



Alabama's Timber Industry—Timber Product Output and Use, 2015

Introduction

This science update contains the findings of a 2015 canvass of all primary wood-using plants in Alabama, and presents changes in product output and residue use since 2013. It complements the Forest Inventory and Analysis (FIA) annual inventory of volume and removals from the State's timberland. The canvass was conducted to determine the amount and source of wood receipts and annual timber product drain, by county, in 2015 and to determine interstate and cross-regional movement of industrial roundwood. Only primary wood-using mills were canvassed. Primary mills are those that process roundwood in log or bolt form or as chipped roundwood. Examples of industrial roundwood products are saw logs, pulpwood, veneer logs, poles, and logs used for composite board products. Mills producing products from residues generated at primary and secondary processors were not canvassed. Trees chipped in the woods were included in the estimate of timber drain only if they were delivered to a primary domestic manufacturer.

A 100-percent canvass of all wood processors in Alabama was conducted in 2016 to obtain information for 2015. In addition, roundwood from out-of-State mills known to be using logs or bolts harvested from Alabama timberland was incorporated into Alabama production estimates. Each mill was canvassed by mail or through personal contact at plant locations. Telephone contacts followed mailed questionnaire responses when additional information or clarification of a response was necessary. In the event of a nonresponse, data collected in previous surveys were updated using current data collected for mills of similar size, product type, and location. Surveys for all timber products other than pulpwood began in 1961, and are currently conducted every 2 years.

Pulpwood production data were taken from an annual canvass of all southern pulpmills. Medium density fiberboard, insulating board, and hardboard plants were included in this survey.

The FIA Research Work Unit of the Forest Service, U.S. Department of Agriculture developed the Timber Product Output (TPO) Database Retrieval System to help customers answer questions about timber harvesting and use in the Southern region. This system acts as an interface to a standard set of consistently coded TPO data for each State and county in the region and Nation. The database is well documented and easy to use. The retrieval system allows the user to select the TPO variables of interest and generate a standard set of timber products, removals, and mill residue tables

for the specified resource area, State, or region. The Excel® core tables and figures that complement this science update are available on the TPO database. The system is available through the FIA Web site: <https://www.fs.usda.gov/srsfia/>.

The SRS gratefully acknowledges the tremendous cooperation and assistance provided by the Alabama Forestry Commission in collecting mill data. Appreciation is also extended to forest industry and mill managers for providing timber products information.

Table 1—Output of industrial products by product and species group, Alabama, 2013 and 2015.

Product and species group	Year			
	2013	2015	Change	Change
	--- thousand cubic feet ---			percent
Saw logs				
Softwood	252,231	282,589	30,358	12.0
Hardwood	46,180	55,217	9,037	19.6
Total	298,411	337,806	39,395	13.2
Veneer logs				
Softwood	30,949	38,553	7,604	24.6
Hardwood	9,317	9,782	465	5.0
Total	40,266	48,335	8,069	20.0
Pulpwood				
Softwood	455,182	452,073	-3,109	-0.7
Hardwood	159,704	146,104	-13,600	-8.5
Total	614,886	598,177	-16,709	-2.7
Composite panels				
Softwood	34,481	43,204	8,723	25.3
Hardwood	6,608	6,609	1	0.0
Total	41,089	49,813	8,724	21.2
Bioenergy				
Softwood	28,260	45,899	17,639	62.4
Hardwood	3,826	11,937	8,111	211.9
Total	32,086	57,836	25,750	80.2
Other Industrial				
Softwood	10,778	11,873	1,095	10.2
Hardwood	59	65	6	10.2
Total	10,837	11,938	1,101	10.2
All industrial				
Softwood	811,882	874,185	62,303	7.7
Hardwood	221,868	229,649	7,781	3.5
Total	1,033,750	1,103,834	70,084	6.8

All Products

Industrial timber product output from roundwood increased 70.1 million cubic feet, or 6.8 percent, to 1,103.8 million cubic feet.

Output of industrial softwood roundwood products was up 7.7 percent, to 874.2 million cubic feet, while output of industrial hardwood roundwood products increased 3.5 percent to 229.6 million cubic feet (fig. 1).

