

SC FOREST PRODUCTS

INDUSTRY EXPORT REPORT: 2016



Industry at a glance

Total 2016 Export
\$1.27 billion

Average Monthly Export
\$105.7 million

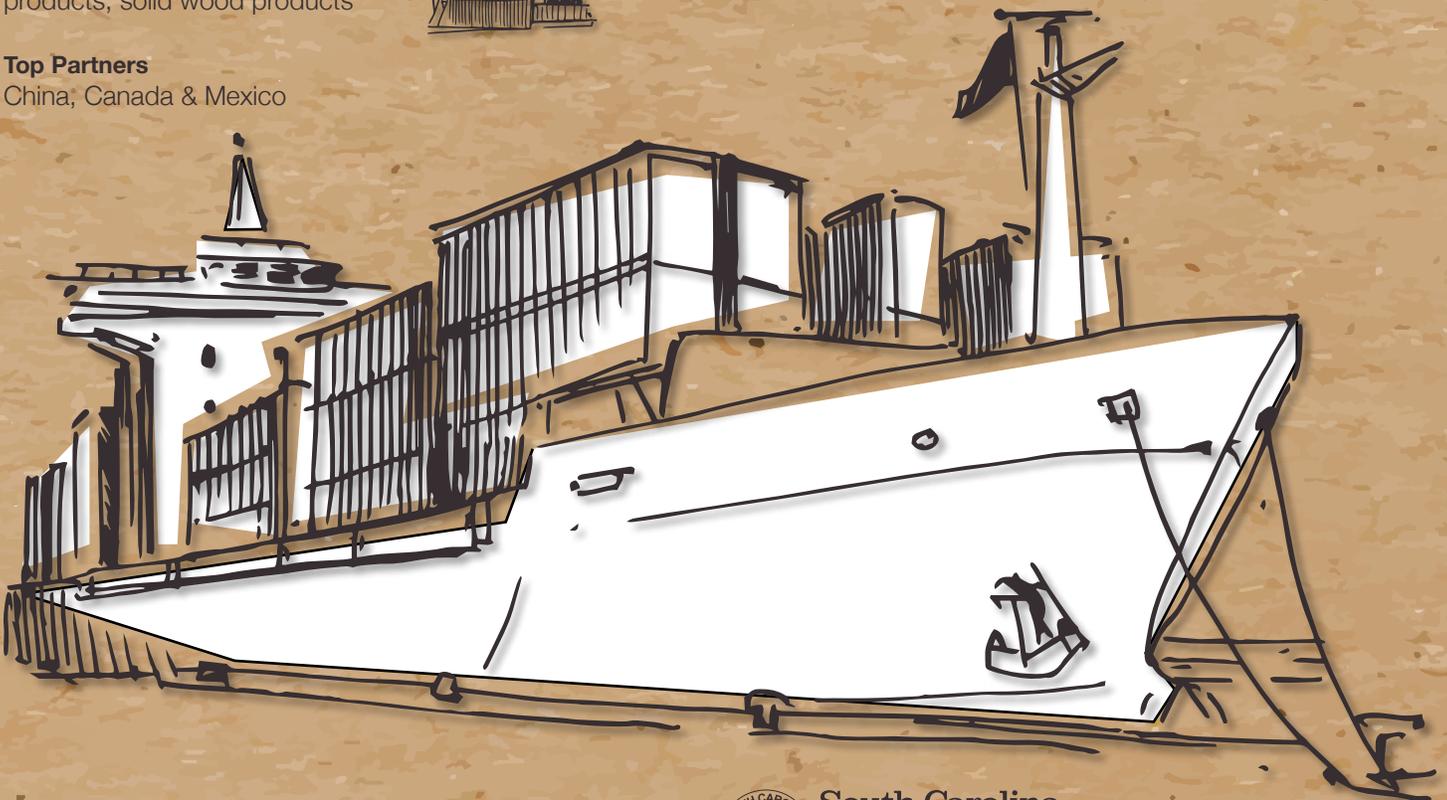
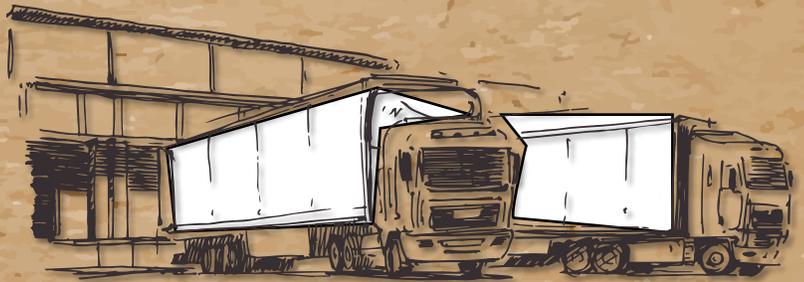
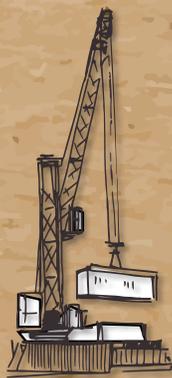
- max » \$110.2 million (Nov.)
- min » \$100.6 million (Jan.)

