

Forestry Statistics 2024

Chapter 2: UK-Grown Timber

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The Research Agency of the
Forestry Commission

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The Agency aims to support and enhance forestry and its role in sustainable development by providing innovative, high quality scientific research, data, technical support and consultancy services.

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Introduction

This chapter covers the production of timber from woodland and the primary processing of harvested wood to give basic wood products.

Estimates for England, Wales, Scotland and Northern Ireland are included, in addition to UK totals, where possible.

International comparisons of timber production are available in the International Forestry chapter. Further information on the data sources and methodology used to compile the figures is provided in Chapter 10: Sources and Methodology.

Figures for 2023 were previously published in [UK Wood Production and Trade: provisional figures](#), released on 16 May 2024. Some figures may have been revised from those previously published. For further details on revisions, see the Timber section of Chapter 10: Sources and Methodology.

A copy of all UK-grown timber tables can be accessed in spreadsheet format from the [Time Series page](#).

Key findings

The main findings for 2023 are (with percentage changes from 2022):

Removals¹ (harvesting) of UK roundwood:

- 9.1 million green tonnes of softwood (-1%);
- 0.8 million green tonnes of hardwood (-2%);

Deliveries of UK roundwood to wood processors and others:

- 9.8 million green tonnes of roundwood (softwood and hardwood), (-3%), of which:
 - Sawmills: 4.9 million green tonnes (-11%);
 - Wood-based panels: 1.4 million green tonnes (13%);
 - Integrated pulp and paper mills: 0.4 million green tonnes (2%);
 - Woodfuel: 2.4 million green tonnes (4%);
 - Other uses, including round fencing, shavings and exports of roundwood: 0.7 million green tonnes (15%);

Production of wood products in the UK included:

- 2.9 million cubic metres of sawnwood (-8%);
- 3.0 million cubic metres of wood-based panels (-4%);
- 3.2 million cubic metres of paper and paperboard (-7%).

¹ The difference between total removals and deliveries reported here (around 0.2 million green tonnes in 2023) is likely to reflect a number of factors, including changes in stock levels and the different data sources and methodologies used.

2.1 Wood production

Wood production (also referred to as removals) refers to the harvesting of roundwood (trunk and branch wood) from coniferous (softwood) and non-coniferous (hardwood) trees. Figures are generally expressed here in green tonnes (weight when freshly felled).

Removals should not be confused with deliveries, which are the quantities of UK-grown roundwood that is delivered to processors (mills) or for other uses (such as woodfuel and exports). Deliveries statistics are presented in Tables 2.5 and 2.6. A comparison of removals and deliveries of UK softwood roundwood is provided in Chapter 10: Sources and Methodology.

The figures on removals of UK roundwood are used to monitor trends in the UK forest sector. The data is also used alongside figures for standing volume (the volume of standing trees) and increment (the growth rate of standing trees) to compile natural capital accounts for inclusion in the UK Environmental Accounts released by the Office for National Statistics.

The data are derived from a number of sources:

- Public sector figures are obtained from Forestry England (FE), Forestry and Land Scotland (FLS), Natural Resources Wales (NRW) and Forest Service Northern Ireland (FS) administrative systems;
- Private sector softwood figures are obtained from the Private Sector Softwood Removals Survey;
- Total hardwood figures are estimated from hardwood deliveries figures, which are compiled from surveys of the UK-grown timber industry, trade associations and expert estimates.

2.1.1 Summary: Wood production

It is estimated that a total of 10.0 million green tonnes of roundwood was removed from UK woodlands in 2023.

Softwood accounted for most of the removals from UK woodland (92%) and totalled 9.1 million green tonnes in 2023 (Table 2.1a). This represented a 1% decrease on the previous year's figure.

Hardwood removals totalled 0.8 million green tonnes in 2023 (Table 2.1b).

Private sector woodlands accounted for 57% of softwood production and 89% of hardwood production in 2023.

Table 2.1a Softwood production, UK, 2014 to 2023

thousand green tonnes

Year	Public sector woodland¹	Private sector woodland²	Total softwood
2014	4,900	6,627	11,527
2015	4,691	5,968	10,659
2016	5,011	5,734	10,745
2017	4,766	6,075	10,842
2018	4,531	6,827	11,359
2019	3,948	5,884	9,832
2020	4,626	5,437	10,062
2021	4,019	6,407	10,426
2022	3,709	5,484	9,193
2023	3,972	5,168	9,140

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Source: Forestry England, Forest and Land Scotland, Natural Resources Wales, Forest Service Northern Ireland, industry surveys (Forest Research) and industry associations.

Notes:

1. Public sector consists of Forestry England, Forestry and Land Scotland, Natural Resource Wales and Forest Service Northern Ireland.
2. Private sector: removals from all other woodland (including some publicly owned woodland).

Table 2.1b Hardwood production, UK, 2014 to 2023

thousand green tonnes

Year	Public sector woodland ¹	Private sector woodland ^{2,3}	Total hardwood ⁴
2014	71	464	535
2015	73	491	564
2016	68	527	595
2017	85	651	736
2018	89	745	834
2019	68	800	868
2020	87	742	829
2021	96	727	823
2022	90	745	834
2023	86	730	816

Source: Forestry England, Forest and Land Scotland, Natural Resources Wales, Forest Service Northern Ireland, industry surveys (Forest Research) and industry associations.

Notes:

1. Public sector consists of Forestry England, Forestry and Land Scotland, Natural Resource Wales and Forest Service Northern Ireland.
2. Private sector: removals from all other woodland (including some publicly owned woodland).
3. Most hardwood production in the UK comes from private sector woodland; the figures are estimates based on reported deliveries to wood processing industries and others.
4. The increase in hardwood removals between 2016 and 2017 is largely attributed to a revised estimate for deliveries of UK grown hardwood used for woodfuel (see Table 2.6). This new estimate should not be interpreted as an increase in a single year.

Data: Longer time series of the above table, including estimates by country (England, Wales, Scotland and Northern Ireland) are available from the [Time Series page](#).

2.1.2 Origin of private sector softwood removals

It is estimated that 69% of all softwood removals from private sector woodlands were harvested in Scotland, 19% in England, 11% in Wales and the remainder in Northern Ireland in 2023 (Table 2.2).

Private sector softwood removals in the UK in 2023 were 6% lower than in 2022.

Table 2.2 Private sector softwood removals by country, UK, 2014 to 2023

thousand green tonnes

Year	England	Wales	Scotland	Northern Ireland	UK
2014	1,165	739	4,691	33	6,627
2015	1,052	686	4,203	28	5,968
2016	1,013	643	4,043	34	5,734
2017	961	783	4,295	36	6,075
2018	1,130	628	5,022	47	6,827
2019	1,222	485	4,133	44	5,884
2020	972	550	3,837	78	5,437
2021	973	581	4,747	106	6,407
2022	956	557	3,863	108	5,484
2023	998	555	3,546	69	5,168

Source: Private Sector Softwood Removals Survey (Forest Research).

Data: Longer time series of the above table, including estimates for hardwood removals and for removals public sector woodlands, are available from the [Time Series page](#).

2.1.3 Origin of public sector removals

Information on removals from Forestry England, Forestry and Land Scotland, Natural Resources Wales and Forest Service Northern Ireland woodlands is obtained from administrative systems.

A total of 4.0 million green tonnes of softwood was removed from public sector woodlands in 2023, a 7% increase from the 2022 figure (Table 2.3).

Over half (55%) of public sector softwood removals in 2023 occurred in Scotland, 23% in England, 15% in Wales and 7% in Northern Ireland.

Table 2.3 public sector softwood removals by country, UK, 2014 to 2023

thousand green tonnes

Year	England	Wales	Scotland	Northern Ireland	UK
2014	1,064	722	2,749	365	4,900
2015	1,023	692	2,644	333	4,691
2016	1,146	778	2,745	343	5,011
2017	1,087	665	2,666	349	4,766
2018	1,048	706	2,438	339	4,531
2019	905	536	2,143	364	3,948
2020	1,014	628	2,577	405	4,626
2021	878	678	2,123	340	4,019
2022	825	566	1,950	368	3,709
2023	906	608	2,170	288	3,972

Source: Forestry England, Forestry and Land Scotland, Natural Resources Wales and Forest Service Northern Ireland.

Data: Longer time series of the above table, including estimates for hardwood removals and for removals from private sector woodlands, are available from the [Time Series page](#).

2.1.4 Softwood availability forecast

The [National Forest Inventory](#) published the “25-year forecast of softwood availability” in July 2022 and the “50-year forecast of hardwood availability” was published in April 2014. They are forecasts of potential availability rather than production, as they do not take account of management objectives, financial factors or the state of markets, all of which will affect the level of and timing of harvesting.

The forecasts are outside the scope of Accredited Official Statistics but are provided here to give more context to the data on wood production.

