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Jiangsu Senmao Bamboo and Wood Industry Co., Ltd. et al v. United States,
Court No. 22-00190, Slip Op. 23-126 (CIT August 25, 2023)

**FINAL RESULTS OF REDETERMINATION
PURSUANT TO REMAND ORDER**

I. SUMMARY

The U.S. Department of Commerce (Commerce) has prepared these final results of redetermination pursuant to the United States Court of International Trade's (CIT or the Court) remand order in *Jiangsu Senmao Bamboo and Wood Industry Co., Ltd. et al v. United States*, Court No. 22-00190, Slip Op. 23-126 (CIT August 25, 2023) (*Remand Order*). The *Remand Order* concerns the *Final Results* of the 2019-2020 administrative review of the antidumping duty order on multilayered wood flooring (MLWF) from the People's Republic of China (China).¹ In the *Remand Order*, the Court directed Commerce to further explain or reconsider the use of Malaysian surrogate values (SV) for oak and non-oak logs rather than the value for logs from the primary surrogate country, Brazil.² The Court held that Commerce's determination was not supported by substantial evidence because Commerce had not adequately cited to record evidence demonstrating that the Brazilian log SV was highly questionable, inadequate, or unavailable to warrant a departure from the primary surrogate country practice.³

¹ See *Multilayered Wood Flooring from the People's Republic of China: Final Results of Antidumping Duty Administrative Review and Final Determination of No Shipments; 2019-2020*, 87 FR 39464 (July 1, 2022) (*Final Results*), and accompanying Issues and Decision Memorandum (IDM); see also *Multilayered Wood Flooring from the People's Republic of China: Amended Final Determination of Sales at Less Than Fair Value and Antidumping Duty Order*, 76 FR 76690 (December 8, 2011) (*Order*).

² See *Remand Order* at 17.

³ *Id.* at 16-17.

The Court also directed Commerce to further explain or reconsider its decision to revise the plywood SV from Brazil to remove an incorrect line item, holding that this action was not supported by substantial evidence, because Exhibit 9 of the American Manufacturers of Multilayered Wood Flooring's (AMMWF's) SV Comments,⁴ upon which Commerce relied in making this determination, was not filed with the Court.⁵

On October 3, 2023, we released the draft results of redetermination to interested parties, in which we (1) recalculated mandatory respondent Jiangsu Senmao Bamboo and Wood Industry Co., Ltd.'s (Senmao's) dumping margin using the Brazilian Harmonized Schedule (HS) subheading 4403.99 to value Senmao's log factors of production (FOPs) and (2) further explained our determination to revise the Brazilian SV for plywood.⁶ On October 12, 2023, we received timely comments from Senmao and AMMWF.⁷ Lumber Liquidators Services, LLC (Lumber Liquidators) submitted comments incorporating the arguments of Senmao.⁸ On October 13, 2023, we placed Exhibit 9 of AMMWF's SV Comments on the record of the remand redetermination.⁹

In Section III of these final results of redetermination, Commerce provides its analysis of the comments submitted by Senmao and AMMWF on the Draft Remand Redetermination included in Section II below. In response to comments, we recalculated Senmao's dumping

⁴ See AMMWF's Letter, "Surrogate Value Comments," dated July 29, 2021 (AMMWF's SV Comments).

⁵ See *Remand Order* at 22-23.

⁶ See Draft Results of Remand Redetermination, *Jiangsu Senmao Bamboo and Wood Industry Co., Ltd. et al v. United States*, CIT Court No. 22-00190, dated October 3, 2023 (Draft Remand Redetermination).

⁷ See Senmao's Letter, "Comments on Draft Remand Redetermination," dated October 12, 2023 (Senmao's Draft Remand Redetermination Comments); see also AMMWF's Letter, "Comments on Draft Remand Determination," dated October 12, 2023 (AMMWF's Draft Remand Redetermination Comments).

⁸ See Lumber Liquidators' Letter, "Letter in Lieu of Comments on Draft Remand Redetermination," dated October 12, 2023.

⁹ See Memorandum, "Addition of Exhibit 9 of AMMWF's Surrogate Value Comments," dated October 13, 2023 (Exhibit 9 Memorandum). We note that we inadvertently omitted Exhibit 9 as an attachment to the Draft Remand Redetermination.

margin from the Draft Remand Redetermination by using the Malaysian SV HS subheading 4403.91 to value Senmao's oak log FOPs and the Brazilian SV HS subheading 4403.99 to value Senmao's non-oak log FOPs. Additionally, we provided additional explanation for our determination to revise the Brazilian SV for plywood, as described below.

II. REMANDED ISSUES

A. The Surrogate Value for Logs

i. Background

Senmao reported that it used seven species of logs in producing subject merchandise.¹⁰ For the SV of Senmao's log FOPs, AMMWF placed contemporaneous data on the record for Malaysian HS subheadings 4403.91.1000 ("Oak Wood In The Rough, Whether Or Not Stripped Of Bark Or Sapwood Or Roughly Squared, Not Treated: Of Oak (*Quercus* Spp.): Baulks, Sawlogs And Veneer Logs") and 4403.99 ("Other Wood, In Rough").¹¹ Senmao placed contemporaneous data on the record for Brazilian HS subheading 4403.99 ("Nonconiferous Wood In The Rough, Nesoi, Whether Or Not Stripped Of Bark Or Sapwood Or Roughly Squared, Not Treated") and argued that Commerce should value these inputs using this HS subheading.¹² AMMWF also placed on the record historical import data for Brazilian HS subheading 4403.¹³

¹⁰ See Senmao's Letter, "Sections C and D Questionnaire Response," dated April 29, 2021, at Exhibit D-3.

¹¹ See AMMWF's SV Comments at Exhibit 1 (a summary of the Malaysian data used to value Senmao's FOPs) and Exhibit 2 (Malaysian import data obtained by AMMWF from Global Trade Atlas (GTA)). We note that the Malaysian HS "basket" subheading 4403.99 consists for of two more-specific subheadings: 4403.99.1095 ("Baulks, Sawlogs And Veneer Logs: Light Hardwoods: Other, Light Hardwood") and 4403.99.9000 ("Other Than Of Oak (*Quercus* Spp.), Of Beech (*Fagus* Spp.), Of Birch (*Betula* Spp.), Of Poplar And Aspen (*Populus* Spp.) And Of Eucalyptus (*Eucalyptus* Spp.) Other Than Baulks, Sawlogs And Veneer Logs").

¹² See Senmao's Letter, "Surrogate Value Comments," dated July 29, 2021 (Senmao's SV Comments), at Exhibit 1 (SV Summary Worksheet) and Exhibit 2 (SV data from GTA).

¹³ See AMMWF's Letter, "Rebuttal Surrogate Value Information," dated August 3, 2021 (AMMWF's SV Rebuttal Comments), at Exhibit 1.