Top Commodities

Woodpulp, paper & paperboard products, solid wood products

Top Partners

China, Canada & Mexico



South Carolina
Forestry Commission

Background: 2002 - 2015 Exports^{1,2}

International markets are a considerable source of revenue for the forest products industry in South Carolina: since 2007, this sector has exported more than \$1 billion per year, mostly on paper and paperboard products, but also on primary commodities such as logs and lumber.

Between 2002 and 2015, forest products exports from the state increased from \$0.5 to \$1.35 billion, which translated into an average growth of \$79.8 million a year (*Fig. 1*).

The majority of shipments leave the country via vessel: almost 85.9% in 2016, whereas air and other methods were used for 1.1% and 13.0% of the cases, respectively (*Fig. 1*). Most of air shipments in 2016 corresponded to paper and paper board products (63.8%), followed by furniture and manufacturing equipment. Products transported via other methods, were mainly paper & paperboard products (71.5%) and wood pulp (11.0%) categories also in 2016.

Figure 1—SC Forest Products Exports by Transportation Method (2002 - 2016)

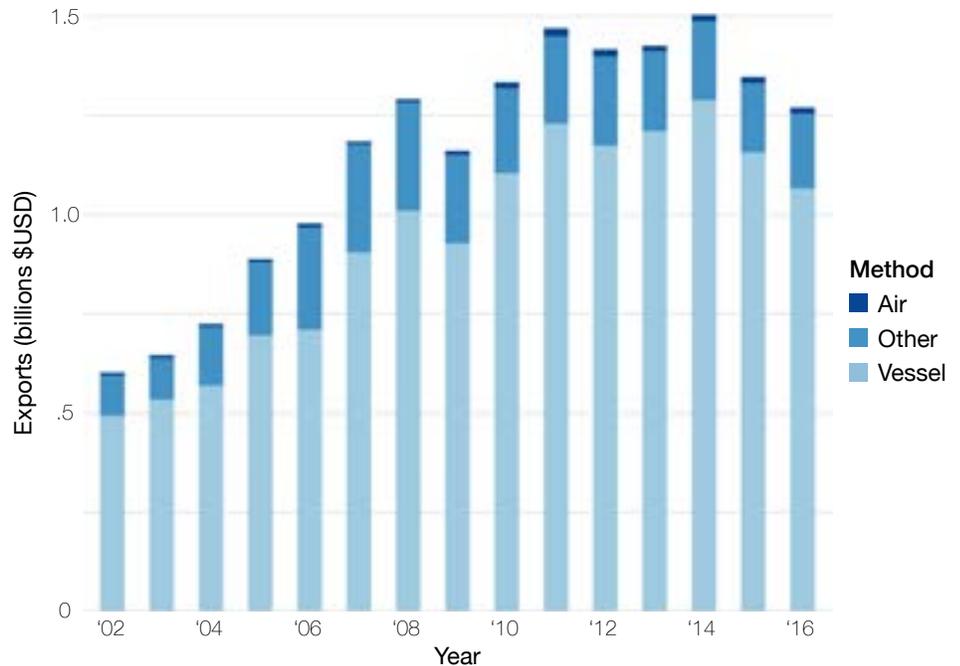
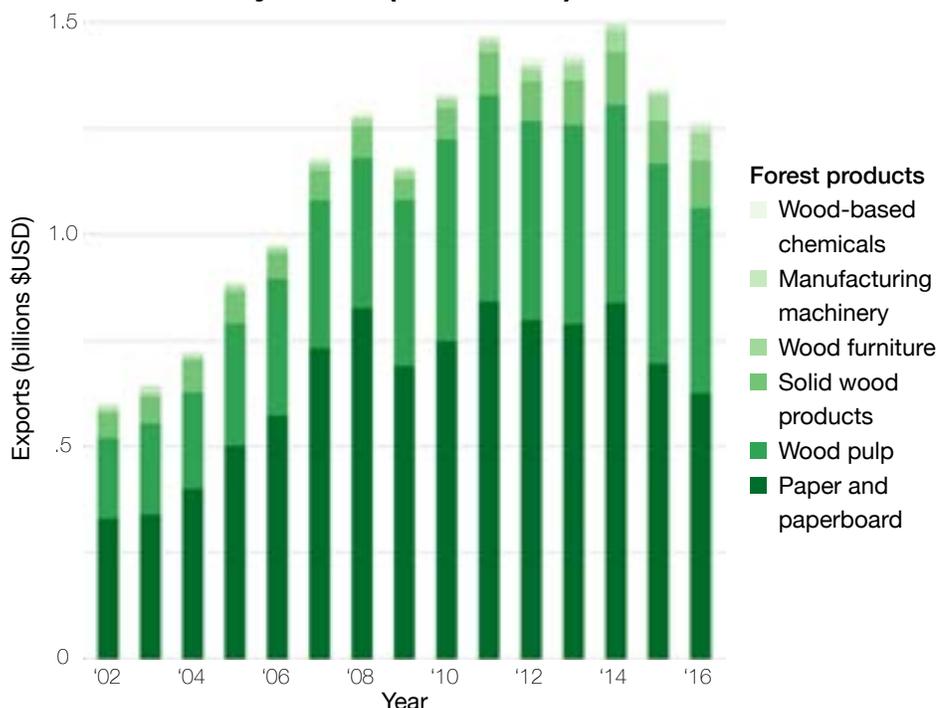