Pulpwood and saw logs were the principal roundwood products in 2015. Combined output of these two products totaled 935.9 million cubic feet and accounted for 85 percent of the State's total industrial roundwood output (fig. 2).

Total receipts at Alabama mills, which included roundwood harvested and retained in the State and roundwood imported from other States, was up 5 percent from 1,101.7 million cubic feet to 1,163.6 million cubic feet

At the same time, the number of primary roundwood-using plants in Alabama increased from 112 in 2013 to 118 in 2015 (fig. 3, see next page). The number of sawmills increased by 2, and the number of bioenergy mills increased by 4, while the number of pulpmills, veneer, composite panel, and other miscellaneous mills remained stable.

Across all products, 85 percent of roundwood harvested was retained for processing at Alabama mills. Exports of roundwood to other States amounted to 154.9 million cubic feet, while imports of roundwood amounted to 219.1 million cubic feet making the State a net importer by 64.2 million cubic feet or 6 percent of produc-

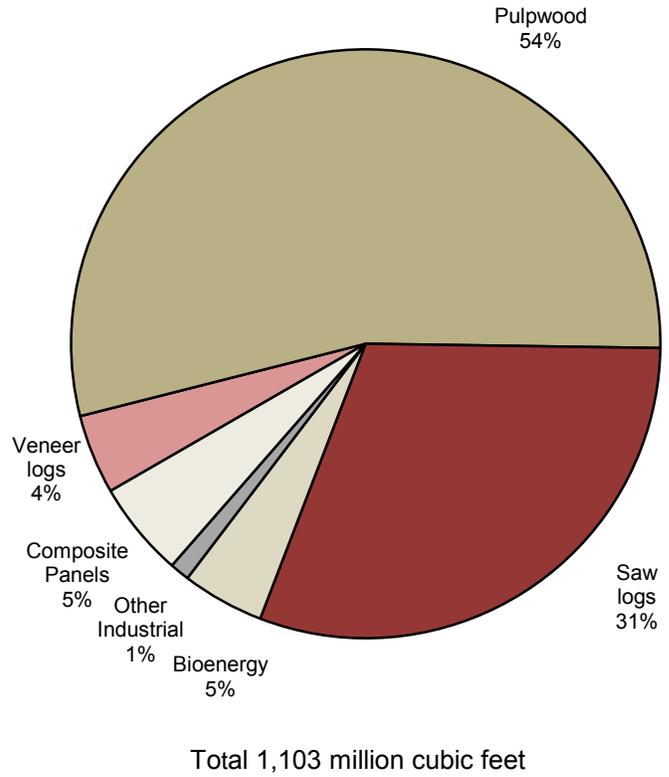


Figure 2—Roundwood production by type of product, Alabama, 2015.