In the *Final Results*, while Commerce selected Brazil as the primary surrogate country to value Senmao's other inputs, we relied on Malaysian import data as SVs for Senmao's "European oak" and "red oak" logs using HS 4403.91.1000 and its non-oak (acacia, hickory, walnut, maple, and poplar) logs using HS 4403.99.00.¹⁴ While we valued the remainder of Senmao's reported FOPs using Brazilian SVs, we used Malaysian data for the log SVs because the Malaysian data possessed two HSs that differentiated oak logs and other log species, while the Brazilian data possessed only a basket category HS containing multiple log species.¹⁵ Further, because there was no information on the record regarding the mix of log species in the Brazilian HS 4403.99 basket category, we declined to use this HS category for Senmao's non-oak logs to avoid the possibility of double counting oak logs, which we were separately valuing with an SV specific to oak logs (*i.e.*, Malaysian HS category 4403.91.0000).¹⁶ Thus, we chose to value the other species of logs using Malaysian HS 4403.99.00 non-oak basket category, *i.e.*, "Other Wood, In Rough."

In the *Remand Order*, the Court determined that Commerce had not adequately cited to record evidence demonstrating that the Brazilian log SV was highly questionable, inadequate, or unavailable to warrant a departure from the primary surrogate country practice.¹⁷ The Court also directed Commerce to further explain or reconsider the use of Malaysian SVs for oak and non-oak logs rather than the value for logs from the primary surrogate country, Brazil.¹⁸ Thus, the CIT remanded Commerce's determination of the SVs for Senmao's log FOPs.

¹⁴ See *Multilayered Wood Flooring from the People's Republic of China: Preliminary Results of Antidumping Duty Administrative Review, Preliminary Determination of No Shipments, and Rescission of Review, in Part; 2019-2020*, 86 FR 73252 (December 27, 2021) (*Preliminary Results*), and accompanying Preliminary Decision Memorandum (PDM), unchanged in the *Final Results*; see also Memorandum, "Surrogate Values for the Preliminary Determination," dated December 17, 2021 (Preliminary SV Memorandum).

¹⁵ *Id.*

¹⁶ See *Final Results* IDM at Comment 5.

¹⁷ See *Remand Order* at 16-17.

¹⁸ *Id.* at 17.

ii. Analysis

Section 773(c)(1) of the Tariff Act of 1930, as amended, instructs Commerce to value the FOPs based on the best available information from a market economy country or countries that Commerce considers to be appropriate. When evaluating SV data, Commerce considers several factors including whether the data are publicly available, contemporaneous with the period of review (POR), representative of a broad market average, tax- and duty-exclusive, and specific to the input.¹⁹ There is no hierarchy among these criteria, and it is Commerce's practice to carefully consider the available evidence in light of the particular facts of each industry when undertaking its analysis.²⁰ However, Commerce's preference is to satisfy the breadth of these aforementioned selection factors,²¹ and to value all FOPs in the primary surrogate country.²²

Commerce found that the SV data on the record for both Brazil and Malaysia are publicly available, contemporaneous with the POR, representative of broad market averages, tax- and duty-exclusive, and specific to the inputs being valued.²³ We continue to find it appropriate to select Brazil as the primary surrogate country because: (1) the record contains usable Brazilian data for valuing the majority of Senmao's FOPs; and (2) the financial statements of Brazilian

¹⁹ See, e.g., *Certain Frozen Fish Fillets from the Socialist Republic of Vietnam: Final Results of Antidumping Duty Administrative Review and New Shipper Reviews; 2010-2011*, 78 FR 17350 (March 21, 2013), and accompanying IDM at Comment I(C).

²⁰ See Enforcement and Compliance's Policy Bulletin 04.1, regarding, "Non-Market Economy Surrogate Country Selection Process" (March 1, 2004), available on Commerce's website at <https://access.trade.gov/Resources/policy/bull04-1.html> (Policy Bulletin).

²¹ *Id.*

²² See 19 CFR 351.408(c)(2); see also, e.g., *Crystalline Silicon Photovoltaic Cells, Whether or Not Assembled into Modules, from the People's Republic of China: Final Determination of Sales at Less Than Fair Value, and Affirmative Final Determination of Critical Circumstances, in Part*, 77 FR 63791 (October 17, 2012), and accompanying IDM at Comment 9.

²³ See *Preliminary Results PDM* at 17, unchanged in *Final Results*.

company Duratex S.A. on the record are contemporaneous with the POR and superior to the financial statements of Malaysian company Focus Lumber Berhad.²⁴

To comply with the Court's *Remand Order*, we reconsidered the SV for Senmao's log inputs and determined that the substantial evidence did not lead us to conclude that the Brazilian log SV is either highly questionable, inadequate, or unavailable to use to value Senmao's log inputs.²⁵ Therefore, for the Draft Remand Redetermination, we valued all of Senmao's log inputs using Brazilian HS category 4403.99, which aligns with Commerce's preference to value all inputs from a single surrogate country whenever possible unless data from the primary surrogate country are unavailable or unreliable.²⁶

Comments submitted by the interested parties on the Draft Remand Redetermination drew our attention to record evidence with respect to HS category classifications. As explained below, although there are sufficient Brazilian data for valuing Senmao's non-oak logs on the record, the Brazilian data with which to value Senmao's oak logs are unavailable, which warrants a departure from the primary surrogate country of Brazil for the valuation of oak logs.²⁷ Therefore, for these final results of redetermination, we used Malaysian HS subheading

²⁴ *Id.* and accompanying Preliminary SV Memorandum. We note that the record contains additional financial statements for Brazilian company Eucatex S/A Industry and Commerce and Subsidiaries (Eucatex). However, we determined that Eucatex's financial statements were not reliable because they were given a qualified opinion by its auditors. See *Preliminary Results PDM* at 17; see also *Wood Mouldings and Millwork Products from the People's Republic of China: Preliminary Affirmative Determination of Sales at Less Than Fair Value, Postponement of Final Determination, and Extension of Provisional Measures*, 85 FR 48669 (August 12, 2020), and accompanying PDM (determining that Eucatex's 2019 financial statements were unreliable because of a qualified opinion by its auditors), unchanged in *Wood Mouldings and Millwork Products from the People's Republic of China: Final Affirmative Determination of Sales at Less Than Fair Value*, 86 FR 63 (January 4, 2021), and accompanying IDM.

²⁵ See Draft Remand Redetermination at 3-5; see also *Final Results*; and Memorandum, "Final Surrogate Value and Calculation Memorandum," dated June 24, 2022 (Final SV Memorandum), at Attachment I.

²⁶ See *Crystalline Silicon Photovoltaic Cells, Whether or Not Assembled Into Modules, from the People's Republic of China: Final Results of Antidumping Duty Administrative Review and Final Determination of No Shipments; 2016-2017*, 84 FR 36886 (July 30, 2019), and accompanying IDM at Comment 13.

²⁷ See Section III.

4403.91.1000 to value Senmao's oak log FOPs and Brazilian HS subheading 4403.99 to value Senmao's non-oak log FOPs.

