

UK Wood Production and Trade

2021 Provisional Figures

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Coverage:

United Kingdom

Geographical breakdown:

Some statistics are available by country and English region in the

additional online tables

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The Research Agency of the Forestry Commission

Forest Research is the Research Agency of the Forestry Commission and is the leading UK organisation engaged in forestry and tree related research. The Agency aims to support and enhance forestry and its role in sustainable development by providing innovative, high quality scientific research, technical support and consultancy services.

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National Statistics Status

National Statistics status means that our statistics meet the highest standards of trustworthiness, quality and public value, and it is our responsibility to maintain compliance with these standards.

The continued designation of these statistics as National Statistics was confirmed in March 2012 following <u>an assessment by the UK Statistics Authority</u> (now the Office for Statistics Regulation) against the Code of Practice for Statistics.

Since the latest assessment of these statistics in 2012, we have made improvements including:

- Internal reviews of the surveys used in this release and of the methodology, resulting in the production of more detailed methodology notes to explain how the figures are compiled.
- Expansion of annex to provide further information, including the addition of information on conversion factors used.
- Inclusion of pellets as a separate category in imports and exports tables.
- Inclusion of a table to provide estimates of consumption of wood products in the UK.



Introduction

This publication contains provisional statistics for 2021 on UK wood production and trade. They are based on surveys of the forest sector, administrative records from Forestry England, Forestry and Land Scotland, Natural Resources Wales and the Forest Service of Northern Ireland, and trade data from HM Revenue & Customs.

These statistics are used primarily to monitor the state of the UK timber industry, and for reporting to international organisations. For more details please refer to the relevant section of the <u>Quality Report: UK Wood Production and Trade</u>.

These provisional statistics will be superseded on 29 September 2022 with the publication of final and more detailed results in <u>Forestry Statistics 2022</u>.

Please refer to the Annex for a glossary of terms used in this release.

Key findings

The provisional figures for 2021 indicate (with percentage changes from 2020):

- Removals (harvesting) of UK roundwood:
 - o 10.4 million green tonnes of softwood (+4%)
 - o 0.8 million green tonnes of hardwood (-1%)
- Deliveries of UK roundwood to wood processors and others:
 - Total: 11.2 million green tonnes of roundwood (softwood and hardwood) (+4%), of which:
 - Sawmills: 6.3 million green tonnes (+7%)
 - Wood-based panels: 1.5 million green tonnes (+21%)
 - Integrated pulp and paper mills: 0.4 million green tonnes (+4%)
 - Other uses, including round fencing, wood fuel, shavings and exports of roundwood: 3.0 million green tonnes (-8%)
- Production of wood products in the UK included:
 - o 3.6 million cubic metres of sawnwood (+8%)
 - o 3.5 million cubic metres of wood-based panels (+18%)
 - o 3.6 million tonnes of paper and paperboard (unchanged)
 - o 0.3 million tonnes of wood pellets and briquettes (+2%)
- UK imports:
 - 8.2 million cubic metres of sawnwood (+13%)
 - 3.7 million cubic metres of wood-based panels (+12%)
 - 9.1 million tonnes of wood pellets (+1%)
 - 5.2 million tonnes of pulp and paper (-3%)
 - The total value of wood product imports was £8.5 billion (+14%)
- UK exports:
 - The total value of wood product exports was £2.0 billion (+27%)

- Apparent consumption of wood products in the UK included:
 - o 11.5 million cubic metres of sawnwood (+11%)
 - o 6.8 million cubic metres of wood-based panels (+17%)
 - o 9.4 million tonnes of wood pellets (+1%)
 - o 6.8 million tonnes of paper (-9%)

Removals of roundwood

Removals refers to the harvesting of roundwood (trunk and branch wood) from coniferous (softwood) and non-coniferous (hardwood) trees. 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.

It is estimated that a total of 11.2 million green tonnes of roundwood was removed from UK woodlands in 2021 (Table 1a), a 3% increase from the level in 2020.

Softwood accounted for the majority (93%) of removals from UK woodland and totalled 10.4 million green tonnes in 2021, a 4% increase from 2020. Hardwood removals totalled 0.8 million green tonnes in 2021, a 1% decrease from 2020.