As the hardwood forecast was produced in 2014, the figures do not take into account any of the findings from the [Preliminary estimates of the changes in canopy cover in British woodlands between 2006 and 2015](#), released in 2016.

The key assumptions underpinning the headline softwood forecast scenario include:

- For private woodlands in Great Britain, felling generally takes place when trees in a stand have, on average, achieved a target diameter (replacing a previous assumption based on growth rates).
- The estate of Forestry England, Forestry and Land Scotland and Natural Resources Wales is managed according to current management plans; note that Forestry England, Forestry and Land Scotland, and Natural Resources Wales intend to cap production below the level set out in Table 2.4a.

Under the above scenario, softwood availability for the UK averages 16.5 million cubic metres a year over the 25-year period 2022 to 2046 (Table 2.4a). The majority (65%) of this softwood is projected to come from private sector woodland. Table 2.4a presents the annual averages of availability within the time periods.

Table 2.4a 25-year forecast of softwood⁴ availability; average annual volumes within periods, UK, 2022 to 2046

thousand cubic metres overbark standing

Time period	England	Wales	Scotland	Great Britain	Northern Ireland	UK
Public sector^{1,2}						
2022 to 2026	1,107	1,284	3,674	6,065	498	6,563
2027 to 2031	1,158	1,017	3,538	5,713	628	6,341
2032 to 2036	1,097	799	3,201	5,096	698	5,794
2037 to 2041	1,006	816	2,699	4,521	635	5,157
2042 to 2046	1,039	457	2,610	4,107	534	4,641
Private sector³						
2022 to 2026	2,570	843	5,092	8,505	24	8,529
2027 to 2031	2,616	683	6,529	9,828	42	9,870
2032 to 2036	2,319	773	8,608	11,700	43	11,743
2037 to 2041	2,495	870	9,609	12,974	40	13,015
2042 to 2046	2,057	790	7,965	10,812	25	10,837
Total softwood						
2022 to 2026	3,677	2,128	8,766	14,570	522	15,092
2027 to 2031	3,774	1,700	10,067	15,541	670	16,211
2032 to 2036	3,415	1,572	11,809	16,796	741	17,537
2037 to 2041	3,501	1,686	12,309	17,495	676	18,171
2042 to 2046	3,096	1,248	10,575	14,919	558	15,477

Source: National Forest Inventory: 25-year forecast of softwood availability (Forest Research, July 2022).

Notes:

1. Public sector consists of Forestry England, Forestry and Land Scotland, Natural Resource Wales and Forest Service Northern Ireland.
2. Forecasts for the public forest estate assume that woodlands are managed according to current management plans.
3. Private woodland forecasts for Great Britain represent potential availability of softwood timber under the assumption of a management scenario of felling at a specified target diameter where viable.
4. To convert softwood 'overbark standing' into green tonnes multiply by 0.818. See Chapter 10: Sources and Methodology for more details on conversion factors.

These figures are outside the scope of Accredited Official Statistics. For more information see Chapter 10: Sources and Methodology.

2.1.5 Hardwood availability forecast

The key assumptions underpinning the headline hardwood forecast scenario include:

- In private woodland, harvesting is limited to areas with evidence of recent thinning activity.
- The estate of Forestry England, Forestry and Land Scotland and Natural Resources Wales is managed according to current management plans.

Under the above scenario, hardwood availability for Great Britain averages 1.6 million cubic metres a year over the 50-year period (Table 2.4b). The majority (89%) of this hardwood is projected to come from private sector woodland. If these woodlands were managed to maximise total production, the forecast would be much higher, as illustrated in the [full National Forest Inventory report](#). Table 2.4b presents the annual averages of availability within the time periods.

Table 2.4b Hardwood availability forecasts, Great Britain, 2013 to 2061
thousand cubic metres overbark standing

Time period	England	Wales	Scotland	Great Britain
Public sector^{1,2}				
2013 to 2016	126	12	9	147
2017 to 2021	92	11	9	111
2022 to 2026	110	17	10	137
2027 to 2031	86	12	10	108
2032 to 2036	99	14	15	128
2037 to 2041	129	19	24	172
2042 to 2046	189	56	31	276
2047 to 2051	116	19	40	175
2052 to 2056	134	28	45	208
2057 to 2061	146	28	64	237
Private sector³				
2013 to 2016	122	20	83	225
2017 to 2021	333	46	139	519
2022 to 2026	538	77	193	808
2027 to 2031	720	100	233	1,054
2032 to 2036	825	115	262	1,202
2037 to 2041	1,047	153	367	1,567
2042 to 2046	1,915	243	586	2,743
2047 to 2051	1,678	227	675	2,580
2052 to 2056	1,254	198	554	2,006

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Time period	England	Wales	Scotland	Great Britain
2057 to 2061	645	139	343	1,127
Total hardwood				
2013 to 2016	249	32	92	373
2017 to 2021	425	58	148	631
2022 to 2026	648	94	203	945
2027 to 2031	806	112	244	1,162
2032 to 2036	923	130	277	1,330
2037 to 2041	1,176	171	391	1,738
2042 to 2046	2,104	299	616	3,019
2047 to 2051	1,795	246	715	2,755
2052 to 2056	1,388	227	599	2,214
2057 to 2061	791	167	406	1,364

Source: National Forest Inventory: 50-year forecast of hardwood availability (Forestry Commission, April 2014).

Notes:

1. Public sector consists of Forestry England, Forestry and Land Scotland, Natural Resource Wales and Forest Service Northern Ireland.
2. The estate of Forestry England, Forestry and Land Scotland and Natural Resources Wales is assumed to be managed according to current management plans.
3. In private woodland, harvesting is assumed to be limited to areas with evidence of recent thinning activity. If these woodlands were managed to maximise total production, the forecast would be much higher, as illustrated in the [full National Forest Inventory report](#).
4. To convert hardwood 'overbark standing' into green tonnes multiply by 0.900. See Chapter 10: Sources and Methodology for more details on conversion factors.
5. These figures are outside the scope of Accredited Official Statistics. For more information see Chapter 10: Sources and Methodology.

2.2 Deliveries of UK-grown roundwood

Figures for deliveries relate to the quantity of UK-grown roundwood that is delivered to processors (mills) or for other uses (such as woodfuel and exports). They are expressed in green tonnes (weight when freshly felled). Statistics on roundwood deliveries are used to monitor trends in the supply of, and demand for, UK-grown wood.

Deliveries should not be confused with removals, which are the quantities of roundwood that is harvested from UK woodland. Removals statistics are presented in Tables 2.1 to 2.3. A comparison of removals and deliveries of UK softwood roundwood is provided in Chapter 10: Sources and Methodology.

The data are derived from a number of sources, including surveys of the UK-grown timber industry, trade associations and expert estimates.

2.2.1 Softwood deliveries

In 2023, deliveries of UK roundwood (softwood and hardwood) totalled 9.8 million green tonnes, a 3% decrease from the previous year (Tables 2.5 and 2.6).

Most UK roundwood deliveries (92%) were softwood and totalled 9.0 million green tonnes in 2023 (Table 2.5). 4.8 million green tonnes (54% of UK softwood deliveries) were used by sawmills, compared to 59% in the previous year. A further 1.7 million green tonnes were used for wood fuel (a 6% increase from 2022), 1.4 million green tonnes were used to produce wood-based panels (a 13% increase), 0.4 million green tonnes by integrated pulp and paper mills (a 2% increase), and 0.6 million green tonnes for other uses, including round fencing, shavings and exports of roundwood.

