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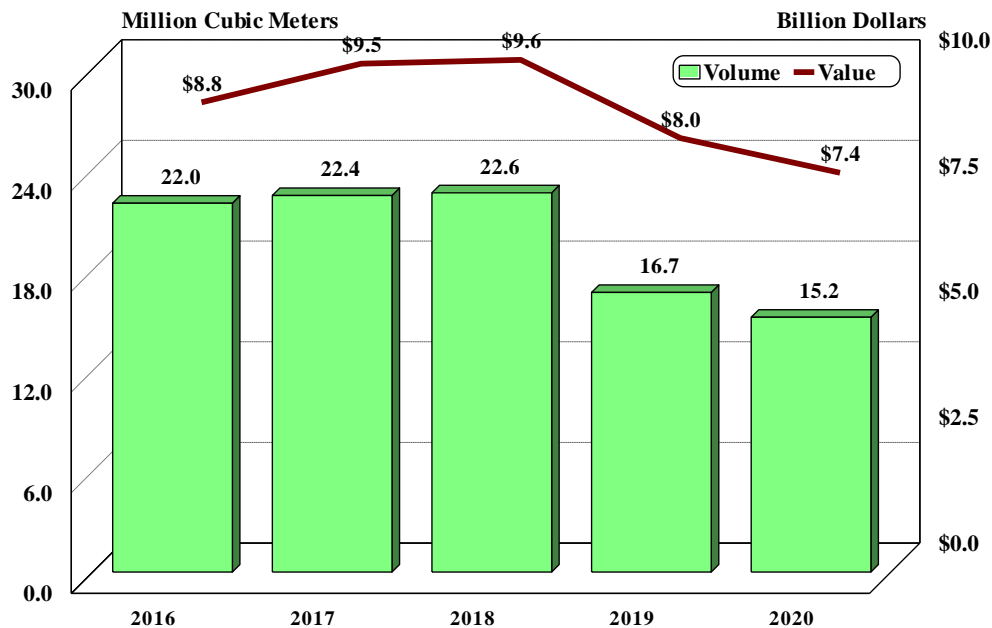


<http://cnas.tamu.edu/>

GLOBAL MARKETS FOR TEXAS FOREST PRODUCTS¹

The global export market for forest products was valued at \$244 billion during 2019. This market consists of hardwoods and softwoods, and includes roundwood, wood used as fuel, lumber, panels, pulp, and paper products. U.S. wood products exports play a significant role in the global forest products market. While down the last two years, U.S. wood products exports of 15.2 million cubic meters (mcm) measured by weight totaled \$7.4 billion during 2020, with softwood logs, softwood lumber, pellets, and chips composing \$3.0 billion of that amount.

U.S. Wood Products Exports, 2016-2020



Source: GATS, FAS/USDA. Note, Volume does not include product measured in MT, Square Meters, or Pieces

The Texas forest products industry was valued at \$18.9 billion during 2019. This includes the value of sales by 104 mills located within Texas, of which 49 are sawmills, 14 are post and pole treatment plants, 13 are biomass plants producing products like pellets, and 9 produce plywood,

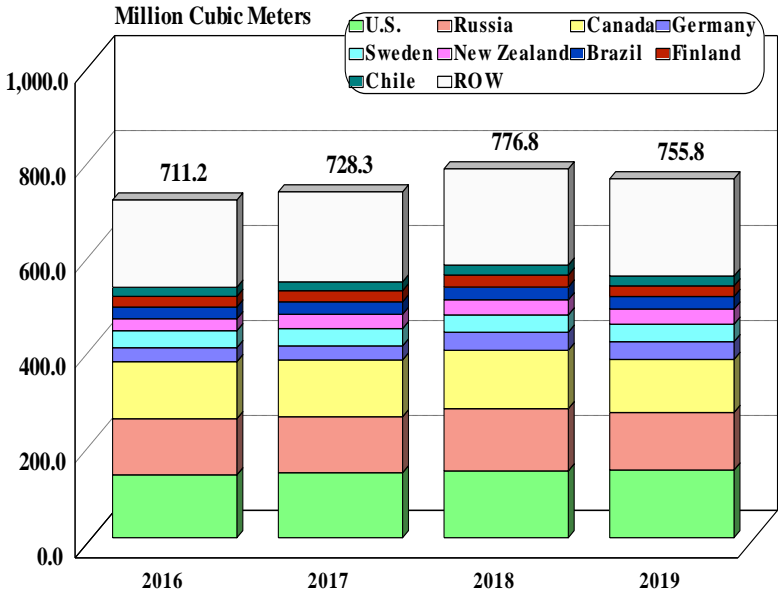
¹ *Global Markets for Texas Forest Products* is a report of the project *Export Market Analysis for Selected Texas Commodities*, funded by the Texas Department of Agriculture. For more information, please contact the Center for North American Studies, Department of Agricultural Economics, Texas A&M AgriLife Extension Service, College Station, TX, 77843-2124. 979-845-3070.

vener, or oriented-strand board. Softwoods dominate forest products production and as such, softwood products will be the focus of this report with export market overviews for softwood logs, softwood lumber, wood pellets, and chips.