Table 1 Removals of UK roundwood

thousand green tonnes

Year	Softwood FE/FLS/ NRW/FS ¹	Softwood Private sector ²	Hardwood FE/FLS/ NRW/FS ¹	Hardwood Private sector ²
2017	4,761	6,075	85	651
2018	4,522	6,827	88	746
2019	3,937	5,884	68	800
2020	4,616	5,437	87	742
2021	4,009	6,407	96	727

Table 1a Total removals of UK roundwood

thousand green tonnes

			9
Year	Total Softwood	Total Hardwood	UK Total
2017	10,836	736	11,573
2018	11,349	834	12,183
2019	9,822	868	10,690
2020	10,053	829	10,881
2021	10,416	823	11,239

Source (table 1 & 1a): Forestry England, Forestry and Land Scotland, Natural Resources Wales, Forest Service, industry surveys, industry associations.

- 1. FE: Forestry England, FLS: Forestry and Land Scotland, NRW: Natural Resources Wales, FS: 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 difference between reported softwood removals and deliveries (Table 2) can be caused by variations in the level of stocks between harvesting and delivery to the wood processor, and/or by the differences in data sources and methodologies used to compile removals and deliveries statistics (see Annex).

Deliveries of roundwood

Figures for deliveries relate to the quantity of UK-grown roundwood that is delivered to wood processors and other users. Statistics on roundwood deliveries are used to monitor trends in the supply of, and demand for, UK-grown wood.

In 2021, deliveries of UK roundwood totalled 11.2 million green tonnes (Tables 2 and 3), a 4% increase from the previous year. Most roundwood deliveries (93%) were softwood.

Softwood deliveries totalled 10.4 million green tonnes in 2021 (Table 2). Sawmills used a total of 6.3 million green tonnes (60%) of UK softwood deliveries. A further 1.6 million green tonnes were used for woodfuel, 1.5 million green tonnes to produce wood-based panels, 0.4 million green tonnes by integrated pulp and paper mills, and 0.6 million green tonnes for all other uses (including round fencing, shavings and softwood exports).

Table 2 UK softwood deliveries

thousand green tonnes

Year	Saw- mills	Pulp mills	Wood- based panels	Fencing	Wood- fuel ¹	Other ²	Soft- wood exports	Total
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	9,904
2021	6,268	399	1,508	247	1,600	176	168	10,366

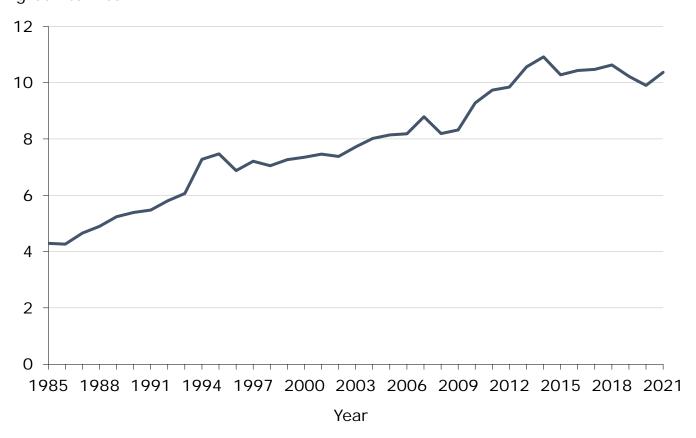
Source: industry surveys, industry associations.

- 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 1 provides the longer-term trend in softwood deliveries.

Figure 1 UK softwood deliveries

millions of green tonnes



Sources: industry survey, industry associations

There was a total of 0.8 million green tonnes of UK hardwood deliveries in 2021 (Table 3), a 1% decrease from 2020. The majority of UK hardwood deliveries (85%) were used for wood fuel in 2021.

