical scope	Production	***	***	***	***	***
Practical scope	Utilization	***	***	***	***	***

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

Table VII-12 presents the producers in Vietnam's narrative responses regarding practical production constraints.

Table VII-12**GPPW: Foreign producers' in Vietnam narrative response regarding practical production constraints**

Item	Firm name and narrative response on production constraints
Existing labor force	***
Supply of material inputs	***

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

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

Item	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
GPPW	Quantity	***	***	***	***	***
Electric powered pressure washers	Quantity	***	***	***	***	***
Other products	Quantity	***	***	***	***	***
All out-of-scope production	Quantity	***	***	***	***	***
Total production	Quantity	***	***	***	***	***
GPPW	Share	***	***	***	***	***
Electric powered pressure washers	Share	***	***	***	***	***
Other products	Share	***	***	***	***	***
All out-of-scope production	Share	***	***	***	***	***
Total production	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, China, and Italy (table VII-14). During 2021, 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 87.4 percent, followed by China and Italy, accounting for 8.3 percent and 1.4 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**

Value in 1,000 dollars; share in percent

Destination market	Measure	2019	2020	2021
United States	Value	30,424	153,531	353,310
China	Value	55	6,147	33,367
Italy	Value	4,470	7,018	5,706
Japan	Value	3,074	2,636	2,610
Cambodia	Value	3,739	4,042	2,169
Canada	Value	---	484	1,798
South Korea	Value	805	704	1,653
Laos	Value	1,835	1,981	1,050
Australia	Value	27	3	719
All other destination markets	Value	1,849	1,556	1,999
All destination markets	Value	46,278	178,100	404,380
United States	Share of value	65.7	86.2	87.4
China	Share of value	0.1	3.5	8.3
Italy	Share of value	9.7	3.9	1.4
Japan	Share of value	6.6	1.5	0.6
Cambodia	Share of value	8.1	2.3	0.5
Canada	Share of value	---	0.3	0.4
South Korea	Share of value	1.7	0.4	0.4
Laos	Share of value	4.0	1.1	0.3
Australia	Share of value	0.1	0.0	0.2
All other destination markets	Share of value	4.0	0.9	0.5
All destination markets	Share of value	100.0	100.0	100.0

Source: Official exports statistics under HS subheadings 8424.30 and 8424.90 as reported by UN Comtrade in the Global Trade Atlas database, accessed January 20, 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 2021.

Subject countries combined

Table VII-15 presents summary data on GPPW operations of the reporting subject producers in the aggregated subject countries. During 2019-21, the combined subject countries' overall capacity increased by 35.4 percent, but was lower by 47.0 percent during interim 2022 than during interim 2021. During 2019-21, the combined subject countries' overall production of GPPW increased by 111.7 percent, but was lower by 67.0 percent during interim 2022 than

during interim 2021. Exports of GPPW from subject countries to the United States increased by 122.0 percent during 2019-21, but were lower by 67.1 percent during interim 2022 than during interim 2021.

Table VII-15
GPPW: Data on the industry in the aggregated subject countries, by period

Quantity in units

Item	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022	Pro- jection 2022	Pro- jection 2023
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

Item	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022	Pro-jection 2022	Pro-jection 2023
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.

U.S. inventories of imported merchandise

Table VII-16 presents data on U.S. importers' reported inventories of GPPW. Inventories of subject imports increased by *** percent between 2019 and 2021, but were *** percent lower in interim 2022 than in interim 2021. The ratio of subject importers' inventories to imports increased from *** percent in 2019 to *** percent in 2021 and was higher in interim 2022 (*** percent) than in interim 2021 (*** percent) by *** percentage points.

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	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
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	***	***	***	***	***
Ratio to imports	Subject	***	***	***	***	***
Ratio to U.S. shipments of imports	Subject	***	***	***	***	***
Ratio to total shipments of imports	Subject	***	***	***	***	***
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 September 30, 2022. Their reported data is presented in table VII-17. Five of the responding firms indicated that they had arranged

such imports. All 5 firms reported arranged imports from subject sources, while one firm reported arranged imports from nonsubject sources.