Softwood Logs

Softwood log production during 2019 was 755.8 mcm, down slightly from 2018 but well above earlier years. The United States is the biggest producer of softwood logs with 142.6 mcm, followed closely by Russia at 121.2 mcm and Canada at 111.7 mcm. While several European Union (EU) countries are shown individually on the chart, if the EU were to be shown as a group, the region would lead the world in softwood log production with 171.1 mcm during 2019, which is typical of most years. Most softwood logs are the inputs for softwood products to be discussed later, but about one-eighth are exported as rough logs.

World Softwood Log Production, 2016-2019

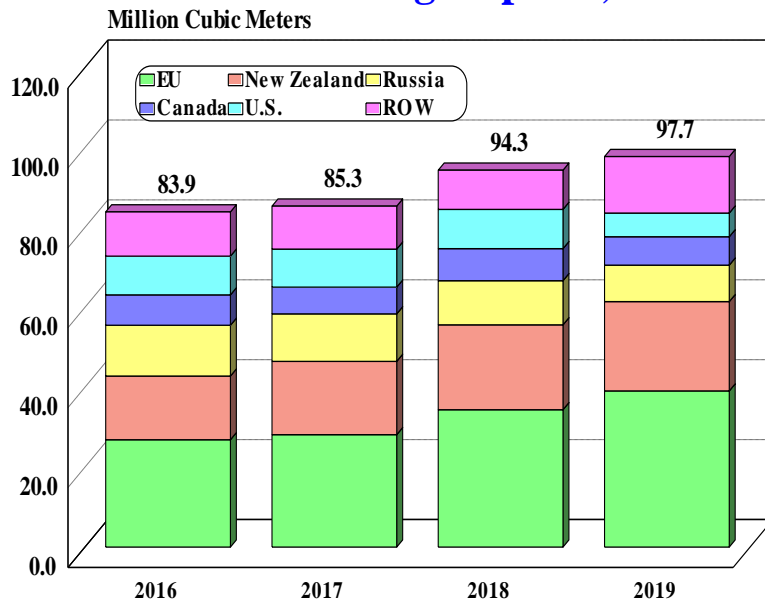


Source: FAO - <http://www.fao.org/forestry/statistics/80938/en/>

The world market for softwood log exports is about 97.7 mcm valued at \$9.0 billion during 2019. The EU captures about forty percent of the market with 39.3 mcm valued at \$2.8 billion during 2019. New Zealand, Russia, Canada and the United States are also major exporters.

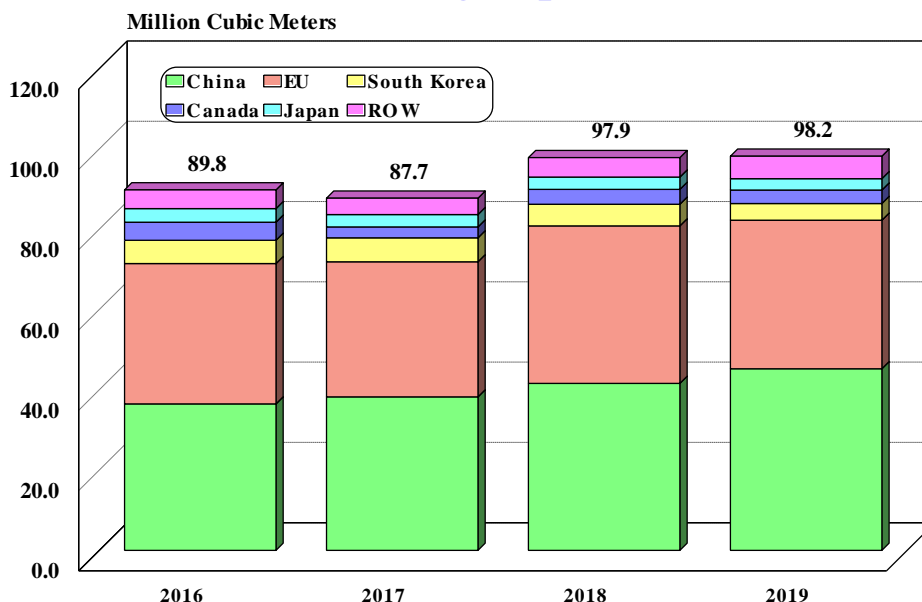
The leading importer of softwood logs is China at 45.3 mcm valued at \$5.6 billion. China then transforms these logs into softwood lumber, primarily for use within China. The other major softwood log importer is the EU at 37.0 mcm, which indicates that much of their trade is within the EU as they are also major exporters and the data source likely did not net out intra-EU trade. Other importers include South Korea, Canada, and Japan.