Table 3 UK hardwood deliveries¹

thousand green tonnes

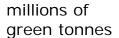
Year	Sawmills	Woodbased panels	Woodfuel ²	Other ³	Total
2017	65	0	600	71	736
2018	66	1	700	68	834
2019	75	0	700	93	868
2020	62	2	700	66	829
2021	60	3	700	60	823

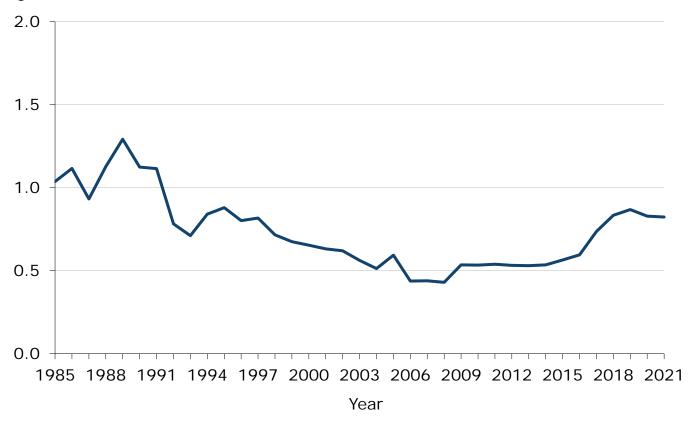
Source: industry surveys, industry associations.

- 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. Other includes round fencing and roundwood exports.

Figure 2 provides the longer-term trend in hardwood deliveries.

Figure 2 UK hardwood deliveries





Sources: industry survey, industry associations

Sawmills

In 2021, the 141 active sawmills in the UK consumed a total of 6.6 million green tonnes of softwood, an 8% increase from 2020 (Table 4). A further 0.1 million green tonnes of hardwood were consumed by UK sawmills in 2021 (Table 4a). Most of the logs, 6.3 million green tonnes softwood and 0.1 million green tonnes hardwood, were UK-grown.

Table 4 Consumption of softwood by sawmills

thousand green tonnes

Year	UK grown	Imported	Total
2017	6,586	267	6,853
2018	6,337	325	6,662
2019	5,898	343	6,242
2020	5,837	263	6,100
2021	6,268	321	6,590

Table 4a Consumption of hardwood by sawmills

thousand green tonnes

Year	UK grown	Imported	Total
2017	65	13	78
2018	66	13	79
2019	75	13	88
2020	62	12	73
2021	60	12	72

Source (table 4 & 4a): Sawmill Survey

Table 5 provides statistics for the sawnwood output of UK sawmills, including sawnwood produced at these mills from imported logs. A total of 3.6 million cubic metres of sawnwood was produced in the UK in 2021, an 8% increase from 2020 (Table 5).

Table 5 Production of sawnwood

thousand cubic metres

Year	Softwood	Hardwood	Total
2017	3,727	41	3,768
2018	3,625	41	3,666
2019	3,416	46	3,463
2020	3,311	37	3,348
2021	3,584	37	3,621

Source: Sawmill Survey

In addition to producing sawnwood, sawmills also generate other products, including chips and sawdust, which are mainly used by wood processors and for woodfuel.

Wood-based panel mills

Six UK wood-based panel mills were operating in 2021. These wood-based panel mills used a total of 4.1 million tonnes of material in 2021 (Table 6b). The inputs in 2021 comprised 1.5 million green tonnes of roundwood (36%), 1.5 million green tonnes of sawmill products (37%), 1.1 million tonnes of recycled wood fibre (26%) and a small amount (less than 0.1 million green tonnes) of imported wood and wood products (1%).

Table 6 Softwood inputs to wood-based panel mills

thousand green tonnes

Year	UK roundwood ¹	Sawmill products	Imports ²
2017	1,059	1,726	0
2018	1,210	1,566	30
2019	1,316	1,468	43
2020	1,248	1,535	22
2021	1,508	1,516	33

Table 6a Hardwood inputs to wood-based panel mills

thousand green tonnes

Year	UK roundwood ¹	Sawmill products	Imports ²
2017	0	0	22
2018	1	0	74
2019	0	0	78
2020	2	0	39
2021	3	0	0

Table 6b Total inputs to wood-based panel mills

thousand green tonnes

Year	Softwood	Hardwood	Recycled wood fibre ^{1,2}	Total
2017	2,785	22	923	3,730
2018	2,806	75	877	3,758
2019	2,827	78	984	3,889
2020	2,805	41	982	3,828
2021	3,057	3	1,085	4,145

Source (Table 6, 6a & 6b): Wood Panel Industries Federation

- 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 pre- and post-consumer wood waste for use in wood-based panel production.
- 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.

Total production of wood-based panels in 2021 was 3.5 million cubic metres, an 18% increase from 2020 (Table 7). This comprised a 17% increase in production of particleboard and a 22% increase in production of fibreboard.