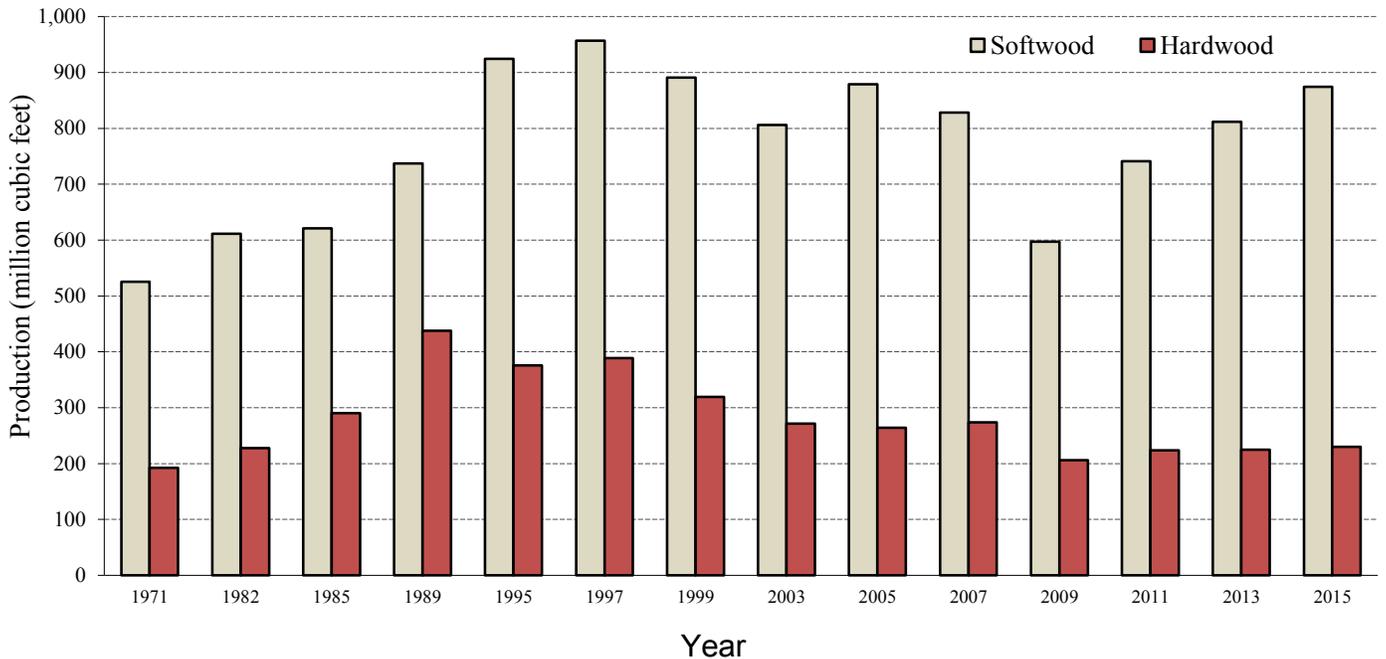


Figure 1—Roundwood production for all products by species group and year, Alabama.