Figure 2—SC Forest Products Exports by Sector (2002 - 2016)



Industry Performance Review: 2016 Exports

In 2016, export of forest products from South Carolina totaled \$1.27 billion, representing a decrease of 5.8% (\$78.0 million) from 2015 and 15.6% (\$234.6 million) from 2014.

The biggest drivers of this change were woodpulp³, paper and paperboard products (*Fig. 2*): their respective exports decreased \$34.8 and \$69.4 million from 2015 to 2016, for a total of \$104.2 million.

Poland, Spain and Malaysia observed the most drastic decreases on their imports of wood pulp from South Carolina; together they accounted for \$34.4 million of the decrease (\$15.7, \$11.1 and \$7.73 million, respectively). Similarly for paper and paperboard products, it was found that the biggest demand drops came from Mexico, Spain and Turkey: their respective reductions were \$16.6, \$15.3 and \$14.1 million respectively, giving a total of \$46.01 million.

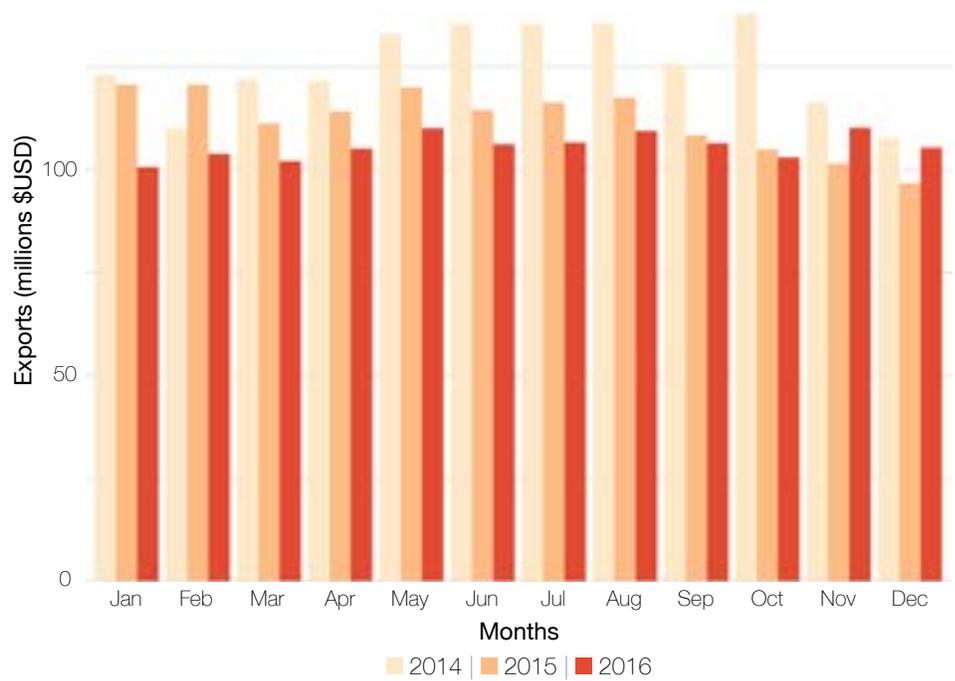
The recent decline in these sectors was partially offset by growth observed on exports of solid wood products, wood-based chemicals and furniture, which increased by 11.1%, 4.0% and 4.5% from 2015 to 2016, respectively.