Table 7 Production of wood-based panels

thousand cubic metres

Year	Particleboard ¹	Fibreboard (MDF) ²	Total woodbased panels
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

Source: Wood Panel Industries Federation

- 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 6) and production.

Pulp & paper industry

Table 8 shows the inputs to the two integrated pulp and paper mills in the UK. These mills used a total of 0.5 million tonnes of material (all softwood) in 2021, a 3% increase from the 2020 total.

Table 8 Inputs to integrated pulp & paper mills^{1,2}

thousand green tonnes

Year	UK roundwood ³	Sawmill products	Total
2017	442	61	503
2018	486	55	541
2019	464	61	525
2020	383	87	470
2021	399	83	482

Source: Confor

Note:

1. All wood inputs to integrated pulp & paper mills are softwood for the years shown.

2. This table excludes inputs of recycled paper and cardboard.

3. UK roundwood derived from stemwood.

Most UK paper production uses recovered waste paper or imported pulp. The figures shown in Table 9, include production by all mills in the UK, not just the integrated pulp and paper mills.

A total of 3.6 million tonnes of paper and paperboard were produced in the UK in 2021, similar to the level reported in 2020. In 2021, packaging materials accounted for 52% of the total UK paper production, sanitary and household papers for 19% and other (including graphic papers) for 29%.

Table 9 Production of paper

thousand tonnes

Year	Sanitary & household papers	Packaging materials	Other (including graphic papers)	Total
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	689	1,898	1,053	3,640

Source: Confederation of Paper Industries.

Wood pellets and briquettes

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. 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 304 thousand tonnes of wood pellets and briquettes are estimated to have been made in the UK in 2021 (Table 10). This represents an increase of 2% from the 2020 production level.

Table 10 Wood pellets and briquettes production

thousand tonnes

Year	Wood pellets and briquettes production
2017	287
2018	279
2019	298
2020	298
2021	304

Source: Survey of UK Pellet and Briquette Production

Imports and exports

Statistics on imports and exports are compiled by HM Revenue & Customs from trade declarations and Intrastat reporting for intra-EU trade. The figures below (Tables 11 to 14) are based on the published UK overseas trade statistics.

Imports

A total of 5.2 million tonnes of pulp and paper was imported into the UK in 2021 (Table 11), a 3% decrease from 2020. Over the same period, imports of sawnwood increased by 13% to 8.2 million m³, imports of wood-based panels increased by 12% to 3.7 million m³ and imports of wood pellets increased by 1% to 9.1 million tonnes.

Table 11 UK import quantities¹

Year	Sawn wood ² (thousand m ³)	Wood-based panels ³ (thousand m ³)	Other wood ⁴ (thousand m ³)	Wood pellets (thousand tonnes)	Pulp & paper (thousand tonnes)
2017	7,663	3,800	1,379	6,885	6,798
2018	7,213	3,878	1,766	7,992	6,663
2019	7,040	3,650	2,229	8,878	6,130
2020	7,218	3,267	2,136	9,078	5,329
2021	8,159	3,671	1,594	9,128	5,152

Table 11a UK import quantities¹: Pulp and paper

thousand tonnes

Year	Paper	Pulp	Recovered paper	Total Pulp & Paper
2017	5,610	1,081	107	6,798
2018	5,477	1,066	120	6,663
2019	5,150	897	83	6,130
2020	4,555	644	130	5,329
2021	4,206	787	159	5,152

Source (table 11 & 11a): UK overseas trade statistics (HM Revenue & Customs), industry associations

- 1. There are reliability concerns for some of these figures, particularly for individual products (see Annex).
- 2. Sawnwood includes sleepers.
- 3. Includes veneer sheets.
- 4. Includes roundwood, wood charcoal, chips, particles, residues and recovered wood.

Wood product imports in 2021 were valued at a total of £8.5 billion, a 14% increase from the 2020 total (Table 12). This was mainly driven by a 68% increase in the value of sawnwood imports.