Table 2.5 Deliveries of UK-grown softwood, UK, 2014 to 2023

thousand green tonnes

Year	Sawmills	Pulp mills	Wood-based panels	Fencing	Woodfuel ¹	Other ²	Exports	Total
2014	6,736	465	1,283	317	1,500	176	437	10,914
2015	6,179	435	1,334	288	1,600	164	276	10,276
2016	6,522	423	1,248	277	1,550	178	231	10,430
2017	6,586	442	1,059	283	1,600	170	331	10,471
2018	6,337	486	1,210	255	1,900	174	264	10,626
2019	5,898	464	1,316	262	1,900	183	201	10,225
2020	5,837	383	1,248	258	1,850	188	140	9,903
2021	6,264	399	1,508	247	1,600	176	168	10,362
2022	5,452	403	1,229	232	1,600	176	132	9,224
2023	4,845	413	1,389	224	1,700	209	207	8,986

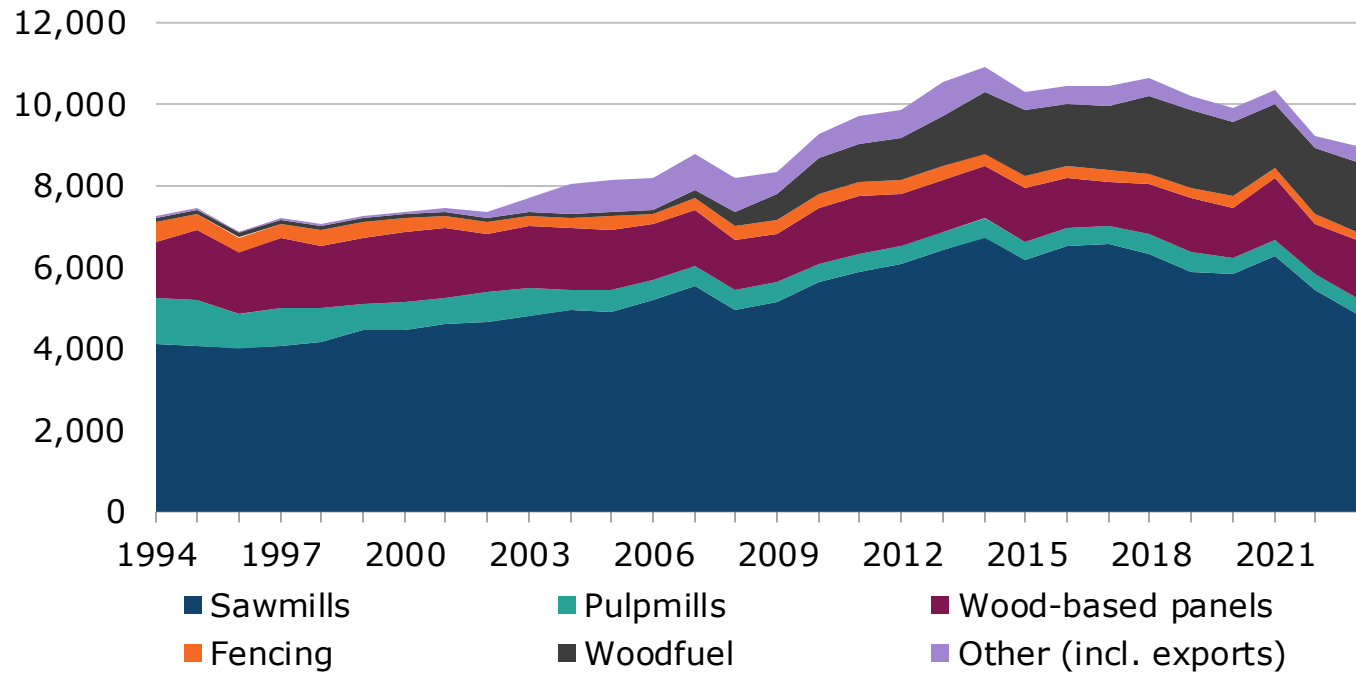
Source: Industry surveys (Forest Research), industry associations.

Notes:

1. Woodfuel derived from stemwood. Includes estimates of roundwood use for biomass energy. The figures are estimated by the Expert Group on Timber and Trade Statistics, and make use of wood fuel data reported in the Private Sector Softwood Removals Survey.
2. Includes shavings and poles. Quantities for some uses are estimates by the Expert Group on Timber and Trade Statistics.

Figure 2.1 Deliveries of UK-grown softwood^{1,2}, UK, 1994 to 2023

thousand green tonnes



Source: Industry surveys (Forest Research), industry associations.

Notes:

1. Woodfuel derived from stemwood. Includes estimates of roundwood use for biomass energy. The figures are estimated by the Expert Group on Timber and Trade Statistics, and make use of wood fuel data reported in the Private Sector Softwood Removals Survey.
2. Includes shavings and poles. Quantities for some uses are estimates by the Expert Group on Timber and Trade Statistics.

2.2.2 Hardwood deliveries

There was a total of 0.8 million green tonnes of UK hardwood deliveries in 2023 (Table 2.6). The majority of UK hardwood deliveries (86% in 2023) were used for woodfuel.

Table 2.6 Deliveries of UK-grown hardwood, UK¹, 2014 to 2023

thousand green tonnes

Year	Sawmills	Pulp mills	Wood-based panels	Woodfuel ^{2, 3}	Other ⁴	Total
2014	75	0	0	400	60	535
2015	74	0	0	400	91	564
2016	73	0	0	400	122	595
2017	65	0	0	600	71	736
2018	66	0	1	700	68	834
2019	75	0	0	700	93	868
2020	62	0	2	700	66	829
2021	60	0	3	700	60	823
2022	59	0	5	700	70	834
2023	53	0	0	700	63	816

Source: Industry surveys (Forest Research), industry associations.

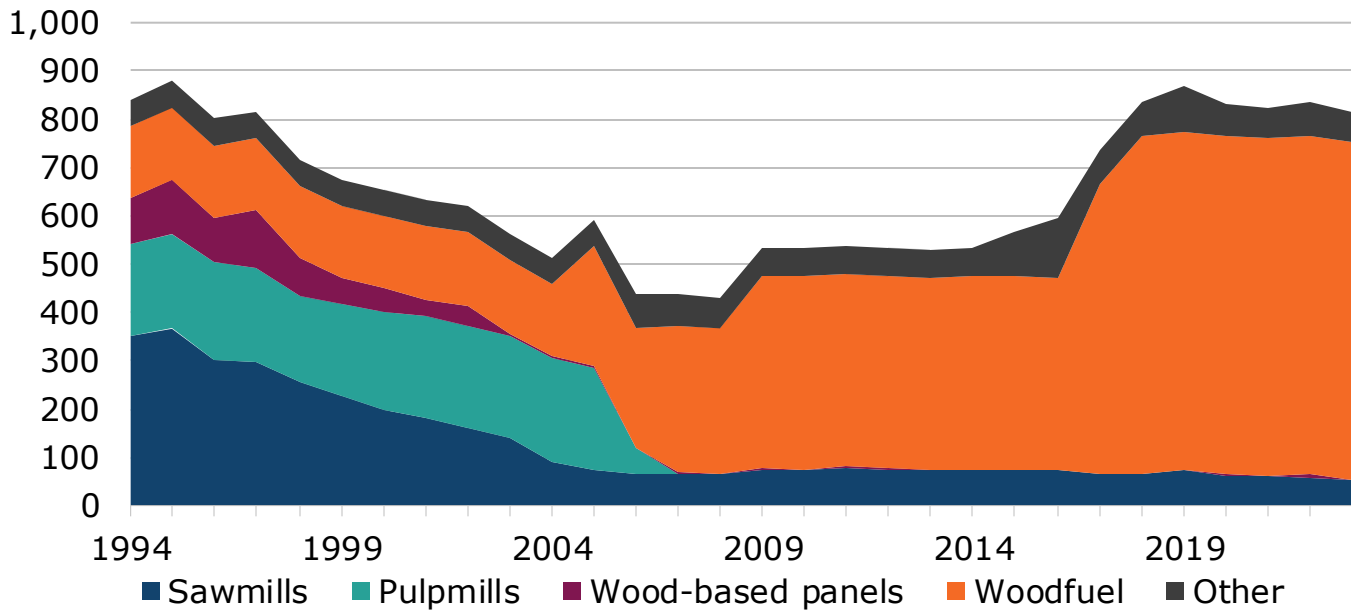
Notes:

1. Figures are based on processing industries' purchases of hardwood grown in the UK and estimates for woodfuel and other uses.
2. Woodfuel reported here is derived from stemwood and includes estimated roundwood use for biomass energy.

3. The apparent increase in woodfuel from 2016 to 2017 reflects a new estimate of the level of hardwood deliveries for woodfuel and should not be interpreted as an increase in a single year.
4. Other includes round fencing and roundwood exports.

Figure 2.2 Deliveries of UK-grown hardwood^{1,2}, UK, 1994 to 2023

thousand green tonnes



Source: Industry surveys (Forest Research), industry associations.

Notes:

1. Other includes round fencing and roundwood exports.
2. The apparent increase in woodfuel from 2016 to 2017 reflects a new estimate of the level of hardwood deliveries for woodfuel and should not be interpreted as an increase in a single year.

2.3 Sawmills - All Mills

Data are collected by Forest Research in an annual Sawmill Survey. The following section covers summary results on the number of mills, consumption and production.

In addition, there are also more detailed figures for larger mills only. The threshold defining larger mills was changed for the collection of 2016 data, from annual sawnwood production of 10 thousand cubic metres to annual sawnwood production of 25 thousand cubic metres. Further information on this change is provided in the section on Larger Mills within this chapter and in the Sawmill Survey section of Chapter 10: Sources and Methodology.

Consumption units are given in green tonnes. For production, the units used are cubic metres sawnwood. For conversion factors between different units, see the Timber section of Chapter 10: Sources and Methodology.

2.3.1 Summary: consumption and production

In 2023, sawmills in the UK consumed a total of 5.1 million green tonnes of softwood, an 11% decrease from 2022 (Table 2.7a).