A close look at maritime and air revealed their value decreased from \$1.17 billion in 2015 to \$1.08 billion in 2016; this represented a 7.83% decrease; but the “volume” of these increased by 6.53%, from 1.94 to 2.06 million Mt.⁴

Woodpulp, paper and paperboard sectors saw their exports decrease between 2015 and 2016, both in value and volume, but in different magnitudes: while the drop observed on the value of exports corresponded to 12%, that for volume amounted to 3% only.

The solid wood products sector on the other hand, saw the value and volume of their exports increase over the last two years. Its value and volume increased \$11.4 million and 166.3 Mt respectively, which corresponded to +13.28% and +81.59%. Changes in

Figure 3—2014-2016 SC Forest Products Monthly Export



pricing for particular commodities and the strength of the U.S. dollar in specific markets were behind these disparities and further analysis is required. A detailed description of these commodity groups and their markets are provided in the following sections.

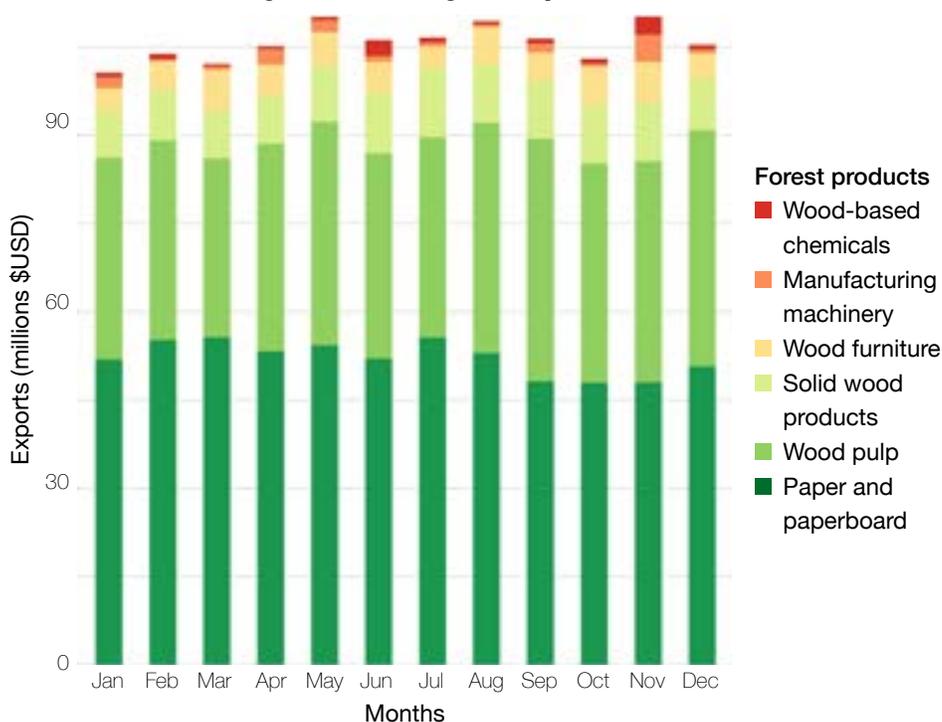
Monthly exports remained fairly stable for the most part of the year around an average of \$105.7 million (Fig 3), but consistently below those in 2014 and 2015

(with exceptions in November and December). At the macro level, 2016 exports followed the same commodity-mix observed since historical data has been available. Paper and paperboard products topped the list by accounting for 49.3% (\$625.7 million) of export in 2016 (Fig 4).

Wood pulp was second with export of \$435.9 million, which constituted 34.4% of the total. Solid wood products and furniture followed in the ranking with sales that accounted for 8.9% (\$112.4 million) and 5.1% (65.0 %) respectively.

During this year, forest products from South Carolina were

Figure 4—2016 S.C. Forest Products Exports by Commodity Group



exported to 115 countries around the world. The state's top trading partner was China, whose volume traded composed 13.4% (\$130 million) of all forest products export in that year.

Canada and Mexico followed suit by driving 9.3% (\$118.6 million) and 7.0% (\$89.0 million) of exports from the state respectively.