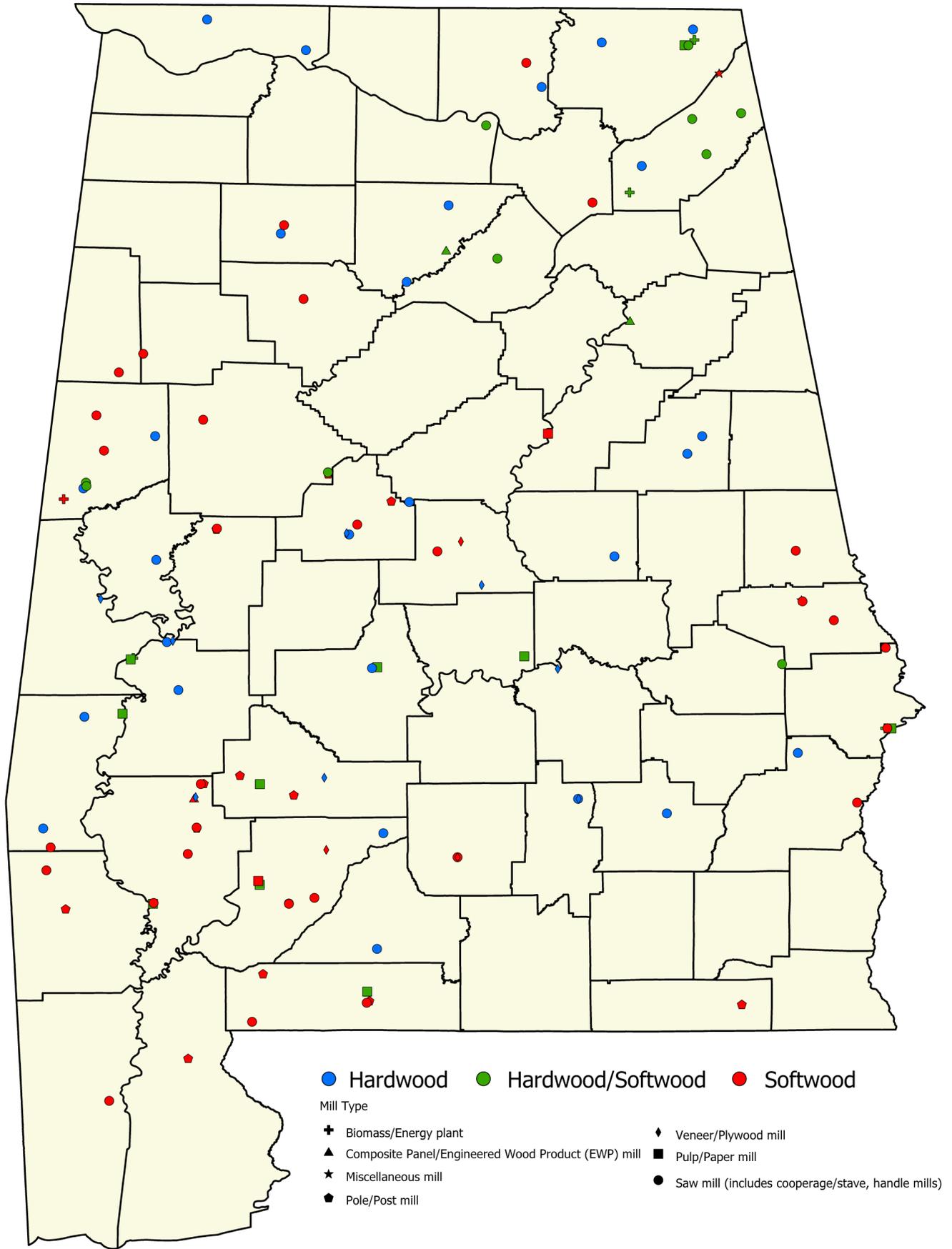


Figure 3—Primary wood-using mills, Alabama, 2015.

Pulpwood

Total pulpwood production decreased 3 percent to 598.2 million cubic feet but accounted for 54 percent of the State's total roundwood TPO compared to 59 percent of total TPO in 2013. Softwood output decreased to 452.1 million cubic feet, while hardwood output decreased to 146.1 million cubic feet (fig. 4). These were a decrease from 2013 numbers of 1 percent and of 9 percent, respectively.

Twelve pulpmill facilities were operating and receiving roundwood in Alabama in 2015, one more than 2013. Total pulpwood receipts for these mills increased to 610.1 million cubic feet, accounting for 52 percent of total receipts for all mills.

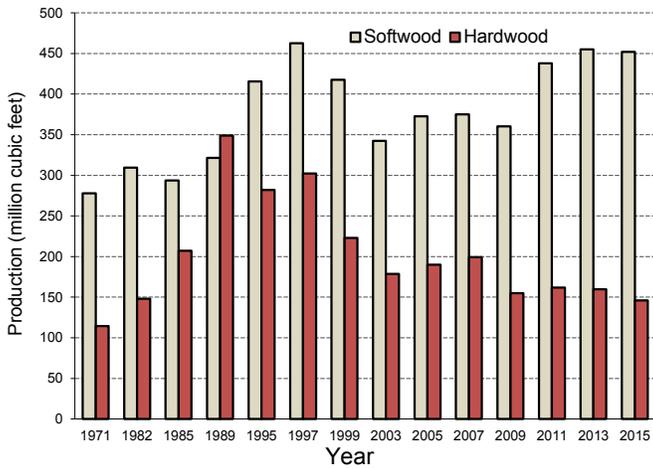


Figure 4—Roundwood pulpwood production by species group and year, Alabama, 2015.

Eighty percent of roundwood cut for pulpwood was retained for processing at Alabama pulpmills. Roundwood pulpwood accounted for 69 percent of total known exports and 59 percent of total imports.

Saw Logs

In 2015, Alabama had 69 sawmills, 2 more mills than in 2013. Total saw-log receipts were up 40.6 million cubic feet to 311.1 million cubic feet. Softwood saw-log receipts increased 14 percent to 303 million cubic feet, while those of hardwoods were up 27 percent to 57 million cubic feet.

Saw logs accounted for 31 percent of the State's total roundwood products. Output of softwood saw logs increased 12 percent to 282.6 million cubic feet, while that of hardwood saw logs was up 20 percent to 55.2 million cubic feet (fig. 5).