A further 0.06 million green tonnes of hardwood were consumed by UK sawmills in 2023. Most of the logs, 4.8 million green tonnes of softwood and 0.05 million green tonnes of hardwood, were grown in the UK.

Table 2.7a Consumption by sawmills, UK, 2014 to 2023

thousand green tonnes

Year	UK-grown softwood	Imported softwood	Total Softwood	UK-grown hardwood	Imported hardwood	Total hardwood
2014	6,736	159	6,895	75	14	89
2015	6,179	182	6,361	74	14	88
2016	6,522	209	6,731	73	17	90
2017	6,586	267	6,853	65	13	78
2018	6,337	325	6,662	66	13	79
2019	5,898	343	6,241	75	13	88
2020	5,837	263	6,100	62	12	73
2021	6,264	321	6,585	60	12	72
2022	5,452	285	5,737	59	12	71
2023	4,845	266	5,110	53	12	65

Source: Sawmill Survey (Forest Research).

A total of 2.9 million cubic metres of sawnwood was produced in the UK in 2023, an 8% decrease from 2022.

In addition to producing sawnwood, sawmills also generate other products. Further information on other products produced by larger mills is provided in Tables 2.18a and 2.18b.

Table 2.7b Sawnwood production by sawmills, UK, 2014 to 2023

thousand cubic metres sawnwood

Year	Softwood production	Hardwood production
2014	3,719	47
2015	3,454	45
2016	3,627	46
2017	3,727	41
2018	3,625	41
2019	3,416	46
2020	3,311	37
2021	3,574	37
2022	3,108	37
2023	2,873	35

Source: Sawmill Survey (Forest Research).

2.3.2 Number of mills by size

A total of 139 sawmills processed UK roundwood in 2023 (Table 2.8). Most mills (86%) produced less than 25 thousand cubic metres sawnwood (softwood and hardwood) during the year.

Over the past ten years, there has been an 18% decrease in the number of active sawmills.

Table 2.8 Number of sawmills by size category of mill¹, UK, 2014 to 2023

Year	Number of mills							Total
	< 1	1 to < 5	5 to < 10	10 to < 25	25 to < 50	50 to < 100	100 +	
2014	66	39	15	17	13	8	12	170
2015	63	41	17	17	12	6	12	168
2016	57	40	17	20	6	10	13	163
2017	57	40	14	22	5	10	12	160
2018	57	34	13	21	8	7	12	152
2019	53	34	14	20	8	6	12	147
2020	52	31	14	18	10	8	11	144
2021	52	28	12	21	9	7	12	141
2022	50	30	16	17	11	8	9	141
2023	52	28	17	22	4	7	9	139

Source: Sawmill Survey (Forest Research).

Notes:

- Categories are based on total sawnwood production (softwood and hardwood), in thousand cubic metres.

Data: Longer time series of the above table are available from the [Time Series page](#).

2.3.3 Number of mills by country

Around one half (53%) of the 139 active sawmills in 2023 were in England, around one third (32%) were in Scotland, 9% in Wales and 6% in Northern Ireland (Table 2.9).

Table 2.9 Number of sawmills by country, UK, 2014 to 2023

Year	Number of mills					UK
	England	Wales	Scotland	Northern Ireland		
2014	90	15	56		9	170
2015	90	15	54		9	168
2016	87	14	53		9	163
2017	86	13	52		9	160
2018	81	12	50		9	152
2019	79	12	47		9	147
2020	77	12	46		9	144
2021	74	12	46		9	141
2022	74	12	46		9	141
2023	73	12	45		9	139

Source: Sawmill Survey (Forest Research).

Data: Longer time series of the above table are available from the [Time Series page](#).

2.3.4 Number of sawmills by type of wood sawn

Over two thirds (69%) of the 139 active sawmills in 2023 processed softwood only (Table 2.10). A further 25% processed both softwood and hardwood, and the remainder processed only hardwood.

Table 2.10 Number of sawmills by type of wood sawn, UK, 2014 to 2023

Year	Softwood only	Hardwood only	Both	Total
2014	114	9	47	170
2015	111	9	48	168
2016	108	9	46	163
2017	108	10	42	160
2018	101	9	42	152
2019	100	8	39	147
2020	97	8	39	144
2021	96	9	36	141
2022	98	9	34	141
2023	96	8	35	139

Source: Sawmill Survey (Forest Research).

2.3.5 Consumption of softwood by size of mill

Despite accounting for only 14% of all sawmills (see Table 2.8), those with total annual sawnwood production of 25 thousand cubic metres or more accounted for 81% of the total softwood consumed by sawmills in 2023 (Table 2.11).

Table 2.11 Consumption of softwood by size category of mill¹, UK, 2014 to 2023

Year	Number of mills							Total
	< 1	1 to < 5	5 to < 10	10 to < 25	25 to < 50	50 to < 100	100 +	
2014	33	143	193	486	833	1,090	4,117	6,895
2015	29	153	224	553	795	801	3,805	6,361
2016	26	139	219	588	372	1,117	4,270	6,731
2017	26	149	172	692	339	1,352	4,122	6,853
2018	30	124	154	626	585	1,009	4,134	6,662
2019	27	124	189	639	550	831	3,881	6,241
2020	29	109	172	504	598	1,146	3,541	6,100
2021	29	101	144	605	576	931	4,200	6,585
2022	29	115	208	520	633	1,204	3,028	5,737
2023	28	98	194	675	246	972	2,899	5,110

Source: Sawmill Survey (Forest Research).

Notes:

1. Categories are based on total sawnwood production (softwood and hardwood), in thousand cubic metres.

Data: Longer time series of the above table are available from the [Time Series page](#).

2.3.6 Consumption of softwood by mills in each country

Mills in Scotland consumed around one half (49%) of the 5.1 million green tonnes of softwood delivered to UK sawmills in 2023 (Table 2.12). A further 30% was consumed by mills in England, 11% in Northern Ireland and the remainder in Wales.

Table 2.12 Consumption of softwood by country, UK, 2014 to 2023

thousand green tonnes

Year	England	Wales	Scotland	Northern Ireland	UK
2014	1,979	729	3,656	530	6,895
2015	1,914	673	3,243	531	6,361
2016	1,981	756	3,437	558	6,731
2017	2,086	709	3,475	583	6,853
2018	2,026	666	3,329	640	6,662
2019	1,990	580	2,994	678	6,241
2020	1,820	585	3,064	631	6,100
2021	1,925	627	3,370	664	6,585
2022	1,763	498	2,868	608	5,737
2023	1,551	499	2,492	568	5,110

Source: Sawmill Survey (Forest Research).

Data: Longer time series of the above table are available from the [Time Series page](#).

2.3.7 Production of sawn softwood by size of mill

UK sawmills produced a total of 2.9 million cubic metres of softwood in 2023, an 8% decrease from the 2022 figure (Table 2.13).

Sawmills with total annual sawnwood production of 25 thousand cubic metres or more accounted for 82% of the total sawn softwood produced by sawmills in 2023.

Table 2.13 Production of sawn softwood by size of mill¹, UK, 2014 to 2023

thousand cubic metres

Year	< 1	1 to < 5	5 to < 10	10 to < 25	25 to < 50	50 to < 100	100 +	Total
2014	19	83	100	282	448	563	2,224	3,719
2015	17	88	120	296	466	422	2,045	3,454
2016	16	80	115	338	186	597	2,296	3,627
2017	16	86	86	384	178	647	2,328	3,727
2018	18	71	74	355	311	468	2,327	3,624
2019	17	71	89	349	306	382	2,203	3,416
2020	17	62	81	277	321	551	1,997	3,307
2021	17	56	66	332	308	483	2,309	3,572
2022	17	63	97	271	344	619	1,698	3,108
2023	16	57	103	352	134	530	1,682	2,873

Source: Sawmill Survey (Forest Research).

Notes:

- Categories are based on total sawnwood production (softwood and hardwood), in thousand cubic metres.

Data: Longer time series of the above table are available from the [Time Series page](#).

2.3.8 Production of sawn softwood by mills in each country

Sawmills in Scotland accounted for 1.4 million cubic metres (50%) of sawn softwood produced in 2023 (Table 2.14). A further 30% was produced by mills in England, 11% in Northern Ireland and the remaining 9% in Wales.

Table 2.14 Production of sawn softwood by country, UK, 2014 to 2023

thousand cubic metres

Year	England	Wales	Scotland	Northern Ireland	UK
2014	1,090	362	1,981	286	3,719
2015	1,054	332	1,783	284	3,454
2016	1,091	374	1,867	294	3,627
2017	1,157	327	1,917	326	3,727
2018	1,120	316	1,837	351	3,624
2019	1,106	275	1,684	351	3,416
2020	1,003	271	1,683	349	3,307
2021	1,050	293	1,857	371	3,572
2022	945	245	1,570	349	3,108
2023	863	249	1,438	323	2,873

Source: Sawmill Survey (Forest Research).