B. Surrogate Value for Plywood

i. Background

In the *Final Results*, Commerce adjusted the composite Brazilian SV for plywood by removing the Spanish import data for January 2020 from the average unit value (AUV) because this single line of data was clearly erroneous.²⁸ As Commerce noted, the quantity of plywood expressed in cubic meters (M3) was the same as the quantity expressed in kilograms (KG), which represents an error in the data because the former measures volume and the latter measures weight and cannot be the same when considering the same quantity of wood.²⁹ Commerce cited AMMWF's SV Comments at Exhibit 9, which contains information on the density of wood species expressed in KG per M3,³⁰ in support of its adjustment. In its *Remand Order*, the Court concluded that Commerce's explanation for its adjustment of the plywood SV data was neither in accordance with law nor supported by substantial evidence because the wood density exhibit was not filed with the Court for its review.³¹

ii. Analysis

As explained above, the Court held that Commerce's explanation for its adjustment of the plywood SV was neither in accordance with law nor supported by substantial evidence. For the Draft Remand Redetermination, we provided further explanation of this issue.³² Specifically, we referred to Exhibit 9 of AMMWF's SV Comments, which shows the density of various wood

²⁸ See *Final Results* IDM at Comment 2.

²⁹ *Id.*; and Final SV Memorandum at Attachment I.

³⁰ *Id.*

³¹ See *Remand Order* at 22-23.

³² See Draft Remand Redetermination at 6.

species, including birch, elm, and oak, from the website Engineering ToolBox, as well as standard conversion factors of wooden products from the Food and Agriculture Organization of the United Nations.³³ Using this information, we concluded that the Spanish data for plywood in the Brazilian plywood SV were in error, as M3 and KG could not be the same, and supported its removal for the *Final Results*.³⁴ As explained below, we continue to find it appropriate to adjust the composite Brazilian SV for plywood by removing the Spanish import data for January 2020 from the AUV.³⁵

III. INTERESTED PARTY COMMENTS

*Senmao's Arguments*³⁶

1. Surrogate Value for Logs

- In the *Final Results*, Commerce selected Brazil as the primary surrogate country but relied on Malaysia surrogates to value Senmao's log inputs.³⁷ In the Draft Remand Redetermination, Commerce agreed with the Court that there was not substantial evidence to support a finding that the Brazilian log SV was either highly questionable, inadequate, or unavailable and valued all of Senmao's log inputs using Brazilian HS category 4403.99.³⁸ This decision is in accordance with Commerce's practice of using a single surrogate country and is supported by substantial evidence and in accordance with law.
- Because this decision is in accordance with the Court's remand order, supported by substantial evidence, and otherwise in accordance with law, Commerce should affirm the decision in its final results of redetermination.

2. Surrogate Value for Plywood

- In the Draft Remand Redetermination, Commerce continued to adjust the Brazilian SV for plywood to remove Spanish import data for January 2020 from the AUV because a "single line of data was clearly erroneous."³⁹ Commerce again states that the quantity of plywood expressed in M3 was the same as the quantity expressed in KG, which represents an error in

³³ *Id.*; see also Exhibit 9 Memorandum.

³⁴ See Draft Remand Redetermination at 6.

³⁵ See Section III.

³⁶ See Senmao's Draft Remand Redetermination Comments.

³⁷ *Id.* at 1 (citing *Final Results* IDM at Comment 5).

³⁸ *Id.* at 2 (citing Draft Remand Redetermination at 5).

³⁹ *Id.*

the data because the former measures volume and the latter measures weight and cannot be the same when considering the same quantity of wood.⁴⁰

- Commerce indicated that it is complying with the Court’s order for further explanation or reconsideration of this issue by submitting Exhibit 9 of AMMWF’s SV Comments as an attachment to these draft results of redetermination,⁴¹ which contains information on the density of wood species expressed in KG per M3.⁴² According to Commerce, it was able to use this information to determine that the Spanish data for plywood in the Brazilian plywood SV were in error, as M3 and KG could not be the same, and supported its removal for the *Final Results*.⁴³
- Commerce did not attach Exhibit 9 to its Draft Remand Redetermination, and doing so would not have resolved the issue. The Court also concluded that “Commerce has a standard practice of considering whether the AUV is aberrational in the aggregate for the economically comparable surrogate countries or as compared to historical AUVs of the surrogate country at issue.”⁴⁴ More specifically, the Court stated that “{i}f Commerce has a routine practice for addressing similar situations, it must either apply that practice or provide a reasonable explanation regarding why Commerce has deviated from that practice.”⁴⁵ The Court ultimately remanded the issue of the plywood SV data adjustment for further explanation or reconsideration.⁴⁶
- Commerce’s submission of Exhibit 9 does not show that it has complied with its standard practice nor does it constitute further explanation or reconsideration. The fact that the KG quantity and the M3 quantity cannot be the same has never been in dispute. Instead, Commerce’s decision to adjust the data is contrary to its practice, which is to determine whether the AUV, in the aggregate, is aberrational.⁴⁷
- Under this practice, Commerce does not compare individual values of imports in the selected surrogate country entered under the HS category and evaluate and remove specific line items. Commerce has explained that “[o]therwise, parties would advocate the manipulation of data by removing one or more line items they find objectionable, with the result that we would not be using the average prices for that category, but some subset thereof.”⁴⁸

⁴⁰ *Id.* at 2-3.

⁴¹ *Id.* at 3 (citing AMMWF’s SV Comments at Exhibit 9).

⁴² *Id.* (citing Draft Remand Redetermination at 5-6).

⁴³ *Id.* (citing Draft Remand Redetermination at 6).

⁴⁴ See Senmao’s Draft Remand Redetermination at 3 (citing *Remand Order* at 21).

⁴⁵ *Id.* at 3-4 (citing *Remand Order* at 10 (citing *SKF USA, Inc. v. United States*, 263 F.3d 1369, 1382 (CAFC 2001) (“An agency action is arbitrary when the agency offers insufficient reasons for treating similar situations differently.”))).

⁴⁶ *Id.* at 4 (citing *Remand Order* at 23).

⁴⁷ *Id.* (citing *Crystalline Silicon Photovoltaic Cells, Whether or Not Assembled Into Modules, From the People’s Republic of China: Final Results of Antidumping Duty Administrative Review and Final Determination of No Shipments; 2014-2015*, 82 FR 29033 (June 27, 2017), and accompanying IDM at Comment 12; *Certain Uncoated Paper From the People’s Republic of China: Final Determination of Sales at Less Than Fair Value*, 81 FR 3112 (January 20, 2016), and accompanying IDM at Comment 2; and *Multilayered Wood Flooring from the People’s Republic of China: Final Results of Antidumping Duty Administrative Review and Final Results of New Shipper Review; 2012-2013*, 80 FR 41476 (July 15, 2015) (*MLWF from China 2012-2013*), and accompanying IDM at Comment 11.D).