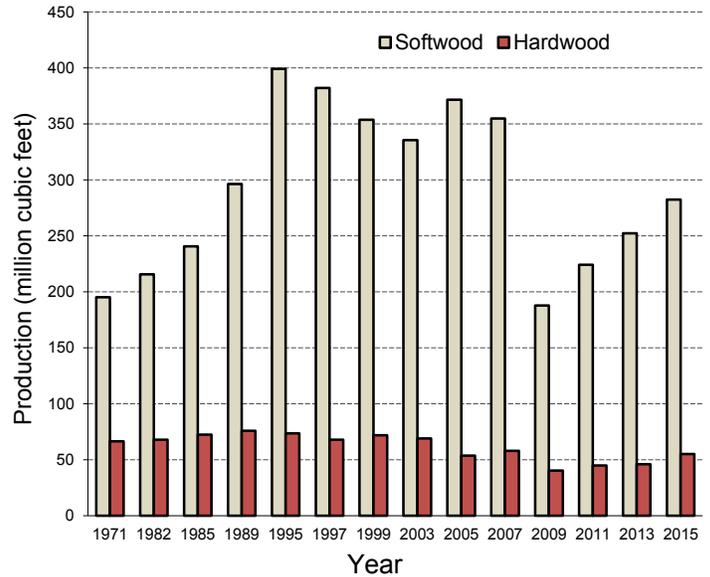


Figure 5—Roundwood saw-log production by species group and year, Alabama, 2015.

Alabama retained 90 percent of its saw-log production for within State manufacture, with saw-log imports exceeding exports by 22.2 million cubic feet in 2015.

Veneer logs

Output of veneer logs in 2015 totaled 48.3 million cubic feet, a 20 percent increase since 2013, and accounted for 4 percent of the State's total roundwood TPO volume. Output of softwood veneer logs increased 25 percent to 38.6 million cubic feet, while that of hardwood veneer logs increased 5 percent to 9.8 million cubic feet (fig. 6).

In 2015, Alabama had 11 veneer mills, the same as 2013. Receipts of veneer logs increased 18 percent to 41.7 million cubic feet. Softwood veneer log receipts increased 26 percent to 30 million cubic feet, while those of hardwoods were up 4 percent to 11.7 million cubic feet.

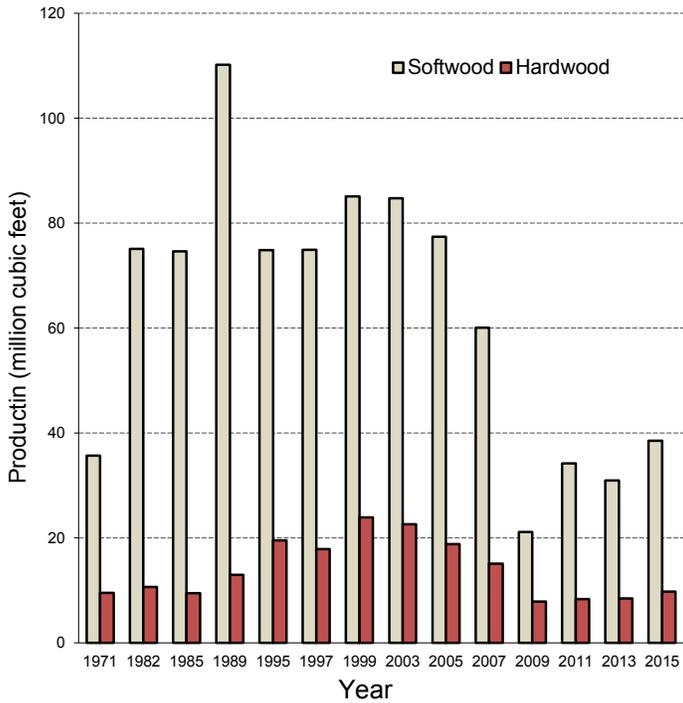


Figure 6—Roundwood veneer-log production by species group and year, Alabama, 2015.

Bioenergy

Bioenergy accounted for 5 percent of the State's total roundwood products. Output of softwood bioenergy increased 62 percent to 45.9 million cubic feet, while that of hardwood bioenergy was up 212 percent to 11.9 million cubic feet (fig. 7).