Data: Longer time series of the above table are available from the [Time Series page](#).

2.4 Sawmills - Larger Mills

The following, more detailed, tables are available for larger mills (those producing at least 25 thousand cubic metres sawnwood annually) only.

These larger mills are estimated to account for 82% of all sawn softwood produced in 2023 (see Table 2.13).

The tables cover the following topics:

- Source of softwood logs;
- Sawn softwood product markets;
- Other softwood products; and
- Sawmill employment.

2.4.1 Softwood consumption and production

Total softwood consumption by the 20 sawmills covered by the detailed sawmill survey in 2023 was 4.1 million green tonnes (Table 2.15). Sawn softwood production by these mills was 2.3 million cubic metres and other softwood products (chips, bark, sawdust, etc) amounted to 2.1 million tonnes.

Sawmills in Scotland accounted for around one half (50%) of all softwood consumption by larger mills. A further 28% was consumed by mills in England, 13% in Northern Ireland and the remaining 9% in Wales.

Table 2.15 Softwood consumption and production by larger mills¹, UK, 2023

Metric	England	Wales	Scotland	Northern Ireland	UK
Number of mills	7	2	9	2	20
Consumption (thousand green tonnes)	1,168	355	2,072	520	4,116
Sawnwood production (thousand cubic metres)	663	175	1,212	295	2,346
Other products (thousand tonnes)	484	193	1,085	301	2,064

Source: Sawmill Survey (Forest Research).

Notes:

1. Sawmills producing at least 25 thousand cubic metres sawnwood (softwood and hardwood).

2.4.2 Source of softwood logs

Of all softwood sawlogs consumed by larger sawmills in 2023, 55% came from Scotland, 20% from England, 12% from Wales and 6% from Northern Ireland (Tables 2.16a and 2.16b). The remaining 6% were imported from other countries.

98% of softwood sawlogs used by Scottish mills in 2023 came from Scotland. The corresponding proportions of mills' log use coming from within the same country were 64% for England, 75% for Wales and 49% for Northern Ireland.

Table 2.16a Source of softwood logs for larger mills¹, UK, 2023

thousand green tonnes

Source country	England	Wales	Scotland	Northern Ireland	UK
England	749	57	35	0	841
Wales	219	268	0	0	487
Scotland	201	30	2,037	0	2,268
Northern Ireland	0	0	0	254	254
Total UK logs	1,168	355	2,072	254	3,850
Other countries	0	0	0	266	266
Total log consumption	1,168	355	2,072	520	4,116

Source: Sawmill Survey (Forest Research).

Notes:

1. Sawmills producing at least 25 thousand cubic metres sawnwood (softwood and hardwood).

Table 2.16b Source of softwood logs for larger mills¹, UK, 2019 to 2023

percent of total softwood consumption

Year	England	Wales	Scotland	Northern Ireland	Other countries	Total
2019	21	13	54	6	7	100
2020	21	11	57	6	5	100
2021	18	13	59	5	6	100
2022	20	12	57	6	6	100
2023	20	12	55	6	6	100

Source: Sawmill Survey (Forest Research).

Notes:

1. Sawmills producing at least 25 thousand cubic metres sawnwood (softwood and hardwood).

2.4.3 Sawn softwood product markets

In 2023, 34% of sawn softwood produced by larger sawmills was used for fencing, 27% for construction, 30% for packaging and pallets, and the remaining 8% went to all other markets (Tables 2.17a and 2.17b).

Table 2.17a Sawn softwood product markets for larger mills¹, UK, 2023

percent of total softwood product markets

Product market	England	Northern Ireland	Scotland	Wales	UK
Construction	14	21	39	6	27
Fencing	50	51	23	27	34
Packaging/pallets	23	28	31	49	30
Other	12	0	7	18	8
Total	100	100	100	100	100

Source: Sawmill Survey (Forest Research).

Notes:

1. Sawmills producing at least 25 thousand cubic metres sawnwood (softwood and hardwood).

Table 2.17b Sawn softwood product markets for larger mills¹, UK, 2019 to 2023

percent of total softwood product markets

Year	Construction	Fencing	Packaging/pallets	Other	Total
2019	30	37	26	7	100
2020	27	43	24	6	100
2021	27	39	25	9	100
2022	25	41	27	7	100
2023	27	34	30	8	100

Source: Sawmill Survey (Forest Research).

Notes:

1. Sawmills producing at least 25 thousand cubic metres sawnwood (softwood and hardwood).

2.4.4 Other softwood products

Sawmills were asked to estimate the quantity of other products (excluding sawnwood) that they generated from softwood and sold to different industries. The figures presented below are based on these estimates.

Other softwood products amounted to 2.1 million tonnes in 2023 (Table 2.15). About one third (39%) of other softwood products were sold to wood processing industries in the form of chips and 17% were sold to these industries in sawdust and other formats (Table 2.18a). A further 19% of other products were sold to bio-energy (including pellet manufacturers), 15% were sold to others and 10% were used internally for heat or energy.

Table 2.18a Other softwood products for larger mills¹, UK, 2023

percent of total other softwood products

Destination and type of product	England	Wales	Scotland	Northern Ireland	UK
Sold to wood processing industries	70	83	60	0	56
Wood chips	52	56	40	0	39
Bark	0	0	0	0	0
Sawdust and other	18	27	20	0	17
Sold to bio-energy	12	4	15	53	19
Wood chips	12	4	12	35	15
Bark	1	0	0	0	0
Sawdust and other	0	0	3	18	4
Other sales²	12	10	15	20	15
Wood chips	2	0	3	3	3
Bark	6	9	8	12	8
Sawdust and other	5	0	4	4	4
Internal use for heat/energy	5	3	10	23	10
Wood chips	4	2	7	23	8
Bark	1	0	1	0	1
Sawdust and other	0	1	2	0	1

Source: Sawmill Survey (Forest Research).

Notes:

1. Sawmills producing at least 25 thousand cubic metres sawnwood (softwood and hardwood).

- Other sales includes sales as firewood and other products disposed of as waste.

Table 2.18b Other softwood products for larger mills¹, UK, 2019 to 2023

percent of total other softwood products

Year	Sold to wood processing industries	Sold to bio-energy (including pellet manufacturers)	Other sales ²	Internal use for heat/energy	Total
2019	53	20	19	8	100
2020	54	20	19	6	100
2021	55	18	21	6	100
2022	50	19	21	10	100
2023	56	19	15	10	100

Source: Sawmill Survey (Forest Research).

Notes:

- Sawmills producing at least 25 thousand cubic metres sawnwood (softwood and hardwood).
- Other sales includes sales as firewood and other products disposed of as waste.

2.4.5 Sawmill employment

There were estimated to be 2,330 full-time equivalent staff employed directly by sawmills producing at least 25 thousand cubic metres of sawnwood in 2023 (Tables 2.19a and 2.19b).

Table 2.19a Sawmill employment for larger mills^{1,3}, UK, 2023

Employment type ^{2, 4}	full-time equivalents				
	England	Wales	Scotland	Northern Ireland	UK
Direct	845	140	1,025	320	2,330
Line and production workers	655	125	860	255	1,895
Managerial and administrative staff	130	15	145	65	355
Haulage of logs to the mill	60	0	20	0	80
Others	15	0	0	0	15
Line and production workers	15	0	0	0	15
Managerial and administrative staff	0	0	0	0	0

Source: Sawmill Survey (Forest Research).

Notes:

1. Sawmills producing at least 25 thousand cubic metres sawnwood (softwood and hardwood).
2. 'Others' refers to others undertaking work for the sawmill, including contractors and their employees.
3. The results exclude any employment on harvesting, and any employment at the site not directly related to the sawmill (for example, exclude work producing pallets or other wood products from sawnwood).
4. Excludes haulage employment on contract.

Table 2.19b Sawmill employment for larger mills¹, UK, 2019 to 2023

full-time equivalents

Year	Line and production workers	Managerial and administrative staff	Haulage of logs to the mill ²	Total employment
Direct				
2019	2,220	395	75	2,690
2020	2,270	380	80	2,730
2021	2,470	410	85	2,965
2022	2,325	415	85	2,825
2023	1,890	350	85	2,325
Others				
2019	75	0	[x]	75
2020	75	5	[x]	80
2021	10	0	[x]	10
2022	15	0	[x]	15
2023	15	0	[x]	15

Source: Sawmill Survey (Forest Research).

Notes:

1. Sawmills producing at least 25 thousand cubic metres sawnwood (softwood and hardwood).
2. Excludes haulage employment on contract which is not collected due to quality, denoted by [x].