World Softwood Log Exports, 2016-2019



Source: FAO - <http://www.fao.org/forestry/statistics/80938/en/>

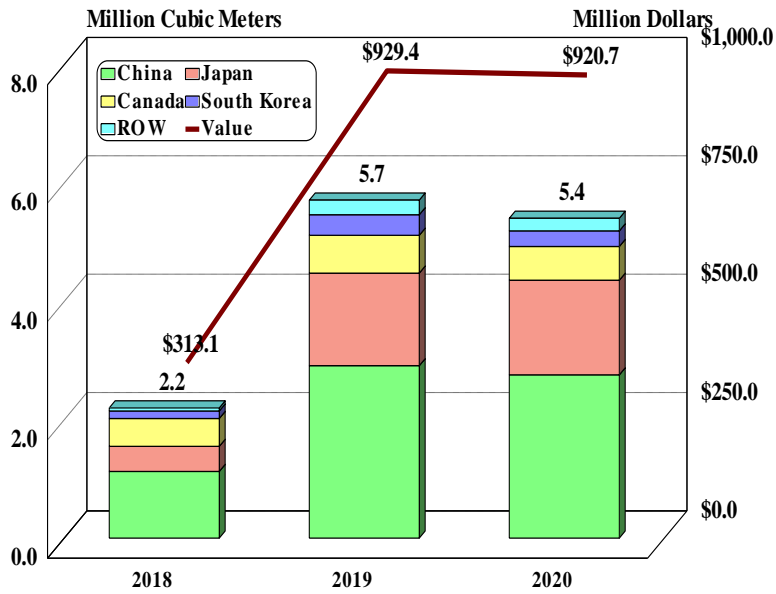
World Softwood Log Imports, 2016-2019



Source: FAO - <http://www.fao.org/forestry/statistics/80938/en/>

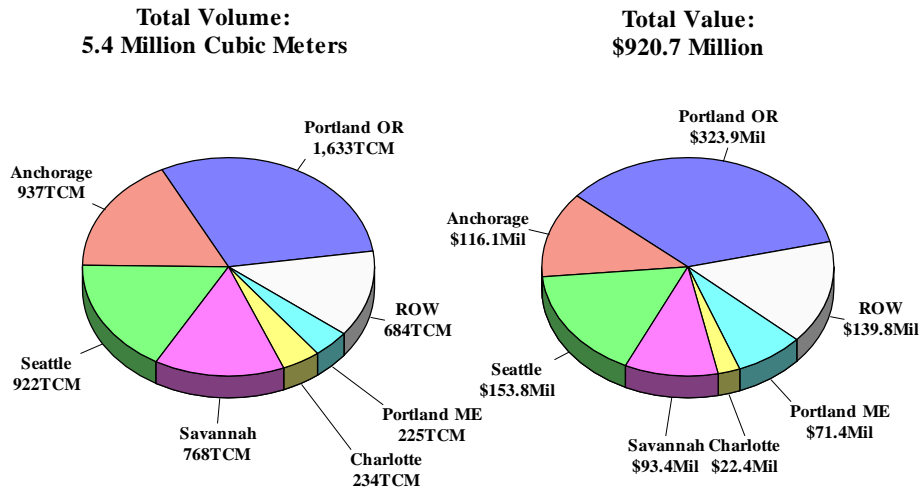
During 2020, U.S. exports of softwood logs totaled 5.4 mcm valued at \$920.7 million. The largest market for U.S. logs is China, to which 2.8 mcm worth \$345.5 million were exported, followed by Japan (1.6 mcm) and Canada (570,525 cubic meters). Exports bound for China used the ports of Savannah, Charlotte, Seattle, Anchorage, and Portland, OR, which was also used for exports to Japan while Portland, ME and other northeastern ports are used for exports to Canada.