Table VII-17
GPPW: U.S. importers' arranged imports, by source and period

Quantity in units

Source	Oct-Dec 2022	Jan-Mar 2023	Apr-Jun 2023	Jul-Sept 2023	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.⁸

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 16.9 percent of exports in 2021, followed by India, at 8.4 percent in 2021.

⁸ World Trade Organization, "Trade Remedies Data Portal," <https://trade-remedies.wto.org/en>, retrieved January 19, 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	2019	2020	2021
United States	Value	1,054,907	1,040,137	1,148,456
China	Value	1,326,572	1,603,257	2,097,971
Vietnam	Value	46,278	178,100	404,380
Subject exporters	Value	1,372,850	1,781,357	2,502,351
Germany	Value	1,581,110	1,523,360	1,765,058
Italy	Value	717,521	722,219	877,390
Netherlands	Value	314,336	398,634	565,620
United Kingdom	Value	265,477	236,747	286,422
France	Value	193,488	187,446	207,639
Belgium	Value	151,637	185,098	233,394
Japan	Value	215,075	178,704	197,277
Denmark	Value	142,867	157,107	180,488
Canada	Value	143,665	156,279	175,921
All other exporters	Value	1,939,643	1,958,664	2,286,384
All reporting exporters	Value	8,092,577	8,525,752	10,426,399
United States	Share of value	13.0	12.2	11.0
China	Share of value	16.4	18.8	20.1
Vietnam	Share of value	0.6	2.1	3.9
Subject exporters	Share of value	17.0	20.9	24.0
Germany	Share of value	19.5	17.9	16.9
Italy	Share of value	8.9	8.5	8.4
Netherlands	Share of value	3.9	4.7	5.4
United Kingdom	Share of value	3.3	2.8	2.7
France	Share of value	2.4	2.2	2.0
Belgium	Share of value	1.9	2.2	2.2
Japan	Share of value	2.7	2.1	1.9
Denmark	Share of value	1.8	1.8	1.7
Canada	Share of value	1.8	1.8	1.7
All other exporters	Share of value	24.0	23.0	21.9
All reporting exporters	Share of value	100.0	100.0	100.0

Source: Official exports statistics under HS subheadings 8424.30 and 8424.90 as reported by various national statistical authorities in the Global Trade Atlas database, accessed January 20, 2023.

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

APPENDIX B

LIST OF STAFF CONFERENCE WITNESSES

CALENDAR OF PUBLIC PRELIMINARY CONFERENCE

Those listed below appeared in the United States International Trade Commission's Preliminary Conference:

Subject: Gas Powered Pressure Washers from China and Vietnam
Inv. Nos.: 701-TA-684 and 731-TA-1597-1598 (Preliminary)
Date and Time: January 20, 2023 - 9:45 a.m.

OPENING REMARKS:

In Support of Imposition (**Matthew J. McConkey**, Mayer Brown LLP)
In Opposition to Imposition
(**Jordan C. Kahn**, Grunfeld, Desiderio, Lebowitz, Silverman & Klestadt LLP)

In Support of the Imposition of the Antidumping and Countervailing Duty Orders:

Mayer Brown LLP
Washington, DC
on behalf of

FNA Group, Inc.

Gus Alexander, Chief Executive Officer, FNA Group, Inc.

Chris Alexander, Executive Vice President, FNA Group, Inc.

Rocky Scalzo, Chief Financial Officer, FNA Group, Inc.

William Alexander, Executive Vice President, Sales and Marketing,
FNA Group, Inc.

Andrew Szamosszegi, Consultant, Capital Trade, Inc.

Fabian Rivelis, Senior International Trade Advisor, Mayer Brown LLP

Matthew J. McConkey)
) – OF COUNSEL
Ellen Aldin)

**In Opposition to the Imposition of the
Antidumping and Countervailing Duty Orders:**

Grunfeld, Desiderio, Lebowitz, Silverman & Klestadt LLP
Washington, DC
on behalf of

MWE Investments, LLC

James Cline, Chief Executive Officer, MWE Investments, LLC

Jon Barleycorn, Chief Operating Officer, MWE Investments, LLC

Bryant Strayer, Vice President of Ecommerce, MWE Investments, LLC

Jordan C. Kahn) – OF COUNSEL

REBUTTAL/CLOSING REMARKS:

In Support of Imposition (**Matthew J. McConkey**, Mayer Brown LLP)

In Opposition to Imposition

(**Jordan C. Kahn**, Grunfeld, Desiderio, Lebowitz, Silverman & Klestadt LLP)

APPENDIX C
SUMMARY DATA

Table C-1: GPPW: Summary data concerning all U.S. producers	C-3
Table C-2: GPPW: Summary data concerning related party exclusion ***	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			
	Calendar year			Jan-Sep		Comparison years			Jan-Sep
	2019	2020	2021	2021	2022	2019-21	2019-20	2020-21	2021-22
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':									
Average 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).....	***	***	***	***	***	▼***	▼***	▲***	▲***
Production workers.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Hours worked (1,000s).....	***	***	***	***	***	▲***	▲***	▲***	▼***
Wages paid (\$1,000).....	***	***	***	***	***	▲***	▲***	▲***	▼***
Hourly wages (dollars per hour).....	***	***	***	***	***	▲***	▲***	▲***	▲***
Productivity (units per 1,000 hours).....	***	***	***	***	***	▼***	▼***	▼***	▲***
Unit labor costs.....	***	***	***	***	***	▲***	▲***	▲***	▼***

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-Sep		Comparison years			Jan-Sep
	2019	2020	2021	2021	2022	2019-21	2019-20	2020-21	2021-22
U.S. producers' Continued:									
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 one U.S. producer *, 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-Sep		Comparison years			Jan-Sep
	2019	2020	2021	2021	2022	2019-21	2019-20	2020-21	2021-22
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':									
Average 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 one U.S. producer *, 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-Sep			Comparison years			Jan-Sep
	2019	2020	2021	2021	2022	2019-21	2019-20	2020-21	2021-22
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 appendices H 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' AND IMPORTERS' NARRATIVES

OF THE LIKE PRODUCT FACTORS

Tables D-1 (U.S. producers) and D-2 (U.S. importers), present a summary of U.S. producers' and importers' responses on the comparability of GPPW versus electric powered pressure washers. Each table includes the six like product factors and the narratives provided by U.S. producers and importers.

Table D-1
GPPW: U.S. producers' comparisons of products by the like product factors

Factor	Producer name and narrative
Physical characteristics	***
Physical characteristics	***
Interchangeability	***
Interchangeability	***
Channels	***
Channels	***
Manufacturing	***
Manufacturing	***
Perceptions	***
Perceptions	***
Price	***
Price	***

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

Table D-2
GPPW: U.S. importers' comparisons of products by the like product factors

Factor	Importer name and narrative
Physical characteristics	***
Physical characteristics	***
Physical characteristics	***
Physical characteristics	***
Physical characteristics	***
Physical characteristics	***

Factor	Importer name and narrative
Interchangeability	***
Interchangeability	***
Interchangeability	***
Interchangeability	***
Interchangeability	***
Interchangeability	***

Factor	Importer name and narrative
Channels	***
Channels	***
Channels	***
Channels	***
Channels	***
Channels	***
Manufacturing	***
Manufacturing	***
Manufacturing	***
Manufacturing	***
Manufacturing	***

Factor	Importer name and narrative
Perceptions	***
Perceptions	***
Perceptions	***
Perceptions	***
Perceptions	***
Perceptions	***
Price	***
Price	***
Price	***
Price	***
Price	***
Price	***

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

APPENDIX E

**U.S. PRODUCERS' AND IMPORTERS' RESPONSES
REGARDING SEMI-FINISHED PRODUCT ANALYSIS**

Tables E-1 (U.S. producers) and E-2 (U.S. importers), present a summary of U.S. producers' and importers' responses regarding the semi-finished product analysis comparing in-scope complete GPPW to in-scope pressure washer components. Each table includes the five intermediate product factors and the narratives provided by U.S. producers and importers.