2.5 Pulp and paper

Statistics on inputs to the pulp and paper industry only cover the integrated pulp and paper mills in the UK that use UK roundwood. There were four such mills until 2003, three from 2004 and two from spring 2006. Figures on inputs are provided by the Confederation of Forest Industries (Confor).

Figures on production of pulp and paper are provided by the Confederation of Paper Industries, and cover all paper production in the UK, not just from mills using UK roundwood.

2.5.1 Inputs for the integrated pulp and paper mills

The integrated pulp and paper mills in the UK consumed a total of 0.5 million tonnes of material (all softwood) in 2023, a 7% increase from the 2022 total (Table 2.20).

UK roundwood represented 81% of the inputs for the integrated pulp and paper mills in 2023, with the remaining 19% coming from sawmill products.

Table 2.20 Inputs for the integrated pulp and paper mills¹, UK, 2014 to 2023

thousand green tonnes

Year	UK roundwood²	Sawmill products	Total
2014	465	97	562
2015	435	101	536
2016	423	82	505
2017	442	61	503
2018	486	55	541
2019	464	61	525
2020	383	87	470
2021	399	83	482
2022	403	70	473
2023	413	95	508

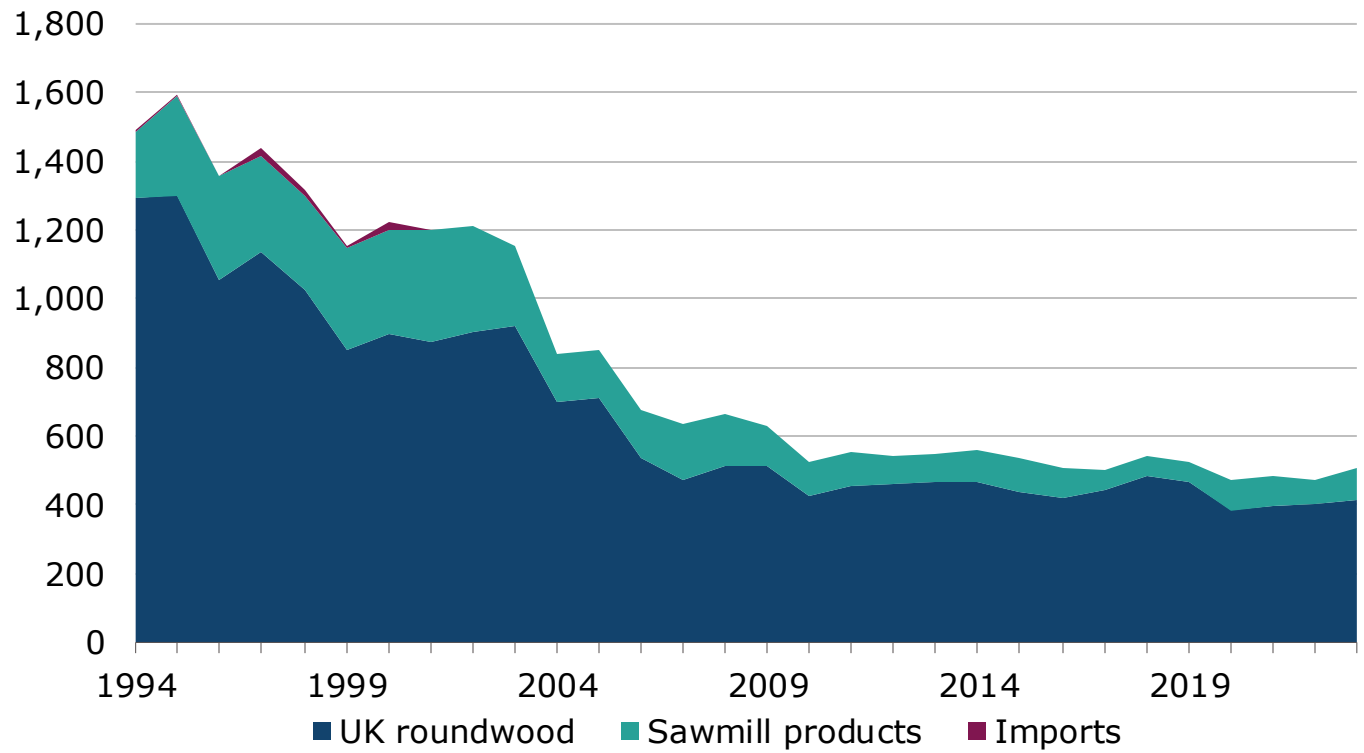
Source: Confor.

Notes:

1. Excludes inputs of recycled paper and cardboard. All inputs are softwood.
2. UK roundwood derived from stemwood.

Figure 2.3 Inputs to integrated pulp and paper mills, UK, 1994 to 2023

thousand green tonnes



Source: Confor.

2.5.2 Production of paper

Figures for the production of paper (Table 2.21) are provided by the Confederation of Paper Industries. They cover all paper production from UK mills, not just those using UK roundwood. Most UK paper production uses recovered wastepaper or imported pulp.

A total of 3.2 million tonnes of paper and paperboard was produced in the UK in 2023, a 7% decrease from the previous year. Packaging materials accounted for 53% of the total UK paper production in 2023, sanitary and household papers for 23% and other paper and paperboard (including graphic papers) for 24%.

Table 2.21 Production of paper and paperboard, UK, 2014 to 2023

thousand tonnes

Year	Sanitary and household papers	Packaging materials	Other (including graphic papers)	Total paper and paperboard
2014	768	1,801	1,828	4,397
2015	772	1,894	1,304	3,970
2016	730	1,800	1,147	3,677
2017	734	1,935	1,188	3,858
2018	738	1,904	1,253	3,894
2019	762	1,884	1,205	3,851
2020	742	1,917	972	3,631
2021	690	1,898	1,054	3,642
2022	737	1,842	877	3,456
2023	734	1,721	770	3,225

Source: Confederation of Paper Industries.

2.6 Wood-based panels

Wood-based panels include oriented strand board (OSB), wood chipboard and cement bonded particleboard (which are all types of particleboard), and medium density fibreboard (MDF) and other fibreboard (which are both types of fibreboard).

Statistics on wood-based panels are provided by the Wood Panel Industries Federation (WPIF).

2.6.1 Inputs for wood-based panel products

Table 2.22 and Figure 2.4 provide statistics on the inputs to mills that produce wood-based panels in the UK. The mills used a total of 3.5 million tonnes of material in 2023, a 1% decrease from 2022. The inputs in 2023 comprised 1.4 million green tonnes of roundwood (40%), 1.1 million green tonnes of sawmill products (31%), 1.0 million tonnes of recycled wood fibre (27%) and 0.07 million tonnes of imports (2%).

Table 2.22 Softwood inputs to wood-based panel mills, UK, 2014 to 2023

thousand green tonnes

Year	UK roundwood softwood ¹	UK roundwood hardwood ¹	Sawmill products	Imports softwood ²	Imports hardwood ²	Recycled wood fibre ^{3, 4}	Total
2014	1,283	0	1,809	0	0	812	3,904
2015	1,334	0	1,687	12	5	852	3,890
2016	1,248	0	1,749	10	29	838	3,874
2017	1,059	0	1,726	0	22	923	3,730
2018	1,210	1	1,566	30	74	877	3,758
2019	1,316	0	1,468	43	78	984	3,889
2020	1,248	2	1,535	22	39	982	3,828
2021	1,508	3	1,516	33	0	1,085	4,145
2022	1,229	5	1,198	93	0	1,041	3,566
2023	1,389	0	1,097	65	0	965	3,516