⁴⁸ *Id.*

- The Court has also held that Commerce’s policy of not disaggregating data in order to preserve representativeness is reasonable.⁴⁹ If Commerce is going to parse the data for any line items that might be considered “clearly incorrect,” then that constitutes a change in practice from which it departed without notice or reasonable explanation, and Commerce is therefore obligated to provide an adequate explanation for the change,” which Commerce has not done.⁵⁰
- Moreover, Commerce has not cited any evidence that the aggregate AUV data was in any way distorted or made aberrational by the error and its decision to adjust the data without such a determination is contrary to its practice. Even when it is evident that the line item was “clearly incorrect” or “clearly erroneous,” Commerce has previously explicitly treated “incorrect” items as included in the definition of “aberrational.”⁵¹ Therefore, even if the data are clearly incorrect, Commerce is still deviating from its practice by removing it.
- Finally, by removing the line items without any finding that the aggregate AUV data was aberrational, Commerce has created an aggregate AUV that is itself distorted. As Commerce has explained in justifying its policy of not removing individual line items, the result is simply that Commerce is “not using the average prices for that category, but some subset thereof.”⁵² In other words, removing the line items would not result in a more accurate SV, but would likely result in a less accurate SV. In this case, Exhibit 9 does not settle the issue of whether the KG quantity or the M3 quantity is correct or whether the error made the data aberrational in the aggregate.
- Commerce has not demonstrated that the unadjusted data are aberrational by comparing these data to any historical AUVs or any other relevant data. In fact, Commerce previously concluded that the aggregate data are not aberrational even if the Spanish data were not removed, stating that “{w}ith respect to the petitioner’s conclusion that historical and POR evidence demonstrates that the Spanish import data are also aberrational, we disagree” and “{w} therefore cannot conclude that the overall AUV for Brazil is aberrational.”⁵³
- Thus, there is no reason to adjust the plywood SV by removing any line items nor does it make the plywood SV more accurate or the best information available. Removing the Spanish line item instead distorted the Brazilian data in a way grossly adverse to Senmao.

⁴⁹ *Id.* (citing *Canadian Solar Int’l Ltd. v. United States*, 415 F. Supp. 3d 1326, 1332 (CIT 2019)).

⁵⁰ *Id.* (citing *Wind Tower Trade Coal. v. United States*, 569 F. Supp. 3d 1221, 1231 (CIT 2022), citing *SKF USA Inc. v. United States*, 630 F.3d 1365, 1373 (CAFC 2011)).

⁵¹ *Id.* at 5 (citing *Tri Union Frozen Prod., Inc. v. United States*, 227 F. Supp. 3d 1387, 1394–95 (CIT 2017) (*Tri Union*), determination sustained in *Tri Union Frozen Prods., Inc. v. United States*, 254 F. Supp. 3d 1290 (CIT 2017), *aff’d* *Tri Union Frozen Prods. v. United States*, 741 F. App’x 801 (Fed. Cir. 2018); *Solarworld Americas, Inc. v. United States*, 532 F. Supp. 3d 1266, 1270 (CIT 2021) (citing *Tri Union*, 227 F. Supp. 3d at 1387, 1394-95); and *Certain Fabricated Structural Steel from the People’s Republic of China: Final Affirmative Determination of Sales at Less Than Fair Value*, 85 FR 5376 (January 30, 2020), and accompanying IDM at Comment 3).

⁵² *Id.* at 6 (citing *MLWF from China 2012-2013* IDM at Comment 11.D).

⁵³ *Id.* (citing *Final Results* IDM at Comment 1).

- After Commerce's removal of the Spanish data, the Brazilian plywood SV increased from \$1.33 per M3⁵⁴ before the adjustment to \$7.36 per M3⁵⁵ after the adjustment, which constitutes a 453 percent increase.
- Commerce made this change without any record evidence or any allegation that \$7.36 per M3 was more accurate or more consistent with historical Brazilian data than \$1.33 per M3.
- For the final results of redetermination, Commerce should rely on the aggregate Brazilian data for plywood without any adjustments, which would be consistent with its practice, supported by substantial evidence on the record, and otherwise in accordance with law.

*AMMWF's Arguments*⁵⁶

1. Surrogate Value for Logs

- In the Draft Remand Redetermination, Commerce first confirmed that the Malaysian data are more specific to the oak log inputs.⁵⁷ However, Commerce then asserted, without any discussion of record information, that it “find{s} that the substantial evidence does not lead us to conclude that the Brazilian log SV is either highly questionable, inadequate, or unavailable to use to value {the respondent's} log inputs.”⁵⁸
- This conclusion finds no support in the record with regard to the oak log SV. On the contrary, the record demonstrates that Brazilian oak log data are unavailable for the POR and that the data relied upon by Commerce in the Draft Remand Redetermination are inadequate for valuing oak logs. Accordingly, for the final results of redetermination, Commerce must modify the oak log SV.
- There is no dispute that HS subheading 4403 is the appropriate four-digit subheading to value both oak and non-oak logs.⁵⁹ Within this four-digit subheading, there are two relevant six-digit subheadings: 4403.91, which covers “Oak Wood In The Rough,” and 4403.99, which covers “Nonconiferous Wood In The Rough, {Not Elsewhere Specified}.”⁶⁰
- As these subheadings are at the six-digit level, they are the same for Malaysia and Brazil. Given that HS subheading 4403.91 is specific to oak logs, it cannot be disputed that imports under this subheading are specific to the oak log inputs at issue. Further, because HS subheading 4403.99 covers logs not elsewhere specified, imports under this HS category necessarily do not include oak logs. In other words, because oak logs are elsewhere specified, they cannot fall under HS 4403.99. Consequently, HS 4403.91 is specific to and limited to oak logs, and HS 4403.99 expressly excludes oak logs.

⁵⁴ *Id.* at 7 (citing *Preliminary Results* Preliminary SV Memorandum at Attachment 1, Tab “Master”).

⁵⁵ *Id.* (citing Draft Remand Redetermination, and accompanying Memorandum, “Draft Remand Results Surrogate Value and Margin Calculation for Jiangsu Senmao Bamboo and Wood Industry Co., Ltd.,” dated October 3, 2023, at Attachment III, Tab “Master”).

⁵⁶ See AMMWF's Draft Remand Redetermination Comments.

⁵⁷ *Id.* at 3 (citing Draft Remand Redetermination at 4).

⁵⁸ *Id.* at 3-4 (citing Draft Remand Redetermination at 4-5).

⁵⁹ *Id.* at 4 (citing *Final Results* IDM at Comment 5).

⁶⁰ *Id.* (citing AMMWF's SV Rebuttal Comments at Exhibit 1).