Table 12 UK import values¹

£ million

Year	Sawn wood ²	Wood- based panels ³	Other wood ⁴	Wood pellets	Pulp & Paper	Total
2017	1,636	1,155	90	961	4,004	7,845
2018	1,743	1,201	122	1,117	4,075	8,257
2019	1,598	1,134	184	1,309	4,076	8,301
2020	1,587	970	198	1,339	3,388	7,482
2021	2,668	1,297	172	1,295	3,088	8,521

Table 12a UK import values: Pulp and paper¹

£ million

Year	Paper	Pulp	Recovered paper	Total Pulp & Paper
2017	3,418	572	14	4,004
2018	3,415	639	21	4,075
2019	3,538	520	17	4,076
2020	2,903	451	35	3,388
2021	2,666	396	26	3,088

Source (table 12 & 12a): UK overseas trade statistics (HM Revenue & Customs), industry associations.

- 1. There are reliability concerns for some of these figures, particularly for individual products (see Annex).
- 2. Sawnwood includes sleepers.
- 3. Includes veneer sheets.
- 4. Includes roundwood, wood charcoal, chips, particles, residues and recovered wood.

Exports

A total of 5.4 million tonnes of pulp and paper (including recovered paper) was exported by the UK in 2021 (Table 13), a 16% increase from the level in 2020.

Table 13 UK export quantities¹

Year	Sawn wood ² (thousand m ³)	Wood-based panels ³ (thousand m ³)	Other wood ⁴ (thousand m ³)	Wood pellets (thousand tonnes)	Pulp & paper (thousand tonnes)
2017	218	374	638	126	5,528
2018	238	295	595	63	5,317
2019	215	384	604	33	5,160
2020	231	389	293	4	4,617
2021	277	324	302	2	5,352

Table 13a UK export quantities¹: Pulp and paper

thousand tonnes

Year	Paper	Pulp	Recovered paper	Total Pulp & Paper
2017	788	7	4,733	5,528
2018	772	15	4,530	5,317
2019	825	9	4,327	5,160
2020	749	26	3,842	4,617
2021	1,048	5	4,299	5,352

Source (table 13 & 13a): UK overseas trade statistics (HM Revenue & Customs), industry associations

- 1. There are reliability concerns for some of these figures, particularly for individual products (see Annex).
- 2. Sawnwood includes sleepers.
- 3. Includes veneer sheets.
- 4. Includes roundwood, wood charcoal, chips, particles, residues and recovered wood.

Wood product exports were valued at a total of £2.0 billion in 2021, an increase of 27% from the previous year (Table 14). The total value of wood product exports in 2021 comprised 85% pulp and paper (mainly paper), 8% wood-based panels, 5% sawnwood and 2% other wood.

Table 14 UK export values¹

£ million

Year	Sawn wood ²	Wood- based panels ³	Other wood ⁴	Wood pellets	Pulp & Paper	Total
2017	55	109	41	6	1,651	1,861
2018	64	103	41	5	1,597	1,809
2019	58	123	41	2	1,491	1,714
2020	63	114	36	1	1,336	1,549
2021	96	158	44	0	1,674	1,972

Table 14a UK export values¹: Pulp and paper

£ million

Year	Paper	Pulp	Recovered paper	Total Pulp & Paper
2017	997	5	649	1,651
2018	1,022	5	570	1,597
2019	1,049	4	437	1,491
2020	931	11	394	1,336
2021	940	3	731	1,674

Source (table 14 & 14a): UK overseas trade statistics (HM Revenue & Customs), industry associations

- 1. There are reliability concerns for some of these figures, particularly for individual products (see Annex).
- 2. Sawnwood includes sleepers.
- 3. Includes veneer sheets.
- 4. Includes roundwood, wood charcoal, chips, particles, residues and recovered wood.

Consumption of wood products

Apparent consumption is the amount of timber used as wood and wood products by people and industries in the United Kingdom. It is calculated as total UK production plus imports, minus exports. Apparent consumption differs from actual consumption by the extent of changes in the level of stocks. It is not practical to collect information on actual consumption.

Table 15 presents estimates of apparent consumption for sawnwood, wood-based panels, wood pellets and paper in the last 5 years, derived from the production figures in tables 5, 7, 9 and 10, data on imports (table 11) and data on exports (table 13).

A total of 11.5 million cubic metres of sawnwood (an 11% increase compared to the previous year), 6.8 million cubic metres of wood-based panels (an increase of 17%), 9.4 million tonnes of wood pellets (an increase of 1%) and 6.8 million tonnes of paper (a decrease of 9%) were consumed in the UK in 2021.