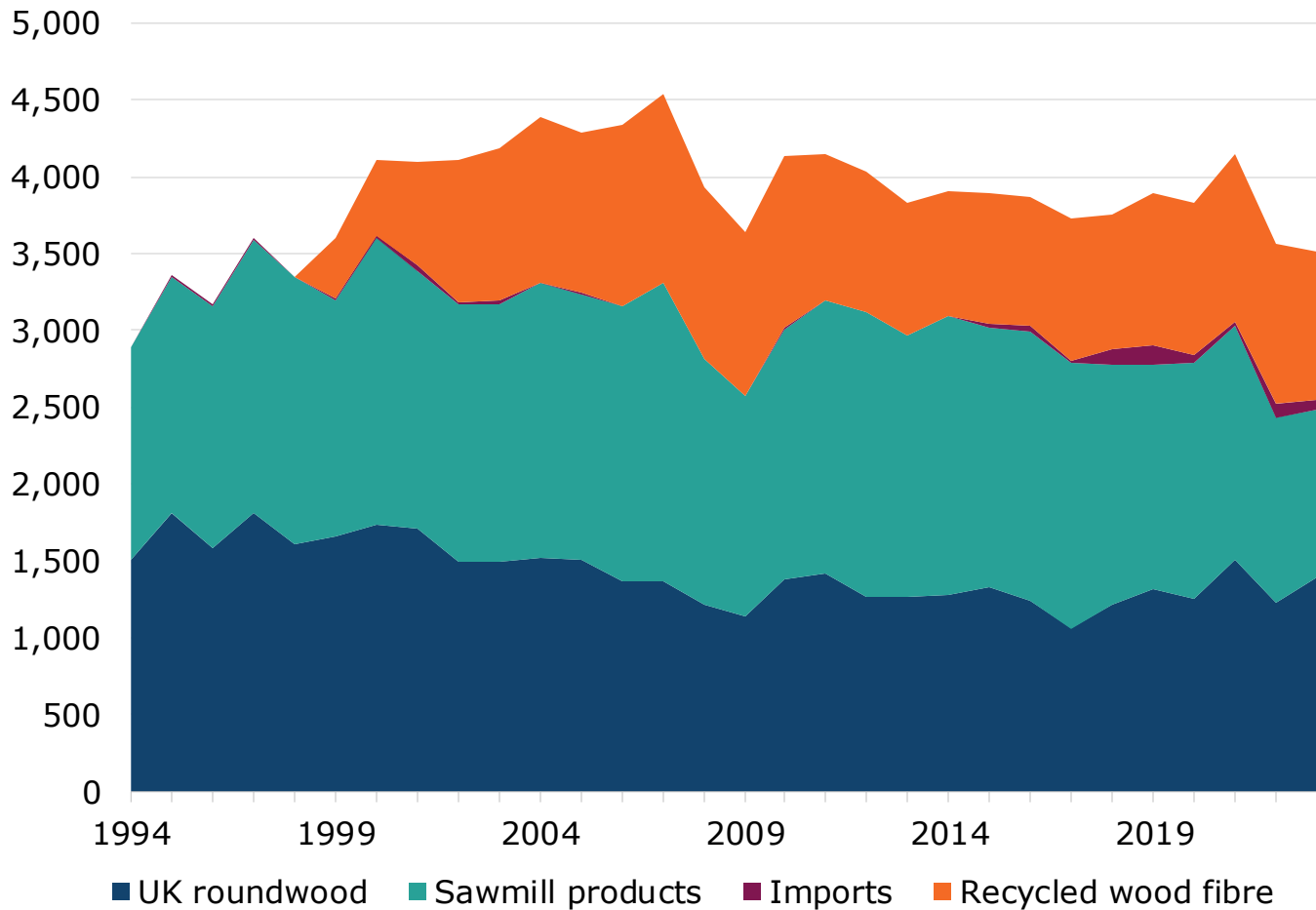
Source: Wood Panel Industries Federation.

Notes:

1. UK roundwood derived from stemwood.
2. Imports include roundwood, wood products and products from imported wood.
3. Recycled wood fibre is wood fibre recovered from both pre- and post-consumer wood waste for use in wood-based panel production. It comprises wood originally grown in the UK and wood originally grown in forests outside the UK.
4. Quantities are as delivered, with an assumed average moisture content of 25%. To convert to green tonnes (assuming moisture content of 52%), multiply by 1.56.

Figure 2.4 Inputs to wood-based panel mills¹, UK, 1994 to 2023

thousand green tonnes



Source: Wood Panel Industries Federation.

Note:

1. Recycled wood fibre data not available before 1999.

2.6.2 Production of wood-based panel products

Total production of wood-based panels in 2023 was 3.0 million cubic metres, a 4% decrease from 2022 (Table 2.23). Over three quarters (80%) of wood-based panel products produced in the UK in 2023 were particleboard (including oriented strand board [OSB]).

Table 2.23 Wood-based panel production, UK, 2014 to 2023

thousand cubic metres

Year	Particleboard ¹	Fibreboard ²	Total
2014	2,319	749	3,068
2015	2,324	756	3,080
2016	2,349	684	3,033
2017	2,501	675	3,176
2018	2,355	724	3,079
2019	2,495	751	3,246
2020	2,296	656	2,952
2021	2,688	798	3,486
2022	2,459	651	3,110
2023	2,378	606	2,984

Source: Wood Panel Industries Federation.

Notes:

1. Includes Oriented Strand Board (OSB).
2. Includes Medium Density Fibreboard (MDF).
3. Changes in the mix of materials used and type of product produced can result in apparent discrepancies between the trends for inputs (Table 2.22) and production.

2.7 Miscellaneous products

Softwood

Data for softwood fencing are obtained from the Survey of Round Fencing Manufacturers conducted by Forest Research. Figures for other uses are reported by manufacturers or are estimated by representatives of the wood processing industries. 1.7 million green tonnes of UK softwood were estimated to have been used directly for woodfuel (including biomass energy) in 2023 (Table 2.24). A further 224 thousand green tonnes of UK softwood were consumed by round fencing manufacturers and 209 thousand green tonnes for other uses in 2023.

Table 2.24 Miscellaneous uses of softwood roundwood, UK, 2014 to 2023

thousand green tonnes

Year	Fencing	Woodfuel ¹	Other ²	Total
2014	317	1,500	176	1,992
2015	288	1,600	164	2,052
2016	277	1,550	178	2,006
2017	283	1,600	170	2,053
2018	255	1,900	174	2,329
2019	262	1,900	183	2,346
2020	258	1,850	188	2,296
2021	247	1,600	176	2,022
2022	232	1,600	176	2,008
2023	224	1,700	209	2,133

Source: Survey of Round Fencing Manufacturers (Forest Research), industry associations.

Notes:

1. Woodfuel derived from stemwood. Includes estimates of roundwood use for biomass energy. The figures are estimated by the Expert Group on Timber and Trade Statistics, and make use of wood fuel data reported in the Private Sector Softwood Removals Survey.
2. Includes shavings and poles. Quantities for some uses are estimates by the Expert Group on Timber and Trade Statistics.

Hardwood

An estimated 700 thousand green tonnes of UK hardwood were used for woodfuel (including biomass energy) in 2023. A further 30 thousand green tonnes were estimated to have been consumed by round fencing manufacturers and 33 thousand green tonnes for other uses, including exports.

2.7.1 Softwood round fencing manufacturers

There were 41 active round fencing manufacturers in 2023 (Table 2.25).

Around two thirds of round fencing manufacturers (68%) consumed less than 5 thousand green tonnes of softwood annually.

Table 2.25 Number of softwood round fencing manufacturers by size category¹, UK, 2014 to 2023

Year	< 1	1 to < 5	5 to < 10	10 +	Total
2014	18	21	10	7	56
2015	15	19	10	6	50
2016	17	16	11	6	50
2017	16	17	9	7	49
2018	15	15	10	6	46
2019	14	16	10	6	46
2020	15	15	9	6	45
2021	16	12	11	6	45
2022	15	14	9	6	44
2023	14	14	7	6	41

Source: Survey of Round Fencing Manufacturers (Forest Research).

Notes:

1. Categories are based on total softwood consumption, in thousand green tonnes.

Longer time series of roundwood purchased by round fencing manufacturers, by size category and by country (England, Wales, Scotland and Northern Ireland) are available from the [Time Series page](#).

2.7.2 Roundwood purchased by softwood round fencing manufacturers

A total of 247 thousand green tonnes of softwood (UK grown and imported) was purchased by softwood fencing manufacturers in 2023 (Table 2.26). This represents a 3% decrease from 2022.

Table 2.26 Total roundwood purchased¹ by size category² of softwood round fencing manufacturers, UK, 2014 to 2023

thousand green tonnes					
Year	< 1	1 to < 5	5 to < 10	10 +	Total
2014	7	54	74	201	335
2015	6	46	79	185	316
2016	7	41	78	177	303
2017	6	45	71	185	307
2018	6	37	71	162	276
2019	6	40	76	166	288
2020	6	38	69	166	279
2021	6	32	75	159	273
2022	5	40	64	145	255
2023	5	41	48	153	247

Source: Survey of Round Fencing Manufacturers (Forest Research).

Notes:

1. This table includes purchases of both UK grown and imported softwood, whereas table 2.24 relates to UK grown softwood only.

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2. Categories are based on total softwood consumption, in thousand green tonnes.

Longer time series of roundwood purchased by round fencing manufacturers, by size category and by country (England, Wales, Scotland and Northern Ireland) are available from the [Time Series page](#).

2.8 Exports

UK softwood exports in 2023 consisted of 127 thousand green tonnes of sawlogs and 79 thousand green tonnes of industrial roundwood (excluding sawlogs), giving a total of 207 thousand green tonnes of roundwood (Table 2.27). There was a 56% increase in the quantity of softwood roundwood exports between 2022 and 2023.

The UK also exported 163 thousand tonnes of softwood chips in 2023, a 293% increase from the previous year.