U.S. Softwood Log Exports, 2018-2020



Source: Global Ag Trading System, FAS/USDA

U.S. Softwood Log Exports by Port District, 2020

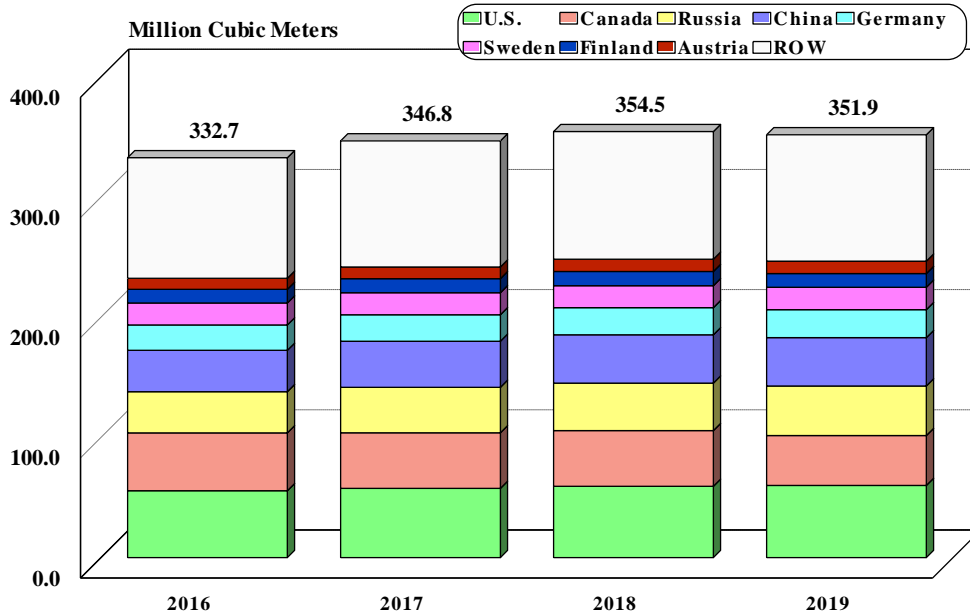


Source: Global Ag Trading System, FAS/USDA, TCM = 1,000 Cubic Meters

Softwood Lumber

World softwood lumber production was 351.9 mcm during 2019, down slightly from 2018. As with softwood logs, the United States leads the world in softwood lumber production with 60.0 mcm, followed by Canada at 41.5 mcm and Russia at 41.3 mcm. If the EU were taken as a group, they would lead with 99.6 mcm. Further, China reports 40.2 mcm of softwood lumber production, much of it produced from imported softwood logs.

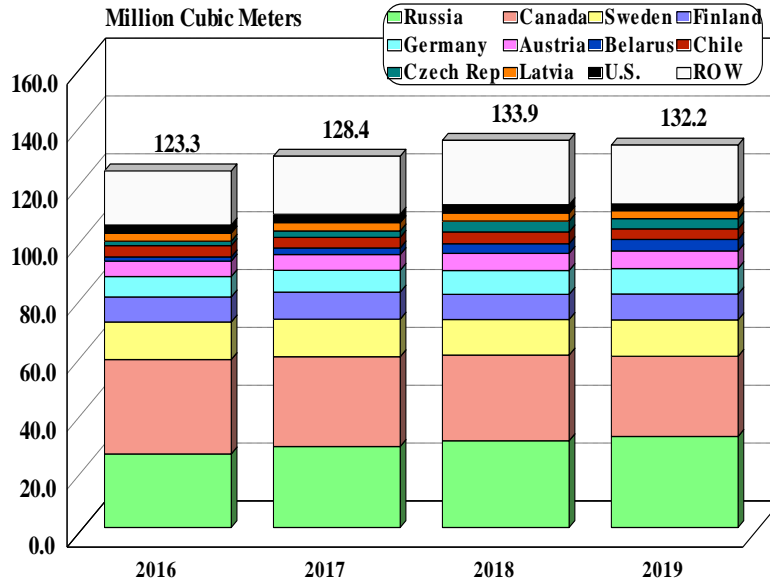
World Softwood Lumber Production, 2016-2019



Source: FAO - <http://www.fao.org/forestry/statistics/80938/en/>

World softwood lumber exports during 2019 were 132.2 mcm valued at \$26.6 billion, down slightly from 2018 but greater than previous years. Russia is the leading softwood lumber exporter at 31.5 mcm valued at \$4.2 billion followed by Canada at 27.7 mcm worth \$6.1 billion. When the EU is combined, they accounted for 53.6 mcm of softwood lumber exports worth \$11.8 billion in 2019. U.S. softwood lumber exports were only 2.3 mcm during 2019, indicating that most softwood lumber produced in the United States remains for domestic use.

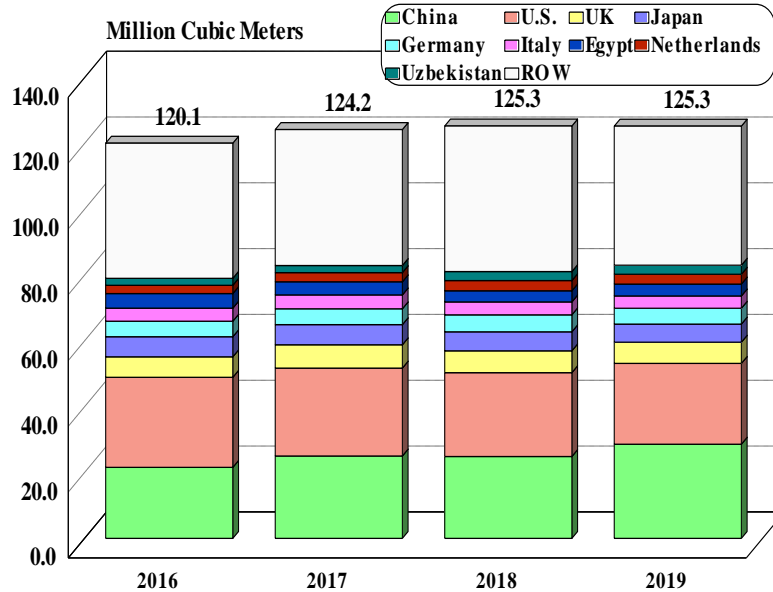
World Softwood Lumber Exports, 2016-2019