- Despite this fact, Commerce relied on Brazilian data under HS 4403.99 to value oak logs in the Draft Remand Redetermination.⁶¹ However, Commerce provided no support for this approach other than to claim—without any discussion of, or citation to, the record—that Brazilian imports under HS 4403.99 “arguably encompasses all wood species used by {the respondent} (*i.e.*, oak and other hardwood species).”⁶² The record does not support this conclusion.
- Additionally, while there have been Brazilian imports under HS 4403.91 in prior years, there were none during the POR.⁶³ These data show that, contrary to Commerce’s conclusion in its Draft Remand Redetermination, Brazilian data for the POR to value oak logs are unavailable; therefore, the data relied upon are inadequate because they expressly exclude the input at issue.
- Commerce’s reliance on the Brazilian data is further undermined by the fact that the record does contain input-specific data. There is no dispute the Malaysian import data under HS 4403.91 is specific to oak logs and is otherwise usable.⁶⁴ While it is Commerce’s preference to value all inputs with data from a single surrogate country, Commerce has recognized, and the CIT has made clear, that departure from this preference is appropriate when data from the primary surrogate country may fall short.⁶⁵
- As the CIT has explained, the single-country preference may be relied on when it is used to support the selection of one set of data where the other available data are fairly considered to be equal.⁶⁶ Here, however, the Brazilian and Malaysian oak log data are plainly not equal because the Malaysian data are specific to and limited to the input at issue, while the Brazilian data specifically exclude the input at issue. Thus, it is not only appropriate, but also consistent with agency practice and CIT precedent, for Commerce to rely on data from a second surrogate country for the limited purpose of valuing oak logs.
- The Court was not directing Commerce to change its source of SV but instead was requesting additional evidence and justification. This is what Commerce should provide on remand, rather than relying on inaccurate data from another country.
- Finally, if Commerce continues to find that it is not appropriate to rely on Malaysian import data to value oak logs, the record contains additional information that can be used as the SV. Specifically, the record contains historic data on Brazilian imports under HS 4403 broken out at the eight-digit level.⁶⁷ These data show that, while there were no Brazilian imports under HS 4403.91 in 2019 or 2020, such data do exist for 2017.⁶⁸

⁶¹ *Id.* at 5 (citing Draft Remand Redetermination at 5).

⁶² *Id.*

⁶³ *Id.* (citing AMMWF’s SV Rebuttal Comments at 1 and Exhibit 1).

⁶⁴ *Id.* (citing *Final Results* IDM at Comment 5).

⁶⁵ *Id.* at 5-6 (citing *Diamond Sawblades Mfrs.’ Coal. v. United States*, No. 17-00167, Slip Op. 18-146 at 25 (CIT 2018) (“The regulatory preference for valuing inputs for {a non-market economy} respondent’s production using data from a single ‘primary’ surrogate country has been held insufficient to explain decisions to reject data from a non-primary surrogate country if questions remain unanswered as to the suitability of the primary surrogate country data.”)).

⁶⁶ *Id.* at 6 (citing *Calgon Carbon Corp. v. United States*, 145 F. Supp. 3d 1312, 1326-28 (CIT 2016)).

⁶⁷ *Id.* (citing AMMWF’s SV Rebuttal Comments at 1 and Exhibit 1).

⁶⁸ *Id.*

- Although the 2017 data are not contemporaneous with the POR, the data are specific to and limited to the input at issue.⁶⁹ As such, the specificity of these data outweigh the non-contemporaneity when compared to Brazilian import data under HS 4403.99, as the latter is contemporaneous but necessarily does not include the input at issue.

2. Surrogate Value for Plywood

- In the *Final Results*, Commerce relied on Brazilian import data to value plywood, but adjusted the data to remove a single line item of data that contained identical quantities in KG and M3 and that was clearly erroneous.⁷⁰ Specifically, the data report that the quantity of Brazilian imports from Spain in January 2020 was both 2,455 M3 and 2,455 KG.⁷¹
- Commerce explained in the Draft Remand Redetermination that for plywood, the record shows that the KG and M3 measurements are not the same.⁷² AMMWF notes that this is also consistent with the reporting of the mandatory respondent in this review.⁷³
- Further, while Commerce generally does not adjust SV data to account for line items that appear to be “too high” or “too low,” Commerce properly recognized in the *Final Results* that the factual circumstances here are distinct. There is no need to compare the data at issue to other data points to determine whether they are incorrect or unreliable nor are the data being removed because they fall at the end of the spectrum of values; instead, the data are “clearly incorrect” on their face, and therefore their removal is appropriate.
- Accordingly, Commerce correctly removed the erroneous data from the SV calculation, as their inclusion would necessarily result in an incorrect SV. Thus, for the final results of redetermination, Commerce should continue to rely on the Brazilian import data as adjusted to value plywood inputs.

Commerce’s Position:

1. Surrogate Value for Logs

For these final results of redetermination, we find that it is reasonable to use Malaysian HS category 4403.91.1000 to value Senmao’s oak log FOPs and Brazilian HS category 4403.99 to value its non-oak log FOPs. We also determine that, in relying on Malaysian log data, we are not acting contrary to our regulatory preference to value inputs in a single primary surrogate country. While it is Commerce’s preference to rely upon the primary surrogate country to value

⁶⁹ *Id.*

⁷⁰ *Id.* at 7 (citing *Final Results* IDM at Comment 2; and Draft Remand Redetermination at 5).

⁷¹ *Id.* (citing *Preliminary Results* Preliminary SV Memorandum and Attachment I (Sheet “Brazil - Calculated SV Data”); and AMMWF’s Letter, “Case Brief,” dated February 7, 2022, at 7).

⁷² *Id.* at 7-8 (citing AMMWF’s SV Comments at Exhibit 9).

⁷³ *Id.* (citing *Preliminary Results* Preliminary SV Memorandum at 3).

all SVs, the Policy Bulletin envisions the need and preference for Commerce to resort to “an additional surrogate” when necessary, indicating a preference for valuing FOPs with as few surrogate countries as possible, in the interest of accuracy.⁷⁴ Therefore, Commerce may resort to a secondary surrogate country if data from the primary surrogate country are unavailable.⁷⁵

Upon reviewing the interested parties’ arguments and the administrative record, we agree with AMMWF that the Brazilian SV do not include oak logs. Specifically, our review of the record shows that there are two relevant six-digit subheadings for imported logs in the Brazil data: 4403.91, which covers “Oak Wood In The Rough,” and 4403.99, which covers “Nonconiferous Wood In The Rough, {Not Elsewhere Specified}.” The six-digit HS subheading 4403.91 is specific to oak logs and, thus, would be appropriate for valuing oak logs. The six-digit category 4403.99 is necessarily exclusive of “Oak Wood In the Rough,” which is imported under HS subheading 4403.91, and thus, includes other types of wood.⁷⁶ AMMWF placed on the record of the administrative review import data of merchandise classified under four-digit HS subheading 4403 (“Wood in the rough, whether or not stripped of bark or sapwood, or roughly squared”) imported into Brazil between 2015 and 2020.⁷⁷ These data indicate that Brazil imported merchandise classified as HS 4403.91, representing oak logs in 2015 and 2017, which is not contemporaneous with the POR.⁷⁸ Thus, because we can compare record evidence of

⁷⁴ See Policy Bulletin at note 7, available on Commerce’s website at <https://enforcement.trade.gov/policy/bull04-1.html> (“An additional surrogate is sometimes used to fill factor price ‘holes’ in the primary surrogate.”).

⁷⁵ See, e.g., *Jiaying Brother Fastener Co. v. United States*, 11 F. Supp. 3d at 1326, 1332 (CIT 2014).