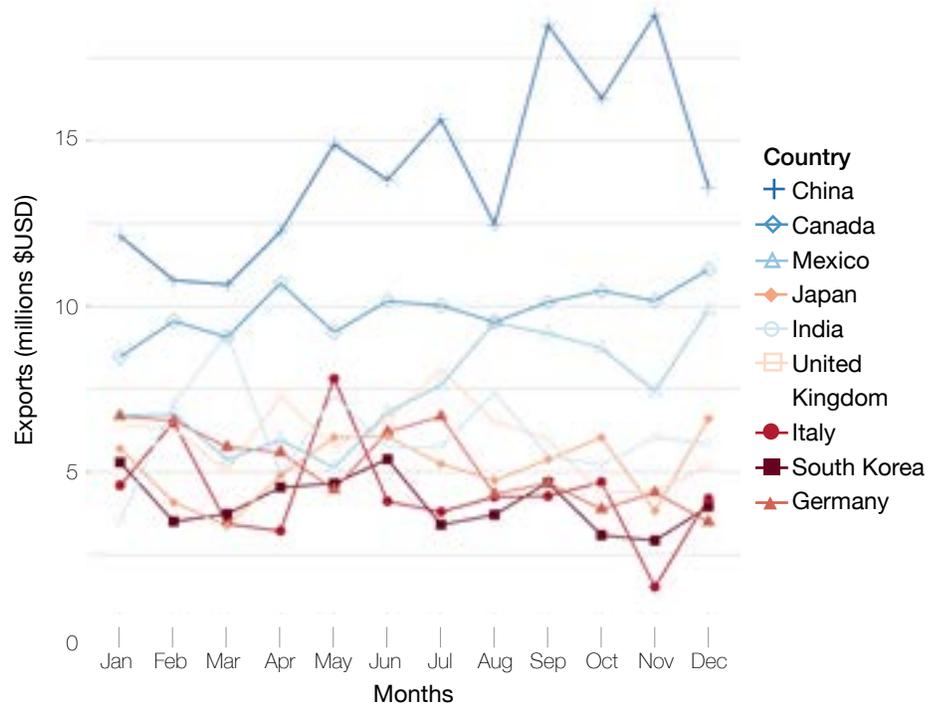
The top 10 destinations for the state's forest products exports in 2016 are shown in *Fig. 5* (ranking by commodity group is offered in *Fig. 7*). It can be noted that overall there is fragmentation on the exports markets: the top ten trading partners accounted for only 62.0% of the total exports from South Carolina in 2016 and the remaining 38.0% was distributed among 105 countries.