Source: FAO - <http://www.fao.org/forestry/statistics/80938/en/>

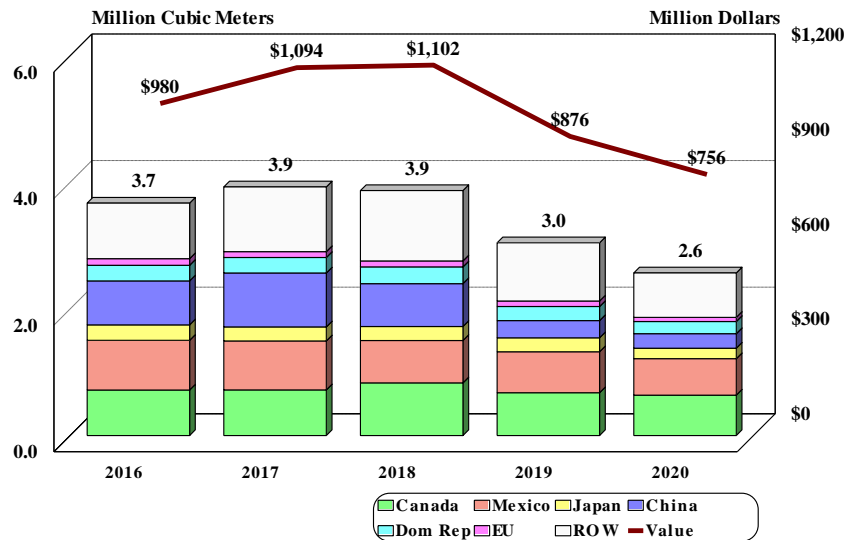
China is the largest market for softwood lumber, importing 26.6 mcm during 2019; U.S. imports were 24.6 mcm. Thus, while the United States participates in the global softwood lumber market, they do so as a net importer.

World Softwood Lumber Imports, 2016-2019



Source: FAO - <http://www.fao.org/forestry/statistics/80938/en/>

U.S. Softwood Lumber Exports, 2016-2020



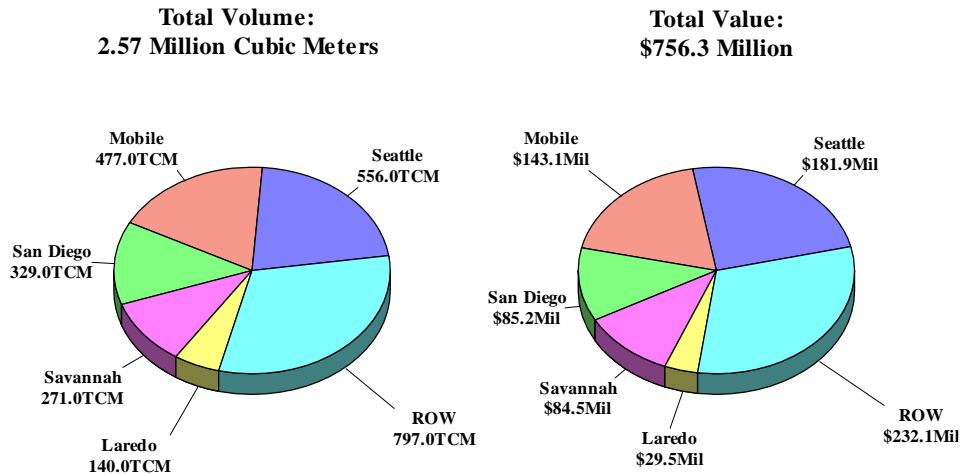
Source: Global Ag Trading System, FAS/USDA

The United States participates in the global softwood lumber market as a net importer. Further, U.S. softwood lumber exports have fallen due to high domestic demand.

During 2020, U.S. exports for softwood lumber of 2.6 mcm were valued at \$756 million. Canada and Mexico are the two most important markets for U.S. softwood lumber, combining to account for nearly half of exports. While dependence on these two markets has grown over the past several years, other important markets are Japan, China, and the Dominican Republic. U.S. softwood lumber exports have fallen over the past several years due in large part to increased domestic demand. Moreover, Texas softwood lumber exports were valued at \$35.5 million in 2020 going mainly to Mexico.

When the United States exports lumber, the major ports for these exports are Seattle, Mobile, San Diego, Savannah, and Laredo. Over half of the exports from Seattle are destined for Canada with 29 percent destined for Japan. Exports from Mobile are destined for the Dominican Republic, Jamaica, and Haiti, exports from San Diego and Laredo flow to Mexico, and from Savannah most exports are shipped to China.