⁷⁶ See AMMWF’s SV Comments at Exhibit 1 (a summary of the Malaysian data used to value Senmao’s FOPs) and Exhibit 2 (Malaysian import data obtained by AMMWF from GTA). We note that the Malaysian HS “basket” subheading 4403.99 consists of two more-specific subheadings: 4403.99.1095 (“Baulks, Sawlogs And Veneer Logs: Light Hardwoods: Other, Light Hardwood”) and 4403.99.9000 (“Other Than Of Oak (*Quercus* Spp.), Of Beech (*Fagus* Spp.), Of Birch (*Betula* Spp.), Of Poplar And Aspen (*Populus* Spp.) And Of Eucalyptus (*Eucalyptus* Spp.) Other Than Baulks, Sawlogs And Veneer Logs”). See Senmao’s SV Comments at Exhibit 1 (SV Summary Worksheet) and Exhibit 2 (SV data from GTA); and AMMWF’s SV Rebuttal Comments at Exhibit 1.

⁷⁷ See AMMWF’s SV Rebuttal Comments at Exhibit 1.

⁷⁸ *Id.*

Brazil's imports between 2015 and 2017 to the current POR and see that imports classified under HS 4403.91 were previously imported into Brazil, we find a sufficient basis in the record exists to show that the Brazilian oak log data for use in calculating Senmao's oak log inputs, *i.e.*, HS category 4403.91, are unavailable for the POR. Because of the existence of imports between 2015 and 2017 under this HS category that is specific to oak logs, we also determine that the Brazilian data classified under HS category 4403.99 for the POR cannot include oak logs in the rough, as oak log imports would have been imported under the HS 4403.91 category. Therefore, while the HS category 4403.99 is suitable to use to value Senmao's non-oak log FOPs, it is inadequate to value Senmao's oak log inputs. Due to the lack of availability of contemporaneous data for Brazilian imports of oak wood in the rough under the HS category 4403.91, we find it reasonable to depart from the primary surrogate country practice with respect to only oak logs, as SV data for all other wood species are available from the primary surrogate country, Brazil.

2. Surrogate Value for Plywood

For these final results of redetermination, we maintain that our adjustment of the plywood SV in order to remove erroneous data is reasonable, in accordance with law, and supported by substantial evidence. To comply with the Court's order, we placed on the record of this remand redetermination Exhibit 9 of AMMWF's SV Comments, which shows the density of various wood species and standard conversion factors of wooden products.⁷⁹ We are including this exhibit again for these final results of redetermination.⁸⁰ Exhibit 9 supports our decision in the underlying review to remove the erroneous line of Spanish import data for January 2020 from the plywood AUV, as it demonstrates that a quantity of plywood expressed in M3 cannot be the

⁷⁹ See Draft Remand Redetermination; *see also* Exhibit 9 Memorandum.

⁸⁰ See Attachment.

same as a quantity expressed in KG. As Senmao notes, the fact that a quantity expressed in M3 cannot be the same as a quantity expressed in KG is not in dispute.⁸¹

Although Commerce normally does not adjust SV data to account for line items that appear to be “too high” or “too low,” in this instance, a portion of the data set, namely the January 2020 Spanish import data, is incorrect on its face because the quantity of plywood expressed in M3, which measures volume, cannot be the same as the quantity expressed in KG, which measures weight. Although one could disqualify an entire dataset for containing erroneous data, in this instance, it is unnecessary to do so because the problem can be easily remedied by removing a distinct subset of data that is limited to imports from a single country in a particular month. Therefore, we disagree with Senmao that removing the January 2020 Spanish import data results in a distorted plywood AUV. Rather, by making this adjustment, the data set is more accurate and enables us to use the SV of plywood from the primary surrogate country. Although Senmao argues that Commerce’s removal of the Spanish data results in a significant increase to the Brazilian plywood SV,⁸² Commerce is required to calculate dumping margins as accurately as possible.⁸³ Removing a distinct and limited subset consisting of the clearly erroneous data from the AUV for plywood is consistent with this requirement and increases the accuracy of Commerce’s dumping margin calculation for Senmao.

⁸¹ See Senmao’s Draft Remand Redetermination Comments at 4.

⁸² *Id.* at 7.

⁸³ See *Shakeproof Assembly Components, Div. of Illinois Tool Works, Inc. v. United States*, 268 F.3d 1376, 1382 (CAFC 2001) (quoting *Lasko Metal Prods., Inc. v. United States*, 43 F.3d 1442, 1446 (CAFC 1994) (the ultimate goal is “to determine the antidumping margins ‘as accurately as possible.’”).

IV. FINAL RESULTS OF REDETERMINATION

In accordance with the Court's *Remand Order*, Commerce has revised the antidumping duty rate for Senmao for the period December 1, 2019, through November 30, 2020, as follows:⁸⁴

Exporter	Draft Results of Redetermination Weighted-Average Dumping Margin (percent)
Jiangsu Senmao Bamboo and Wood Industry Co., Ltd.	34.68

Based on our determinations in the final results of redetermination, and should the Court affirm the final results of redetermination, Commerce intends to publish a notice of amended final results in the *Federal Register* and issue appropriate instructions to U.S. Customs and Border Protection, consistent with the discussion above.

10/24/2023

X 

Signed by: LISA WANG

Lisa W. Wang
Assistant Secretary
for Enforcement and Compliance

⁸⁴ See Memorandum, "Final Remand Results Surrogate Value and Calculation Memorandum for Jiangsu Senmao Bamboo and Wood Industry Co., Ltd.," dated concurrently with these final results of redetermination.

Attachment

Exhibit 9 of AMMWF's Surrogate Value Comments

Public Document

EXHIBIT 9

EXHIBIT 9A

- **search** is the most efficient way to navigate the Engineering ToolBox!

Density of Various Wood Species

Density of various wood species - apple, ash, cedar, elm and more

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Densities of seasoned & dry wood are indicated in the table below:

Solid	Density (kg/m ³) (lb/ft ³)
Alder	420 - 680
Afrormosia	710
Agba	510
Apple	650 - 850
Ash, white	650 - 850
Ash, black	540
Ash, European	710
Aspen	420
Balsa	110 - 140
Bamboo	310 - 400
Basswood	320 - 590
Beech	700 - 900
Birch	510 - 770
Birch, British	670
Birch, European	670
Blue gum	1000
Box	950 - 1160
Butternut	380
Cedar	490 - 570
Cedar of Lebanon	580
Cedar, western red	380
Cherry	630 - 900
Cherry, European	630
Chestnut, sweet	560
Cottonwood	410
Cypress	510
Dogwood	760
Douglas Fir	530
Ebony	1110 - 1330