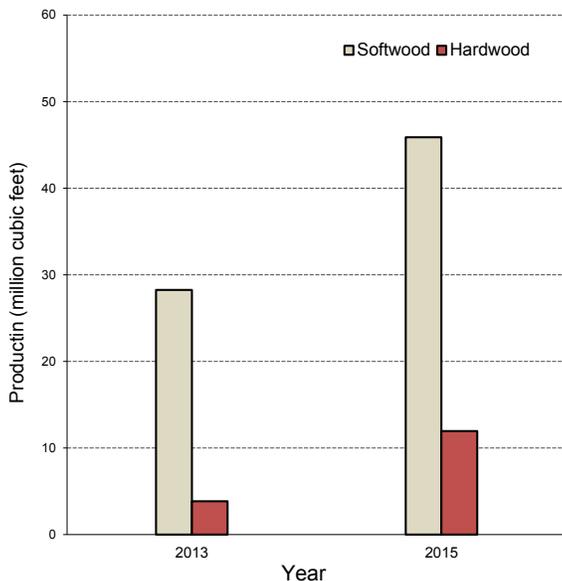


Figure 7—Roundwood bioenergy production by species group and year, Alabama, 2015.

In 2015, Alabama had 9 bioenergy mills, 4 more mills than in 2013. Total bioenergy receipts were up 14.4 million cubic feet to 81 million cubic feet. Softwood bioenergy receipts increased 67 percent to 63.7 million cubic feet, while those of hardwoods were up 226 percent to 17.3 million cubic feet.

Alabama retained 82 percent of its bioenergy production for within State manufacture, with bioenergy imports exceeding exports by 23.2 million cubic feet in 2015.

Composite Panels

Output of composite panels in 2015 totaled 49.8 million cubic feet, a 21 percent increase since 2013, and accounted for 5 percent of the State's total roundwood TPO volume. Output of softwood composite panels increased 25 percent to 43.2 million cubic feet, while that of hardwood composite panels experienced no change.

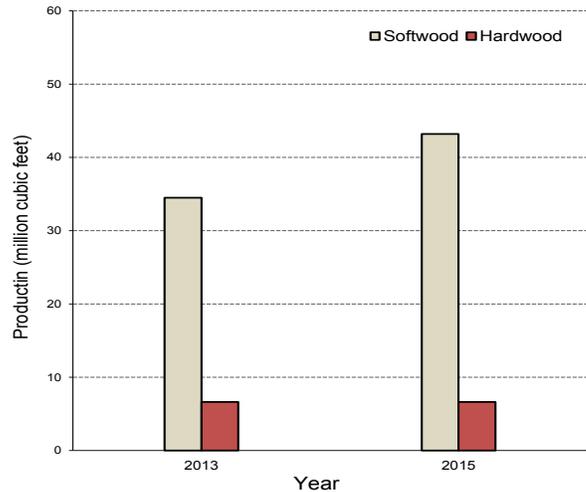


Figure 8— Roundwood composite production by species and year, Alabama, 2015

In 2015, Alabama had 3 composite mills, the same as 2013. Receipts of log used to manufacture composite panels increased 29 percent to 57.3 million cubic feet. Softwood veneer log receipts increased 34 percent to 50.7 million cubic feet, while those of hardwoods experienced no change at 6.6 million cubic feet.

Other Industrial Products

Roundwood harvested for other industrial uses such as poles, posts, mulch, residential firewood, industrial fuel, logs for log homes, and all other industrial products totaled 11.9 million cubic feet. Softwood made up 99 percent of the other industrial products volume.

The number of plants producing other industrial products totaled 14 in 2015. Combined receipts of other industrial products from softwood and hardwood totaled 13.5 million cubic feet.

Plant Byproducts

In 2015, processing of primary products in Alabama mills generated 348.8 million cubic feet of wood and bark residues. Coarse residues from all primary products amounted to 124.4 million cubic feet, while bark volume totaled 138 million cubic feet. Collectively, sawdust and shavings made up 23 percent of total residues, or 78.6 million cubic feet (fig. 9).

The processing of saw logs generated 227.3 million cubic feet of mill residues, accounting for 65 percent of the total residues produced (fig. 10).