U.S. Softwood Lumber Exports by Port District, 2020

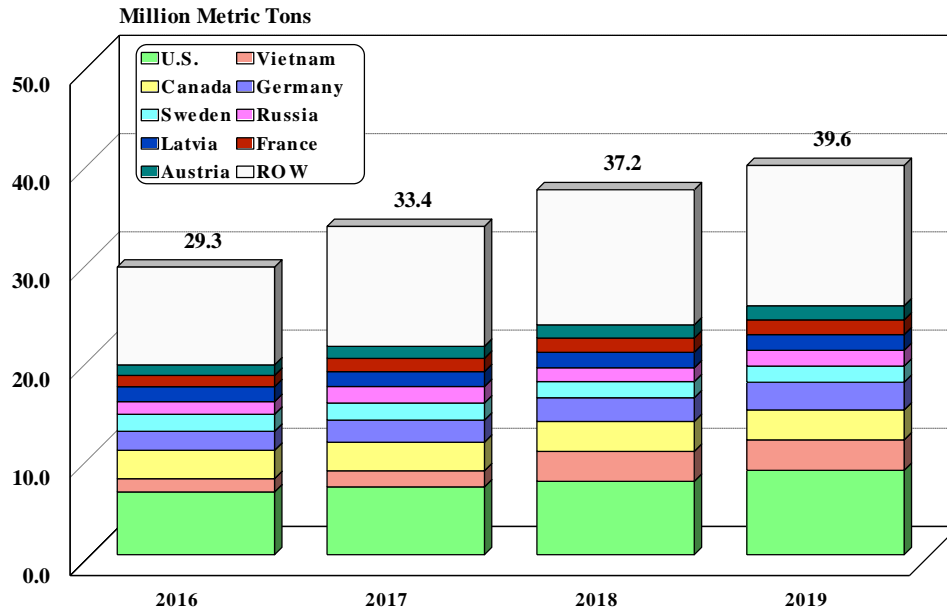


Source: Global Ag Trading System, FAS/USDA, TCM = 1,000 Cubic Meters

Wood Pellets and Softwood Chips

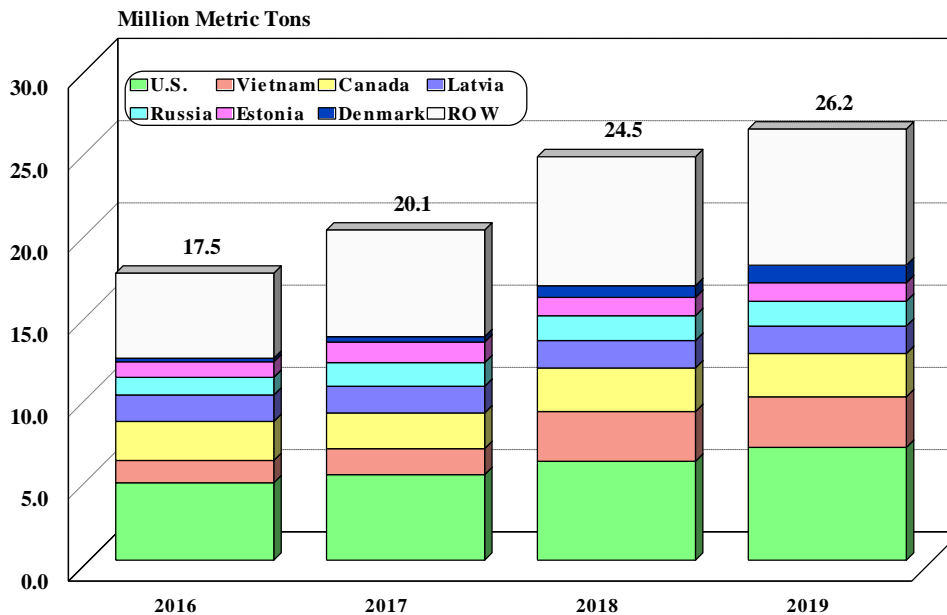
World wood pellet production, whether made from softwood or hardwood, has grown significantly over the past several years, from 29.3 million metric tons (MMT) in 2016 to 39.6 MMT in 2019. One reason for increased production is a supply response to greater demand for wood pellets due to their use as a renewable fuel. The United States is by far the largest producer of wood pellets with Vietnam, Canada and Germany among major producers. The United States, Vietnam and Canada are also the leading exporters of wood pellets. However, if taken as a group, the EU would be the number two producer and exporter of wood pellets.

World Wood Pellet Production, 2016-2019



Source: FAO - <http://www.fao.org/forestry/statistics/80938/en/>

World Wood Pellet Exports, 2016-2019

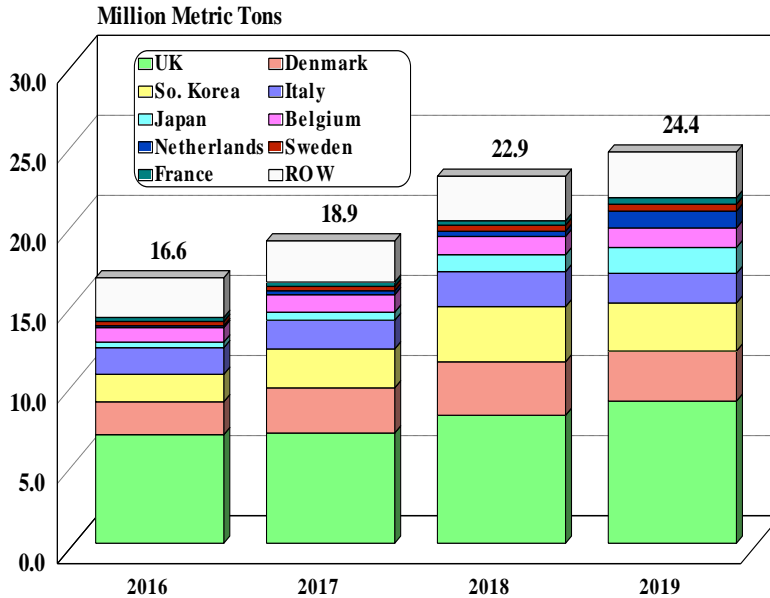


Source: FAO - <http://www.fao.org/forestry/statistics/80938/en/>

EU countries are also the leading importers of wood pellets, accounting for over 70 percent of world imports. A major reason for the size of the EU market for wood pellets is that they are approved as a renewable energy source which help the EU to achieve their climate goals.