Solid	Density (kg/m³) (lb/ft³)
Elm	540 - 600
Elm, American	570
Elm, English	550 - 600
Elm, Dutch	560
Elm, Wych	690
Elm, Rock	820
Gaboon	430
Greenheart	1040
Gum, Black	590
Gum, Blue	820
Gum, Red	540
Hackberry	620
Hemlock, western	500
Hickory	600 - 930
Holly	760
Iroko	660
Juniper	560
Keruing	740
Larch	500 - 560
Lignum Vitae	1170 - 1330
Lime, European	560
Locust	670 - 710
Logwood	910
Madrone	740
Magnolia	570
Mahogany, African	500 - 850
Mahogany, Cuban	660
Mahogany, Honduras	650
Mahogany, Spanish	850
Maple	620 - 750
Meranti, dark red	710
Myrtle	660
Oak	600 - 900
Oak, American Red	740
Oak, American White	770
Oak, English Brown	740
Obeche	390
Oregon Pine	530
Parana Pine	560
Pear	610 - 730
Pecan	770
Persimmon	900
Philippine Red Luan	590
Pine, pitch	830 - 850
Pine, Corsican	510
Pine, radiata	480
Pine, Scots	510
Pine, white	350 - 500
Pine, yellow	420
Plane, European	640
Plum	660 - 780
Poplar	350 - 500
Ramin	670
Redwood, American	450
Redwood, European	510
Rosewood, Bolivian	820
Rosewood, East Indian	900
Sapele	640
Satinwood	950
Spruce	480 - 780
Spruce, Canadian	450
Spruce, Norway	430
Spruce, Sitka	450
Spruce, western white	450
Sycamore	400 - 600

Solid	Density (kg/m ³) (lb/ft ³)
Tanguile	640
Teak, Indian	660 - 980
Teak, African	980
Teak, Burma	740
Utile	660
Walnut	640 - 700
Walnut, Amer Black	630
Walnut, Claro	490
Walnut, European	570
Water gum	1000
Whitewood, European	470
Willow	400 - 600
Yew	670
Zebrawood	790

- $1 \text{ kg/m}^3 = 0.001 \text{ g/cm}^3 = 0.0005780 \text{ oz/in}^3 = 0.16036 \text{ oz/gal (Imperial)} = 0.1335 \text{ oz/gal (U.S.)} = 0.0624 \text{ lb/ft}^3 = 0.000036127 \text{ lb/in}^3 = 1.6856 \text{ lb/yd}^3 = 0.010022 \text{ lb/gal (Imperial)} = 0.008345 \text{ lb/gal (U.S.)} = 0.0007525 \text{ ton/yd}^3$

- [Lumber dimensions](#)
- [Mass and density in the Imperial system](#)
- [Unit Converter](#)

After felling, timber will lose moisture to align itself with the atmospheric conditions. Moisture content should be lower than 20% to stop fungal attack. Seasoning is the name of the process where moisture content is reduced to the appropriate level for proposed use.

Shrinkage will occurs as a result of the moisture loss - typical 3-4% across the grain.

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- [Density](#) - Density of different solid materials, liquids and gases. Definitions and conversion calculators.

Related Documents

- [Board Feet Chart and Calculator](#) - Board feet - volume measurement of lumber
- [Combustion of Wood - Heat Values](#) - Firewood and combustion of wood heat values - for species like Pine, Elm, Hickory and more
- [Densities of Materials](#) - Densities of common products in both Imperial and SI-units
- [Density of Selected Solids](#) - Density of selected solids
- [Density, Specific Weight and Specific Gravity](#) - An introduction to density, specific gravity and specific weight - formulas with examples
- [Drill Bit Speed - Hardwood and Softwood](#) - Hardwood and softwood drill speed chart
- [Fire Wood - the Cord](#) - The cord is the most common unit for purchasing fuel wood
- [Glue-Laminated Timber - Dimensions](#) - Typical sizes of glue-laminated timber
- [Hardwood and Softwood Species](#) - Species of hardwood and softwood
- [Hardwood Lumber - Dimensions](#) - Size of hardwood lumber
- [Lumber - Weights](#) - Weights of green, kiln dried and pressure treated lumber boards
- [Machine Stress Rated \(MSR\) and Machine Evaluated \(MEL\) Lumber](#) - Grading of lumber in North America
- [Nails and Spikes - Withdrawal Force](#) - Allowable withdrawal load for nail and spikes

- **Sandpaper - Grit Sizes** - Grit sizes ranging 12 - 600
- **Softwood and Hardwood - Structural Strength Classes** - Strength classes, bending stress and mean density of hardwood and softwood
- **Softwood Lumber - Grading** - Rough lumber, surfaced lumber (dressed), worked lumber, shop and factory lumber and yard lumber
- **Softwood Lumber - Standard Sizes** - Nominal and minimum-dressed lumber sizes
- **Structural Lumber - Properties** - Properties of structural lumber
- **Surface Finishing** - Lumber and surface finishing abbreviations
- **Timber - Structural Lumber Section Sizes** - Basic size, area, moments of inertia and section modulus for timber - metric units
- **Urban Tree Heights** - Height of trees commonly used in towns and urban areas
- **Water Demand of different Tree Species** - Trees and their relative water demand
- **Wood - Compressive Strength vs. Moisture Content** - Red Spruce, Longleaf Pine and Douglas Fir - moisture content and their compressive strength
- **Wood and Bio Mass Heat** - Combustion values of wet and dry wood - *Btu/pounds, kJ/kg and kcal/kg*
- **Wood Columns - Safe Loads** - Safe loads for wood columns
- **Wood Density and Moisture Content** - Density of wood versus moisture content
- **Wood Hardness** - Soft and hardwood - Janka Hardness
- **Wood Headers Supported Weight** - The weight that can be supported by a double or triple wood header
- **Wood Screws - Withdrawal Forces** - Allowable withdrawal load force
- **Wood Species - Moisture Content and Weight** - Weight of green and air-dried fire wood
- **Wood, Panel and Structural Timber Products - Mechanical Properties** - Density, fibre stress, compressive strength and modulus of elasticity of clear wood, panel and structural timber products

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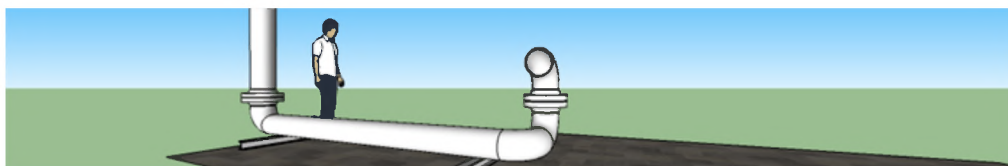
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The advertisement features a Nectar Resident mattress on a wooden bed frame. The mattress is white with a black base and has the Nectar logo on the side. A box labeled 'RESIDENT' is placed on top of the mattress. Below the mattress, there is a large purple banner with the text 'UP TO \$498 IN ACCESSORIES with purchase of Nectar Premier mattress'. A button labeled 'FIND A STORE NEAR YOU' is also present. At the bottom, it says 'Including the new Nest Hub with Sleep Sensing*' and includes the Google logo.

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Unit Converter

Temperature

☒ °C☐ °F

Length

☒ *m*☐ *km*☐ *in*☐ *ft*☐ *yards*☐ *miles*☐ *naut miles*

Area

☒ m^2 ☐ km^2 ☐ in^2 ☐ ft^2 ☐ $miles^2$ ☐ *acres*

Volume

- ☒ m^3
- ☐ *liters*
- ☐ in^3
- ☐ ft^3
- ☐ *us gal*

Convert!