*** were the two responding U.S. producers presented in table E-1. ***.

Table E-1
GPPW: U.S. producers' narratives regarding semi-finished product analysis

Item	Producer name and narrative
Separate market	***
Differences in characteristics	***
Differences in cost	***
Differences in cost	***
Transformation intensive	***

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

Table E-2
GPPW: U.S. importers' narratives regarding semi-finished product analysis

Item	Importer name and narrative
Other uses	***
Other uses	***
Separate market	***
Separate market	***
Separate market	***
Differences in characteristics	***
Differences in characteristics	***
Differences in characteristics	***
Differences in cost	***
Differences in cost	***
Differences in cost	***
Transformation intensive	***
Transformation intensive	***
Transformation intensive	***

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

APPENDIX F

U.S. PRODUCERS' AND IMPORTERS' SHIPMENTS

BY PRODUCT TYPE AND PERIOD

Appendix F presents U.S. producers' and U.S. importers shipments by product type (residential and commercial units) and period during 2019-21, January-September 2021, and January-September 2022.

Table F-1
GPPW: U.S. producers' U.S. shipments by product type and period

Quantity in units and 1,000 pounds, Value in 1,000 dollars

Product type	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
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 F-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	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
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 "--".

Table F-2
GPPW: U.S. importers' U.S. shipments of imports from China by product type and period

Quantity in units and 1,000 pounds, Value in 1,000 dollars

Product type	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
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 F-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	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
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.

Table F-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	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
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 F-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	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
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.

Table F-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	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
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 F-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	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
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.

APPENDIX G

U.S. OFFICIAL IMPORTS BY SOURCE AND PERIOD

Tables G-1 (U.S. imports by source), G-2 (Apparent U.S. consumption), and figure G-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).¹

Table G-3 (out-of-scope imports) presents U.S. imports of out-of-scope merchandise that were classified under HTS statistical reporting number 8424.30.9000 (based on the U.S. importer questionnaire responses to question II-8b).²

Table G-1
GPPW: U.S. imports, by source and period

Value in 1,000 dollars, share in percent

Source	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
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: 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 January 19, 2023. Imports are based on the imports for consumption data series and reflect landed duty paid value adjusted to remove out of scope imports value as reported in questionnaire responses.

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 "---".

¹ Due to the lack of quantity data available for 2019 (specifically for Vietnam), the data presented in these tables is based on landed duty paid value.

² ***.

Table G-2
GPPW: Apparent U.S. consumption, based on value data, by source and period

Value in 1,000 dollars, share in percent

Source	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
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 January 19, 2023. Imports are based on the imports for consumption data series and reflect landed duty paid value adjusted to remove out of scope imports value as reported in questionnaire responses.

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 G-2
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 January 19, 2023. Imports are based on the imports for consumption data series and reflect landed duty paid value adjusted to remove out of scope imports value as reported in questionnaire responses.

Table G-3**GPPW: Out-of-scope U.S. imports under HTS statistical reporting number 8424.30.9000, by source and period**

Quantity in units, value in 1,000 dollars, unit values in dollars per unit, share in percent

Source	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
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	***	***	***	***	***
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	***	***	***	***	***

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

APPENDIX H

U.S. PRODUCERS DATA, APPARENT CONSUMPTION AND MARKET SHARES

EXCLUDING ***

Table H-1

**GPPW: U.S. producers' capacity, production and capacity utilization excluding one U.S. producer
***, by period**

Capacity and production in units; ratios in percent

Item	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Capacity	***	***	***	***	***
Production	***	***	***	***	***
Utilization	***	***	***	***	***

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

Figure H-1

**GPPW: U.S. producers' capacity, production and capacity utilization excluding one U.S. producer
***, by period**

* * * * *

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

Table H-2**GPPW: U.S. producers' total shipments excluding one U.S. producer ***, by destination and period**

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

Item	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
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 H-3**GPPW: U.S. producers' inventories and their ratio to select items excluding one U.S. producer ***, by period**

Quantity in units; inventory ratios in percent

Item	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
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 H-4**GPPW: U.S. producers' employment related information excluding one U.S. producer ***, by item and period**

Item	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
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 H-5
GPPW: Apparent U.S. consumption and market shares based on quantity excluding one U.S. producer *, by source and period**

Quantity in units; shares in percent

Source	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
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 H-6**GPPW: Apparent U.S. consumption and market shares based on value excluding one U.S. producer ***, by source and period**

Value in dollars; shares in percent

Source	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
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 J

PRICE DATA EXCLUDING DATA FROM ***

***. This appendix provides pricing data excluding ***.

Tables J-1 to J-4 and figures J-1 to J-4 present the price data with the above exclusion. Table J-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 2019-September 2022.