Table 2.27 Summary of softwood exports, 2014 to 2023

thousand green tonnes

Year	Industrial roundwood ¹	Roundwood sawlogs	Total roundwood	Chips
2014	228	209	437	151
2015	75	202	276	86
2016	48	183	231	51
2017	124	207	331	92
2018	67	197	264	112
2019	46	154	201	109
2020	29	110	140	55
2021	23	145	168	51
2022	31	101	132	41
2023	79	127	207	163

Source: Industry associations.

Notes:

1. Includes all roundwood other than sawlogs.

2.9 Certification

Forest certification assesses forest management practices against an agreed standard and awards a label to those forest products that meet the standard. In order for products to achieve certification, both [forest management practices and the Chain of Custody](#), which tracks timber from forest to retail outlet, must be assessed.

The following tables provide information on the level of certified wood produced in the UK (Table 2.28a) and the number of sawmills holding Chain of Custody certificates (Table 2.29).

Estimates of the certified softwood removals in the UK by country, are also provided (Table 2.28b).

Information on areas of certified woodland is provided in Chapter 1.

2.9.1 Volume certified

64% of private sector softwood removals in 2023 were from certified woodlands (Table 2.28a). The percentage of private sector softwood removals that are certified has fluctuated over recent years; industry experts have indicated a general reduction in the level of certification amongst smaller estates and an increase in production from larger estates.

As nearly all removals from Forestry England, Forestry and Land Scotland, Natural Resources Wales and Forest Service Northern Ireland woodland are certified, this equates to around 80% of all softwood removals in 2023 from certified sources.

80% of sawmills' roundwood consumption in 2023 was certified.

Table 2.28a Percent of volume certified², UK, 2014 to 2023

percent certified volume

Year	Softwood removals from private sector woodland	Total softwood removals ¹	Consumption (softwood and hardwood) by sawmills
2014	72	84	80
2015	69	83	80
2016	66	82	80
2017	76	87	79
2018	71	82	77
2019	65	79	77
2020	67	82	78
2021	71	84	77
2022	74	79	79
2023	64	80	80

Source: Industry surveys (Forest Research).

Notes:

1. Includes all removals from public sector woodland.
2. Certification of consumed softwood by round fencing manufacturers is no longer collected, from 2023.

Table 2.28b provides a country breakdown of softwood removals from certified woodlands in 2023. 85% of softwood removals from woodlands in Northern Ireland were certified, 84% from Wales, 85% from Scotland, and 60% from England.

Table 2.28b Percentage of certified softwood removals by country¹, UK, 2023

Year	percent certified	
	Softwood removals from private sector woodland	Total softwood removals ²
England	26	60
Wales	66	84
Scotland	76	85
Northern Ireland	21	85
UK	64	80

Source: Forestry England, Forestry and Land Scotland, Natural Resources Wales and Forest Service Northern Ireland; and Private Sector Softwood Removals Survey (Forest Research).

Notes:

1. Includes all removals from public sector woodland.

2.9.2 Chain of Custody certificates

Sawmills were also asked whether they held a Chain of Custody certificate. 85% of sawmills for which the certification status was known held a Chain of Custody certificate in 2023 (Table 2.29). This proportion varied with size of mill, from 61% for mills producing less than 5 thousand cubic metres sawnwood to 100% for those producing 25 thousand cubic metres sawnwood or more.

Table 2.29 Number of sawmills with Chain of Custody certificates, UK, 2023

Mill size ^{2,3}	number of mills			Total ¹
	Mills holding certificate	Mills without certificate	Certification status not known ¹	
< 5	11	7	62	80
5 to < 25	26	3	10	39
25 +	20	0	0	20
All sawmills	57	10	72	139

Source: Sawmill Survey (Forest Research).

Notes:

1. Includes non-respondents to survey in current year.
2. For large sawmills (those producing at least 25 thousand cubic metres) that did not report whether or not they held a certificate or did not respond to the 2023 survey, the certification status was obtained from the FSC database, where possible.
3. Categories are based on total sawnwood production (softwood and hardwood), in thousand cubic metres.
4. Certification of consumed softwood by round fencing manufacturers is no longer collected, from 2023.

2.10 Woodfuel and pellets

Wood from various sources can be used for fuel, including roundwood, chips and sawdust from wood processing, specific products such as pellets and briquettes, and recycled wood. The following pages provide data on:

- recycled wood used for woodfuel (Table 2.30 below);
- woodfuel supply by sawmills and round fencing manufacturers (Table 2.31); and
- wood pellet production (Table 2.32) and feedstock (Table 2.33).

In addition, estimates of roundwood used directly for woodfuel are provided in tables 2.5 and 2.6.

2.10.1 Recycled wood used for woodfuel

Estimates of recycled wood used for woodfuel have been obtained from the Wood Recyclers' Association. In 2023, it is estimated that around 2.9 million tonnes of recycled wood were used for woodfuel, a 3% increase from the previous year.

Table 2.30 Recycled wood used for woodfuel¹, UK, 2014 to 2023

million tonnes

Year	Total ³
2014 ²	1.3
2015	1.4
2016	1.6
2017	1.7
2018	2.2
2019	2.5
2020	2.5
2021	2.6
2022	2.8
2023	2.9

Source: Wood Recyclers Association.

Notes:

1. Post consumer recovered wood, comprising wood originally grown in the UK and wood originally grown in forests outside the UK.
2. Figures from 2014 relate to capacity, rather than consumption.
3. Quantities are as delivered, with an assumed average moisture content of 25%. To convert to green tonnes (assuming moisture content of 52%), multiply by 1.56.

These figures are outside the scope of Accredited Official Statistics.

2.10.2 Woodfuel supply by sawmills and round fencing manufacturers

An estimated 843 thousand green tonnes (mainly softwood) of woodfuel were supplied by sawmills in 2023 and a further 87 thousand green tonnes were supplied by round fencing manufacturers (Table 2.31). The majority (69%) of the total woodfuel supplied was sold to bioenergy.

Table 2.31 Woodfuel supply¹ by sawmills and round fencing manufacturers, UK, 2019 to 2023

thousand green tonnes

Year	Sales to bioenergy	Sales to firewood	Used internally for heat/energy	Total
Sawmills				
2019	533	17	206	757
2020	569	23	180	772
2021	621	12	186	819
2022	667	14	256	938
2023	589	29	225	843
Round fencing manufacturers				
2019	43	10	25	77
2020	43	10	27	79
2021	44	9	28	81
2022	43	8	28	80
2023	51	7	29	87

Source: Sawmill Survey, Survey of Round Fencing Manufacturers (Forest Research).

Notes:

1. Material reported as sales/use for woodfuel but may have been used for other purposes.

2.10.3 Wood pellets

Wood pellets and briquettes are processed wood products that can be made from roundwood, sawmill products and/or recycled wood. Some of the wood used to make wood pellets and briquettes will be accounted for elsewhere in this release (for example in Tables 2.30 and 2.31). Wood pellets and briquettes are often used for woodfuel, but pellets may also be used for other purposes (such as horse bedding or cat litter).

A total of 312 thousand tonnes of wood pellets and briquettes are estimated to have been produced in the UK in 2023. This represents a 4% decrease from the 2022 estimate of 327 thousand tonnes.

Table 2.32 Wood pellet production, UK, 2014 to 2023

thousand tonnes

Year	Total
2014	354
2015	343
2016	329
2017	287
2018	279
2019	298
2020	298
2021	304
2022	327
2023	312

Source: Survey of UK Pellet and Briquette Production (Forest Research).

A total of 636 thousand tonnes of feedstock was used to produce wood pellets in the UK in 2023, a 15% increase from the total for 2022 (Table 2.33).

Table 2.33 Wood pellet feedstock², UK, 2019 to 2023

thousand tonnes

Year	Roundwood	Sawmill products ¹	Total
2019	307	263	570
2020	390	254	644
2021	363	248	611
2022	246	308	555
2023	297	339	636

Source: Survey of UK Pellet and Briquette Production (Forest Research).

Note:

1. May also include wood from other sources (for example, energy crops, arboriculture arisings and recycled wood).
2. Tonnes as delivered.

2.11 Preservative treatment of sawnwood

An item on the use of preservative treatment has been included in the Sawmill Survey for the last 4 years. As of 2023, this item is no longer collected on the Survey of Round Fencing Manufacturers.

38% of sawnwood produced in the UK that was reported by respondents to the 2023 survey was preservative treated. In addition, 23% of the preservative treated sawnwood was suitable for use in ground contact.

Table 2.34 Preservative treatment of domestically sawnwood produced in the UK^{1,2}, 2020 to 2023

percent preservative treated

Year	Preservative treated	Preservative treated, of which suitable for Ground Contact
2020	42	27
2021	39	25
2022	44	26
2023	38	23

Source: Sawmill Survey (Forest Research).

Note:

1. Figures relate to respondents only.
2. Use of preservative treatment is no longer collected from round fencing manufacturers, from 2023.

Forestry Statistics 2024: Chapter 2 UK-Grown Timber

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