U.S. wood pellet exports, while destined mostly for the European Union, have seen demand in the French West Indies, Canada, and Japan.

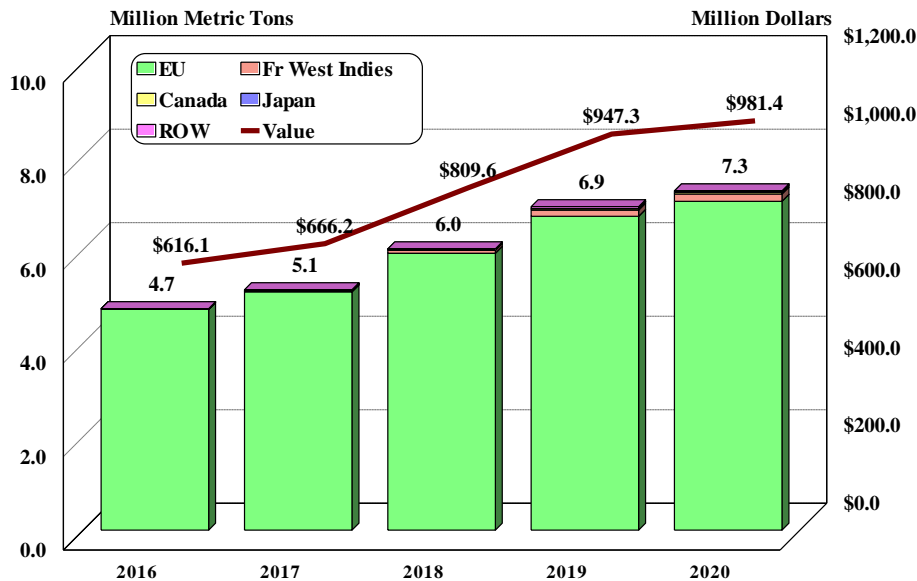
World Wood Pellet Imports, 2016-2019



Source: FAO - <http://www.fao.org/forestry/statistics/80938/en/>

U.S. wood pellet exports totaled 7.3 MMT during 2020 valued at \$981.4 million, with almost all of it destined for the EU. However, there continue to be market opportunities in the French West Indies, Canada, and Japan. Furthermore, Texas wood pellet exports were valued at \$68.1 million in 2020 going mainly to the UK.