Products and Markets

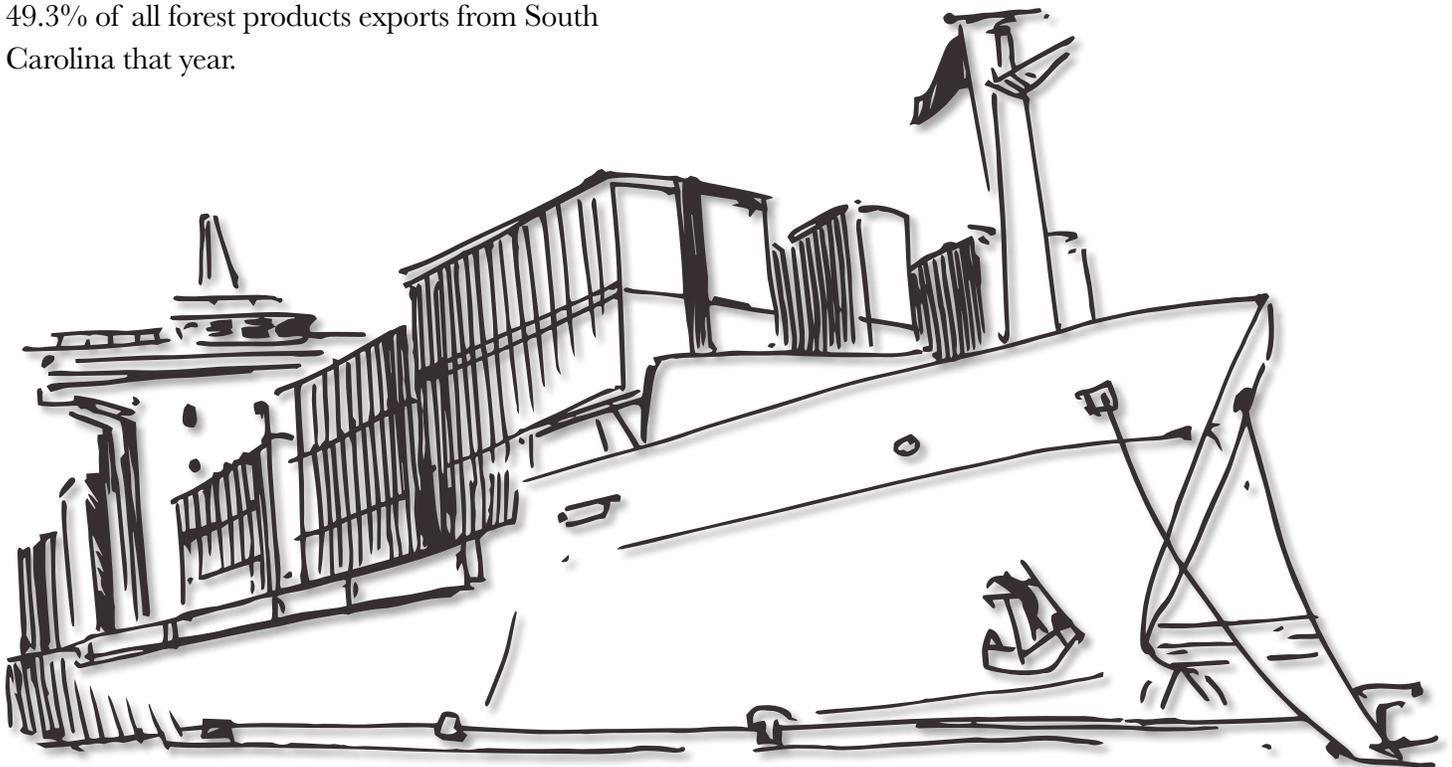
PAPER & PAPERBOARD

Export of paper and paperboard products amounted to \$625.7 million in 2016, which corresponded to 49.3% of all forest products exports from South Carolina that year.

Figure 5—2016 SC Forest Products Exports by Partner



Monthly exports of these commodities remained within the \$47.9 – \$55.7 million interval, for an average of \$52.1 million. More than half of export within this category (51.5%) consisted of uncoated kraft paper and paperboard (HTS⁵ code 4804), which amounted to \$322.0 million.



The second best-selling product was paper for writing and printing (HTS 4802), whose exports amounted to \$109.4 million in 2016 and represented 17.5% of the state's total.

Other examples of products from the state with significant trade were coated paper and paperboard (HTS 4811), coated paper with kaolin (HTS 4810) and sanitary paper products (HTS 4818); whose respective export were \$54.4, \$34.5 and \$19.4 million.

Paper and paperboard products from South Carolina were sold to 99 countries in 2016: the top ten accounted for 65.28% of the total sales and the top three being Canada, the United Kingdom and Germany, each with imports of \$88.9, \$10.51 and \$9.18 million, respectively.

WOOD PULP

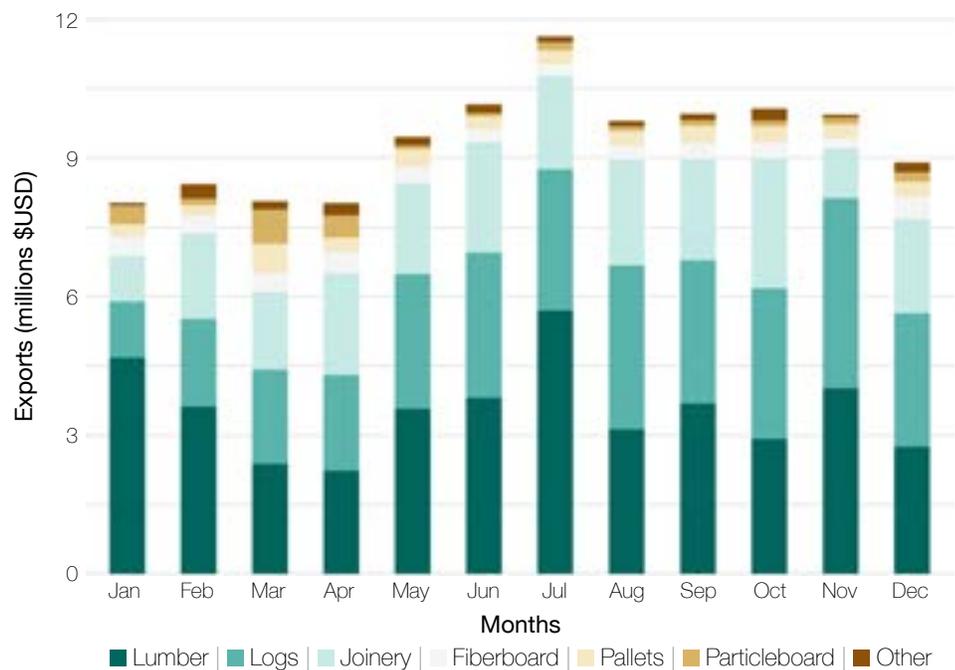
International markets for wood pulp products from South Carolina made this commodity group the highest traded after paper and paper board products. Their export in 2016 amounted \$435.9 million, which represented 34.4% of all forest products exports from the state.