Table 15 Apparent consumption in the UK

Year	Sawnwood (thousand m ³)	Wood-based panels (thousand m³)	Wood Pellets (thousand tonnes)	Paper (thousand tonnes)
2017	11,212	6,602	7,045	8,679
2018	10,641	6,662	8,209	8,599
2019	10,288	6,512	9,144	8,176
2020	10,335	5,830	9,371	7,437
2021	11,503	6,833	9,431	6,798

Source: industry surveys, industry associations, HM Revenue and Customs Note:

1. Apparent consumption is defined as production + imports – exports.

Annex

Introduction

This annex provides background information on the UK wood production and trade statistics presented in this publication. It covers the data sources and methodology used to produce the statistics, information on quality measures and on any revisions to historic data and links to further information.

Glossary

Brash

Branch wood and leaf material that is generally too small in diameter to be considered part of the timber product from a harvesting site.

Briquettes

Similar to wood pellets (see below) but larger, briquettes are made from compressed wood fibres and used for heating.

Confor

Confederation of Forest Industries.

Deliveries

The quantities of UK-grown roundwood that is delivered to processors (mills) or for other uses (such as wood fuel and exports). Note that for sawmills and round fencing mills, the deliveries figure reported is actually the quantity of roundwood consumed by the mill, which may differ from the true deliveries figure if the levels of input stocks vary.

Fibreboard

Panel material with thickness equal to or greater than 1.5 mm, manufactured from lignocellulosic fibres with application of heat and/or pressure. The bond is derived

either from the felting of the fibres and their inherent adhesive properties or from a synthetic binder added to the fibres.

Forest Research (FR)

The Forestry Commission agency responsible for forestry and tree related research (including statistics).

Forest Service (FS)

An executive agency of the Department of Agriculture, Environment and Rural Affairs (DAERA). Forest Service fulfils DAERA's legal obligations for forestry in Northern Ireland.

Forestry and Land Scotland (FLS)

The Scottish Government agency responsible for managing the national forests and lands in Scotland, created on 1 April 2019.

Forestry Commission (FC)

The government department responsible for forestry matters in England. The Forestry Commission's functions in Wales transferred to the Welsh Government and to Natural Resources Wales on 1 April 2013. The Forestry Commission's functions in Scotland transferred to Scottish Forestry and to Forestry and Land Scotland on 1 April 2019. The Forestry Commission is supported by two agencies; Forestry England and Forest Research.

Forestry England (FE)

The Forestry Commission agency responsible for managing the national forests in England. Prior to April 2019, Forestry England was known as Forest Enterprise England.

Great Britain (GB)

England, Wales and Scotland.

Green tonne

The weight measurement of timber freshly felled before any natural or artificial drying has occurred.

Hardwood

The wood of broadleaved trees, such as oak, birch and beech; a term sometimes used for the broadleaved trees themselves.

HM Revenue & Customs (HMRC)

The United Kingdom's tax, payments and customs authority.

Increment

The growth rate of standing trees.

Medium-density fibreboard (MDF)

Wood fibreboard made by a dry process in which the primary bond is derived from a bonding agent, and having a density usually exceeding 600 kg per cubic metre.

Natural Resources Wales (NRW)

The organisation responsible for advising the Welsh Government on the environment, created on 1 April 2013.

Particleboard

Panel material manufactured under pressure and heat from particles of wood (wood and chipboard flakes, chips, shavings, sawdust), with the addition of an adhesive.

Pulp

Fibrous material produced by mechanically or chemically reducing wood into its component parts from which pulp, paper and paperboard sheets are formed after proper slushing and treatment or used for dissolving purposes (dissolving pulp or chemical cellulose) to make rayon, plastics, and other synthetic products. Sometimes called wood pulp.

Roundwood

Trunk or branch wood, generally with a top diameter of 7 cm or more. Can be in the form of logs (14 cm top diameter or more) or small roundwood (7 to 14 cm).

Sawlogs

Material of at least 14 cm top diameter that is destined to be sawn into planks or boards.

Softwood

The wood of coniferous trees, such as spruce, pine and larch; a term sometimes used for the coniferous trees themselves.

Standing volume

Measurement of quantity before trees are felled. Usually expressed as cubic metres overbark standing.