Nearly 348.8 million cubic feet, or 100 percent, of the wood and bark residues were used for a product. While <1 percent of the residues were not used for a product, 51 percent of the residues were used for industrial fuel, of which 75 percent was used onsite and 25 percent at other plants. Forty percent were used for fiber products (fig. 11). Ninety-three percent or 116.2 million cubic feet, of the coarse residues were used for fiber products. Ninety-five percent of the bark was used for industrial fuel, while 50 percent of the sawdust and shavings were used for industrial fuel.

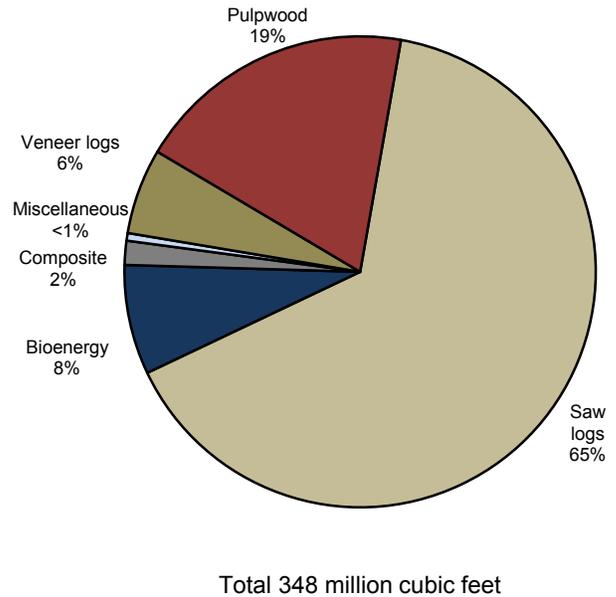


Figure 10—Primary mill residue produced by roundwood type, Alabama, 2015.

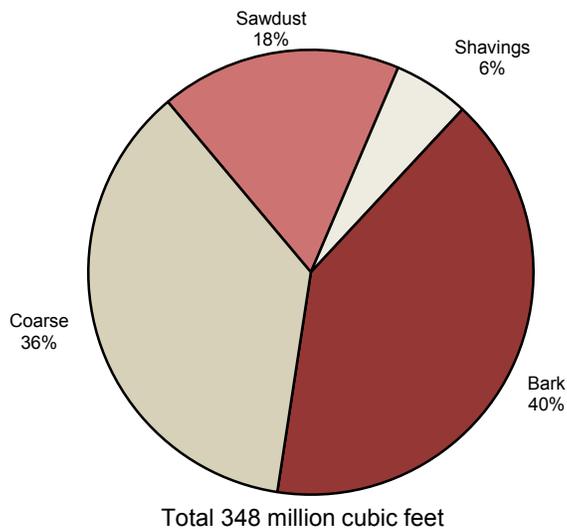


Figure 9—Primary mill residue by residue type, Alabama 2015.

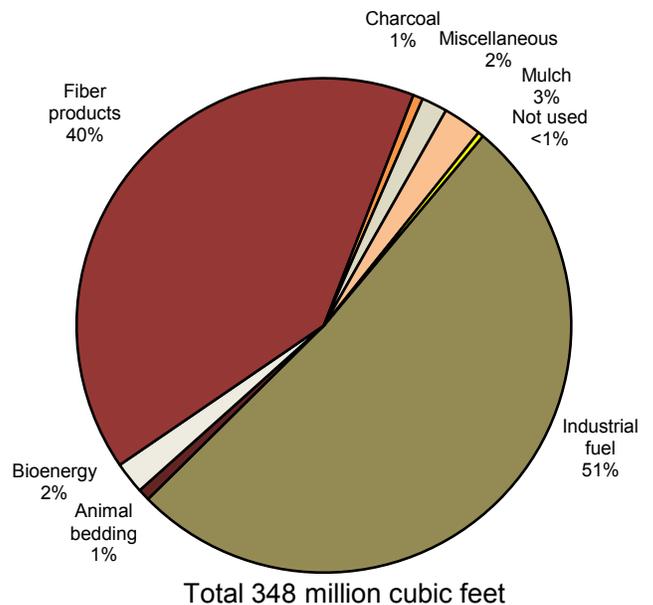


Figure 11—Disposal of residue by product, Alabama, 2015.

How to Cite This Publication

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