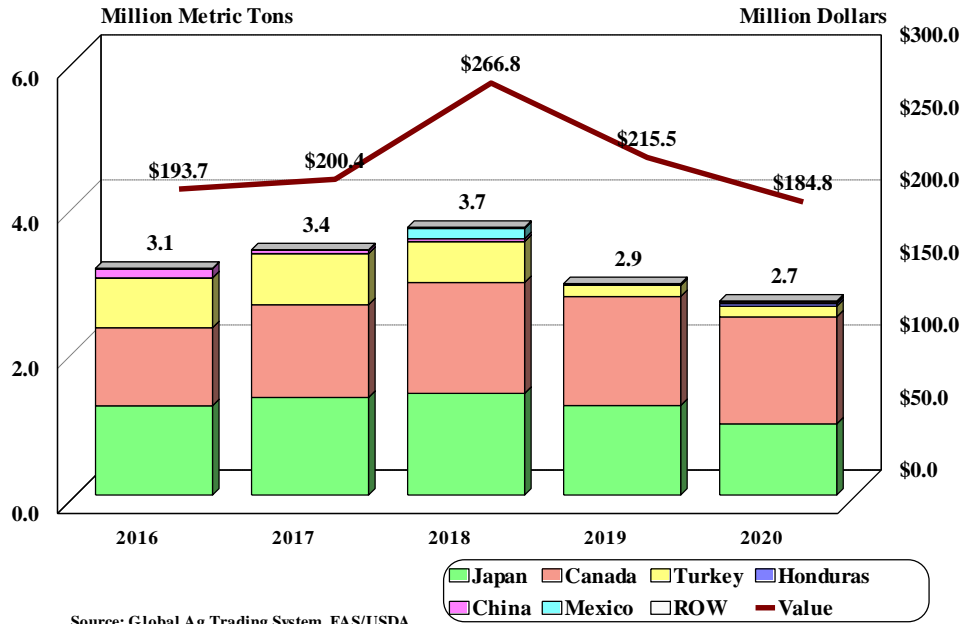
U.S. Wood Pellet Exports, 2016-2020



Source: Global Ag Trading System, FAS/USDA

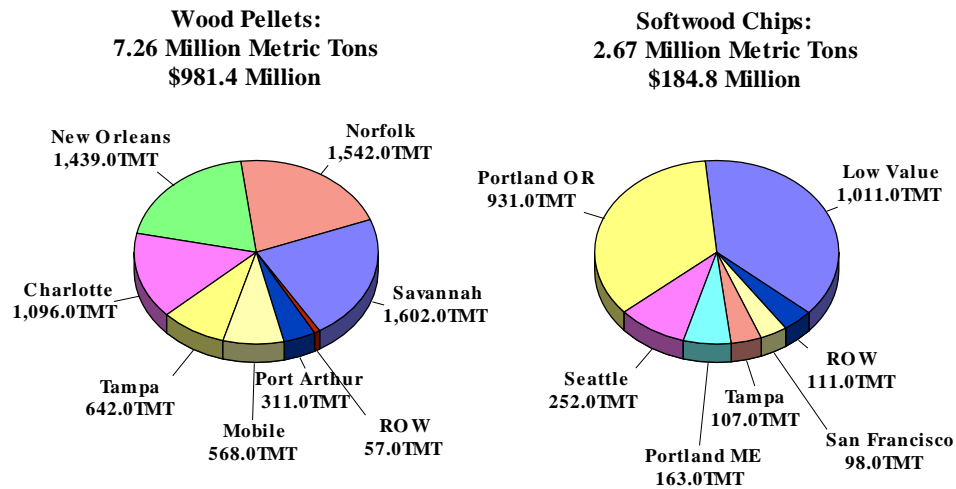
The United States also exports a large amount of softwood chips, 2.7 MMT worth \$184.8 million in 2020. Softwood chips are used for mulch, fertilizer, as a biofuel, and for ground cover. Japan and Canada are the major markets for U.S. softwood chip exports; Japan by value and Canada by volume.

U.S. Softwood Chips Exports, 2016-2020



Wood pellets are exported primarily from the ports for Savannah, Norfolk, New Orleans, and Charlotte, with almost all destined for the EU. Savannah and Norfolk are also used for wood pellet exports to the French West Indies. Softwood chip low value exports to Canada flow through a variety of land ports on the northern U.S. border. Other softwood chip exports to Canada use the ports of Seattle, Portland, ME, and, to a lesser extent, Portland, OR. Most softwood chip exports which use Portland, OR are destined for Japan.

U.S. Wood Pellet and Softwood Chip Exports by Port District, 2020



Source: Global Ag Trading System, FAS/USDA; Low Value are Destined for Canada; TMT = 1,000 Metric Tons

Other Softwood Products

Two additional softwood products merit a brief discussion – softwood plywood and softwood veneer, which is used in the production of softwood and hardwood plywood. During 2020, U.S. exports of softwood plywood were 295.6 mcm worth \$100.4 million. About half of these exports are exported to Canada with about 30 percent headed for Mexico. The Bahamas, Leeward Islands, and the Dominican Republic are smaller markets for U.S. softwood plywood.

U.S. softwood veneer exports were 17.2 million square meters worth \$23.6 million in 2020, with about a half bound for Canada and a quarter shipped to Mexico. The EU is the only other significant market for softwood veneer, capturing roughly ten percent of U.S. exports.

Barriers to Trade

There are two main barriers to trade for softwood products – tariffs and phytosanitary issues. U.S. forest products exports face zero or very low tariffs in most important markets. Canada, Mexico, the EU, three important U.S. markets, levy no import tariffs on U.S. softwood products or wood pellets discussed in this report. In Japan, there are no tariffs on less-processed products but they have a 4.8 percent on softwood lumber. And in China, rates had recently ranged from 5–25 percent on U.S. forest products due to the recent trade war. However, most U.S. exports now face an applied rate of 1–2 percent as a result of a decision by the Government of China.

For phytosanitary issues, the most important issue for the many timber producing countries is to prevent pests and diseases from entering their country. As a result, U.S. lumber exports typically must be kiln dried or heat treated before export. Further, an Authorized Certification Officer (ACO) must verify that the lumber is free of bark and similar tissue. More information on the export process for lumber may be found in the USDA APHIS Export Program Manual, at

www.aphis.usda.gov/import_export/plants/manuals/domestic/downloads/xpm.pdf. To search for these regulations by country, the scientific name for the product must be use. As most softwood in Texas is pine, the appropriate initial search term to use is *pinus*, and then the search may be refined further.

Conclusions

The global market for forest products is robust. Texas, which produces mainly softwood products, has the potential to export a wide variety of markets including Canada, Mexico, Japan, China, and the EU. While there is competition from other states and countries, the United States has been a leader in the global forest products market. Texas has the advantage of being geographically close to several wood products export ports, including Laredo, Port Arthur, New Orleans, and Mobile. As tariffs are relatively low, the most important requirements to meet are the import market phytosanitary regulations. Once this can be accomplished, the global market for Texas forest product exports will be open for business.

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