Average monthly sales remained between \$30.4 and \$41.1 million, with an average of \$36.3 million. One single product, –chemical woodpulp (HTS 4703), accounted for 83.1% of the total exports within this group.

The distant second product in importance was recovered (waste and scrap) paper and paperboard (HTS 4707) which accounted for 16.5% of all export of woodpulp products in 2016. A total of 65 countries bought woodpulp products from South Carolina in 2016 and the top ten partners represented 77.1% of the value traded.

China topped the list with import of \$85.2 million, which represented 19.6% of the total. India and Japan followed with imports of \$43.3 and \$41.9 million respectively, each representing 9.9% and 9.6% of the total.

Figure 6—2016 SC Exports of Solid Wood Products



SOLID WOOD PRODUCTS

Products included in the solid wood category are those with HTS⁶ 44 codes: fuelwood, charcoal, logs, lumber, poles, veneers and oriented-strand board (OSB), among others.

Export of these commodities amounted \$112.4 million in 2016, with a monthly average of \$9.4 million (*Fig 6*), a minimum of \$8.0 in April, and a maximum of \$11.6 million in July. A total of 17 different products had international sales during 2016, however the top five accounted for 95.7% of the total value traded.

In first place was lumber, whose sales amounted to \$42.5 million and represented 37.8% of the total. It was followed by logs, builders' joinery and fiberboard, with respective exports of \$33.2, \$23.5 and \$4.2 million, which accounted for 29.6%, 20.9% and 3.8% of the total.

Interestingly, log export presented the fastest growth among solid wood products in the last six years: +43.1% per year, followed by builders' joinery and lumber with +24.9% and +18.1% a year respectively.

Products within this commodity group went to 61 countries around the world and the top five partners accounted for 69.9% of the total value traded. China's imports of solid wood products from South

Carolina totaled \$38.6 million, becoming the most important partner for the state (34.4% of export). Canada and India occupied the second and third places with respective exports of \$13.5 and \$9.2 million, for 12.0% and 8.2% of the export within this commodities.

OTHER SECTORS

Other commodity groups with significant contributions to the international trade of forest products were wood-based chemicals, wood furniture and prefabricated furniture: demand coming from these sectors drove 7.4% of all forest products exports from the state. Shipments of wood-based chemicals⁷ totaled \$12.7 million in 2016, which represented an increase of 45.7% over the \$8.7 million exported in 2015. Their average monthly export was \$1.1 million,

with a peak of \$3.1 million in November and a minimum of \$0.4 million in March.

The top three international partners were Finland (\$4.4 million), South Korea (\$2.6 million) and China (\$1.6 million). Finland's remarkable growth within this category in the past two years -from 14th to 1st place, was due to its increase in imports of tall oil: from zero in 2015 to \$4.4 million in 2016, which corresponded to 92.7% of their total.

Export of wood furniture in 2016 grew to \$65.0 million, which represented a 7.4% increase from 2015 and a 5.1% of all exports from the state.

International demand came mainly from Russia, Thailand and Canada (21.8%, 20.7% and 3.4% respectively) which totaled \$9.4 million exports per month on average, with a minimum \$8.0 million in April and a maximum of \$11.6 million in July.

Figure 7—Top 10 SC Forest Products Markets in 2016

(2015-16 Ranking Change in Parentheses)

Rank	Wood-based chemical products	Solid wood products	Wood Pulp	Paper and paperboard	Paper manuf. machinery	Furniture	Prefabricated buildings
1	Finland (13)	China (0)	China (0)	Canada (0)	Poland (11)	Russia (0)	Chile (11)
2	Korea, South (1)	Canada (0)	India (2)	United Kingdom (2)	Canada (-1)	Thailand (3)	Spain (10)
3	China (-2)	India (0)	Japan (-1)	Germany (0)	Malaysia (0)	Canada (-1)	Canada (-1)
4	Brazil (-2)	Australia (0)	Mexico (3)	Mexico (-2)	Germany (0)	Egypt (2)	Bahamas (-1)
5	Canada (2)	Japan (1)	Korea, South (0)	China (0)	Argentina (11)	Germany (-1)	China (7)
6	Thailand (-2)	United Kingdom (2)	Italy (0)	Italy (0)	Mexico (-4)	Malaysia (2)	Romania (6)
7	Mexico (1)	Vietnam (0)	Colombia (3)	Ecuador (1)	Australia (2)	India (0)	Australia (5)
8	Kuwait (6)	Bangladesh (10)	Poland (-5)	India (1)	Colombia (-2)	China (3)	Korea, South (4)
9	India (-3)	Pakistan (1)	Netherlands (-1)	Netherlands (11)	Brazil (6)	Brazil (1)	Colombia (3)
10	Netherlands (-1)	Korea, South (2)	Belgium (1)	Egypt (9)	Netherlands (11)	Australia (19)	France (-6)