Weight

1.0

- ☒ kg_f
- ☐ N
- ☐ lb_f

Convert!

Velocity

1.0

- ☒ m/s
- ☐ km/h
- ☐ ft/min
- ☐ ft/s
- ☐ mph
- ☐ *knots*

Convert!

Pressure

1.0

- ☒ $Pa (N/m^2)$
- ☐ *bar*
- ☐ $mm H_2O$
- ☐ kg/cm^2
- ☐ *psi*
- ☐ *inches*

H_2O

Convert!

Flow

1.0

- ☒ m^3/s
- ☐ m^3/h
- ☐ *US gpm*
- ☐ *cfm*

Convert!

Scientific Online Calculator



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EXHIBIT 9B



Food and Agriculture
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United Nations

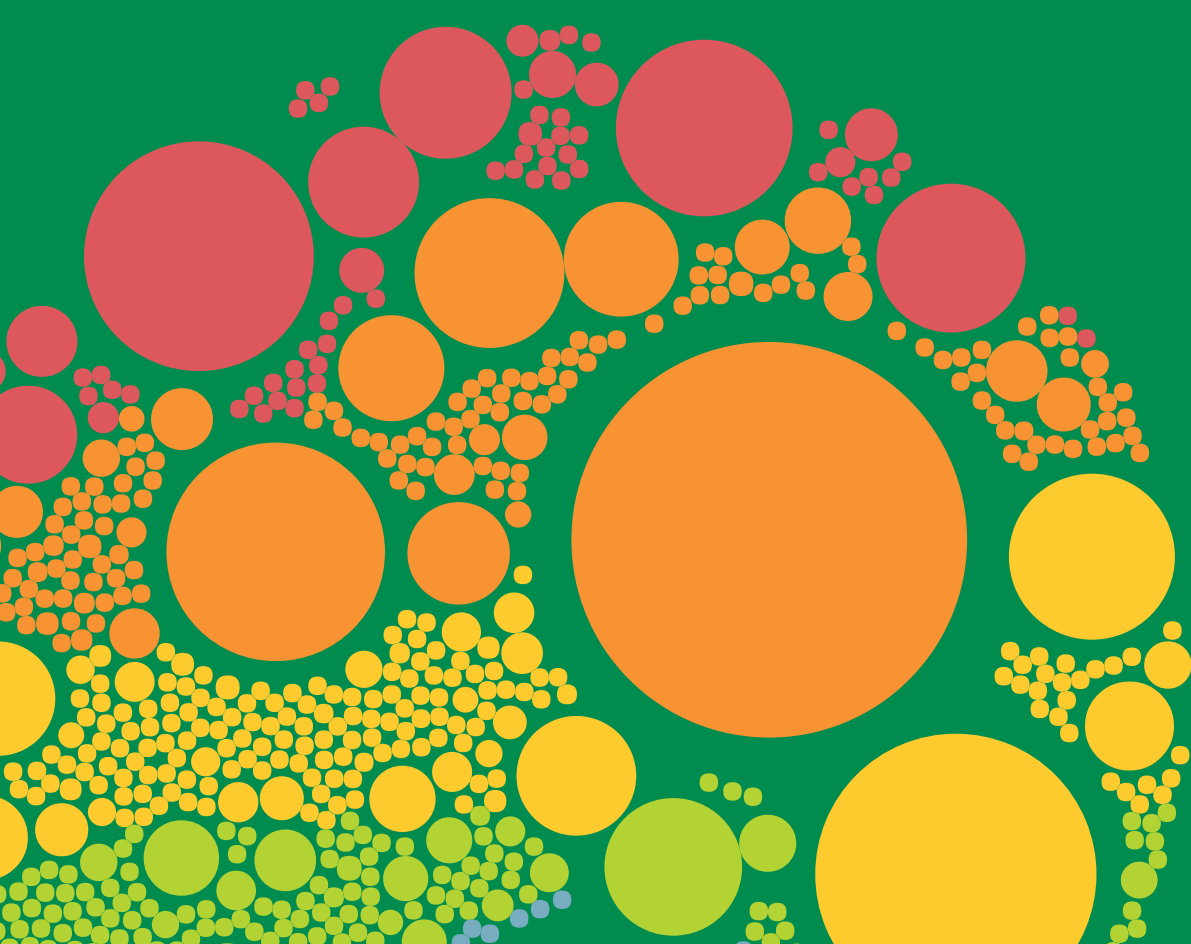
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2019



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YEARBOOK
ANNUAIRE
ЕЖЕГОДНИК
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STANDARD CONVERSION FACTORS

Units	Metric Equivalents
1 inch	= 25.4 millimetres
1 square foot	= 0.0929 square metre
1 cubic foot	= 0.02832 cubic metre
1 short ton	= 0.9072 metric ton
1 long ton	= 1.016 metric ton

Forest Product Measures

Product and Unit	Cubic Meters	Cubic Feet	1000 Board Feet	Standard (Petrograd)
ROUNDWOOD				
1 hoppus cubic foot	0.03605	1.273		
1 ton of 5 hoppus cubic feet	1.8027	63.66		
1 cunit	2.83	100		
1 cord ¹	3.625	128		
1 stere ¹	1	35.315		
1 fathom ¹	6.1164	216		
SAWNWOOD				
1 standard (Petrograd)	4.672	1651.98	1	
1 000 board/super feet ²	2.36	83.33	1	0.505
1 ton of 50 cubic feet	1.416	50	0.6	0.303
WOOD-BASED PANELS				
1 000 square metres (1 millimetre thickness)	1	35.315	0.4238	
1 000 square feet (1/8 inch thickness)	0.295	10.417	0.125	

¹Stacked volume² See "Notes on the tables"**Approximate Equivalents for Forest Measures**

Product and Unit	Cubic Metres	Cubic Feet
Solid volume without bark		
SAWLOGS AND VENEER LOGS		
1 000 board/super feet	4.53	160
PULPWOOD, ROUND AND SPLIT		
1 stere	0.72	25.4
1 cord	2.55	90
WOOD FUEL		
1 stere	0.65	23
1 cord	2.12	74.9
1 000 stacked cubic feet	18.41	650

Weight and Volume

Product	kg/m ³			m ³ /tonne		
	General	Coniferous	Non-coniferous	General	Coniferous	Non-coniferous
Wood fuel	725	625	750	1.38	1.60	1.33
Sawlogs and veneer logs						
Tropical			730			1.37
Non-tropical		700	800		1.43	1.25
Pulpwood, round and split	675	650	750	1.48	1.54	1.33
Other industrial roundwood	750	700	800	1.33	1.43	1.25
Wood chips	625			1.60		
Wood residues	667			1.50		
Sawnwood		550	700		1.82	1.43
Veneer sheets	750			1.33		
Plywood	650			1.54		
Particle board and OSB	650			1.54		
Hardboard	950			1.05		
Medium/high density fibreboard (MDF/HDF)				1.34		
Other fibreboard	420			2.38		