Tables J-6 and J-7 (analogous to tables V-8 and V-9, respectively) present instances of underselling. 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), prices for product from China were between *** and *** percent above prices for the domestic product.

Prices for product imported from Vietnam were below those for U.S.-produced product in *** of *** instances (***) units); margins of underselling ranged from *** to *** percent. In the remaining *** instances (***) units), prices for product from Vietnam were between *** and *** percent above prices for the domestic product.

Table J-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
2019 Q1	***	***	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***	***	***
2021 Q2	***	***	***	***	***	***	***	***
2021 Q3	***	***	***	***	***	***	***	***
2021 Q4	***	***	***	***	***	***	***	***
2022 Q1	***	***	***	***	***	***	***	***
2022 Q2	***	***	***	***	***	***	***	***
2023 Q3	***	***	***	***	***	***	***	***

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 J-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").

Table J-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
2019 Q1	***	***	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***	***	***
2021 Q2	***	***	***	***	***	***	***	***
2021 Q3	***	***	***	***	***	***	***	***
2021 Q4	***	***	***	***	***	***	***	***
2022 Q1	***	***	***	***	***	***	***	***
2022 Q2	***	***	***	***	***	***	***	***
2023 Q3	***	***	***	***	***	***	***	***

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 J-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.

Table J-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
2019 Q1	***	***	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***	***	***
2021 Q2	***	***	***	***	***	***	***	***
2021 Q3	***	***	***	***	***	***	***	***
2021 Q4	***	***	***	***	***	***	***	***
2022 Q1	***	***	***	***	***	***	***	***
2022 Q2	***	***	***	***	***	***	***	***
2023 Q3	***	***	***	***	***	***	***	***

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 J-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.

Table J-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	China price	China quantity	China margin	Vietnam price	Vietnam quantity	Vietnam margin
2019 Q1	***	***	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***	***	***
2021 Q2	***	***	***	***	***	***	***	***
2021 Q3	***	***	***	***	***	***	***	***
2021 Q4	***	***	***	***	***	***	***	***
2022 Q1	***	***	***	***	***	***	***	***
2022 Q2	***	***	***	***	***	***	***	***
2023 Q3	***	***	***	***	***	***	***	***

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 J-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 J-5**GPPW: Summary of price data, excluding data from U.S. producer ***, by product and source, January 2019-September 2022**

Quantity 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: Percent change column is percentage change from the first quarter 2019 to September 2022.

Table J-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

Product	Type	Number of quarters	Quantity	Average margin	Min margin	Max margin
Product 1	Underselling	***	***	***	***	***
Product 2	Underselling	***	***	***	***	***
Product 3	Underselling	***	***	***	***	***
Product 4	Underselling	***	***	***	***	***
Total, all products	Underselling	***	***	***	***	***
Product 1	Overselling	***	***	***	***	***
Product 2	Overselling	***	***	***	***	***
Product 3	Overselling	***	***	***	***	***
Product 4	Overselling	***	***	***	***	***
Total, 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 J-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

Source	Type	Number of quarters	Quantity	Average margin	Min margin	Max margin
China	Underselling	***	***	***	***	***
Vietnam	Underselling	***	***	***	***	***
Total, all subject sources	Underselling	***	***	***	***	***
China	Overselling	***	***	***	***	***
Vietnam	Overselling	***	***	***	***	***
Total, 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 K

U.S. PRODUCERS FINANCIAL DATA EXCLUDING ***

Table K-1**GPPW: Results of operations of U.S. producers excluding one U.S. producer ***, by item and period**

Quantity in units; Value in 1,000 dollars; Ratios in percent

Item	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
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 one U.S. producer ***, by item and period**

Shares in percent; Unit values in dollars per unit; Count in number of firms reporting

Item	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
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.

Table K-2**GPPW: Changes in average unit values between comparison periods excluding one U.S. producer**

Changes in percent

Item	2019-21	2019-20	2020-21	Jan-Sep 2021-22
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 one U.S. producer**

Changes dollars per unit

Item	2019-21	2019-20	2020-21	Jan-Sep 2021-22
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.