■ Asia | ■ Europe | ■ Central/South America & The Caribbean | ■ North America | ■ Oceania | □ Africa



NOTES

- ¹ Data source: U.S. Census Bureau. (2016). USA Trade Online. Retrieved March 15, 2016, from <https://usatrade.census.gov>.
- ² This report is based on USA Trade On-line's State Export Data (Origin of Movement) report series. Export figures are expressed in U.S. Dollars, unless otherwise noted.
- ³ Naming convention used for commodities in this document is based on the Harmonized Tariff Schedule of the United States (29th Edition).
- ⁴ Mt: Metric Tons.
- ⁵ HTS Code: Harmonized Tariff Schedule Code.
- ⁶ HTS codes are grouped into chapters (e.g. Chapter 44: "Wood and Articles of Wood; Wood Charcoal").
- ⁷ Examples of Wood-based Chemicals: tall oil, wood tar; gum, wood or sulfate turpentine oils.

SCFC MARKETING PROGRAM

Expanded market opportunities encourage non-industrial forest landowners to exercise sound management practices on their land. Thanks to healthy markets and a favorable return on their timber investments, landowners will reinvest in establishing quality, well-stocked stands for future timber resources. New markets created through industrial and export development improve financial returns to landowners, retain working forests, enhance forest health, better protect water quality, and increase wood supply to retain and grow the forest industry and its job numbers. The goal of the SCFC's marketing program is to develop current and new markets for the state's forest resources and to increase export volume. We do this by offering research of marketing intelligence, targeted advertisement and promotion, market entry and expansion assistance, and education.

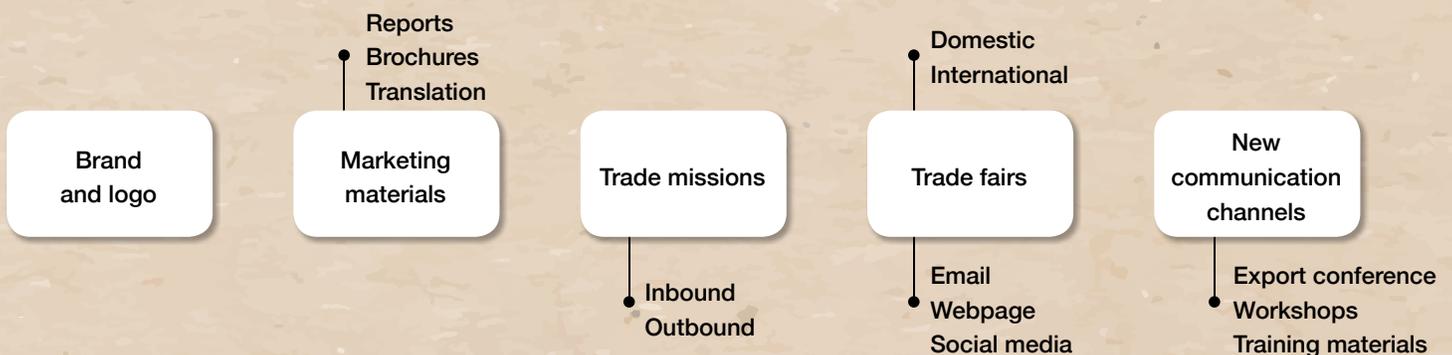


Objectives

- Assess market needs/barriers
- Develop marketing information and trade contacts to improve demand for SC forest products
- Provide company-specific assistance for locating sources of raw materials or manufactured products from SC producers
- Disseminate database on primary and secondary processors market and promote South Carolina forest product commodities for international trade

Elements of our marketing program

- Monitoring the health of the state's forest products industry
- Conducting research on current and new markets
- Promotion and sales assistance:



Other services and resources

Assistance is provided for forest/wood products and related business development. In addition, trade development activities are carried out to increase markets for South Carolina wood products.

- Forest products mill directory and maps
- Wood product business location or expansion assistance
- International trade information and assistance
- Forest Inventory & Analysis (FIA) reports, statewide and customized
- Timber Products Output (TPO) reports
- Sources of supply



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