Stemwood

Wood from the stem and main branches of a tree, excluding the stump and small branches.

Stump

The above-ground base part of a tree that would usually remain after felling.

Wood pellets

Sawdust or wood shavings compressed into uniform diameter pellets. They are often burned for heat or energy, but may also be used for other purposes (such as horse bedding or cat litter).

Data sources and methodology

Administrative sources

Administrative records are used to compile the roundwood removals figures from woodland owned or managed by Forestry England, Forestry and Land Scotland, Natural Resources Wales, or the Forest Service (in Northern Ireland).

Industry surveys

Data for softwood removals from other woodland and for wood processing is collected through several industry surveys:

- The Private Sector Softwood Removals Survey;
- The Sawmill Survey
- The Survey of Round Fencing Manufacturers;
- The Pellet and Briquette Production Survey.

Details on each survey and methodology can be found at the <u>About Our Statistics</u>: Survey page.

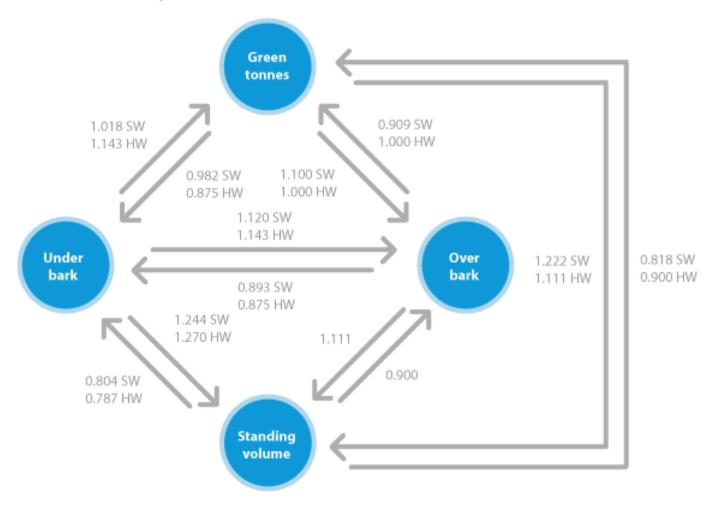
Other sources of industry data include:

- The Wood Panel Industries Federation (for wood-based panels);
- Confederation of forest industries (for integrated pulp and paper mills);
- The Confederation of Paper Industries (for paper production).

Estimates are also provided by the Expert Group on Timber and Trade Statistics.

Conversion factors

The following factors have been used in this release to convert between cubic metres (m³) and green tonnes:



HW = Hardwood, SW = Softwood.

The diagram shows separate conversion factors to use when converting softwood (SW) and hardwood (HW) with arrows to indicate the direction of conversion. For example, to convert 1,000 green tonnes of SW into an underbark volume, the 1,000 green tonnes should be multiplied by the conversion factor of 0.982 to give 982m3 underbark. There is no difference between the softwood and hardwood conversion factors for converting between standing volume and overbark volumes.

Further information on conversion factors is available in Forestry Statistics 2021.

Trade statistics

Statistics on imports and exports are based on the <u>published overseas trade</u> <u>statistics for intra-EU trade and extra-EU trade produced by HM Revenue & Customs</u>. Where the reporting units for quantity differ from those shown in this release, figures are adjusted using standard FAO/ECE conversion factors, which are listed in the <u>Sources section of Forestry Statistics 2021</u>.

Historically, HM Revenue & Customs wood trade figures have often necessitated adjustments, following liaison with practitioners in the trade. This is partly because detailed intra-EU wood trade data is obtained through a survey of businesses which trade above a particular value threshold. Businesses which trade below this threshold are only required to report the total value of their imports and exports. Therefore, the trade data reported in this publication for individual products is based on a potentially biased survey. More information on HMRC statistics can be found at the UK Trade Info website.

More details on trade statistics sources can be found in the <u>Sources section of</u> Forestry Statistics 2021.

Statistics on international trade flows (by country of source and country of destination) are available from the <u>FAOSTAT website</u>.

Quality

The figures in this publication are provisional. Final figures will be published in Forestry Statistics 2022, with a summary in Forestry Facts and Figures 2022.

Detailed information on the quality of the statistics presented in this publication is available in the <u>Quality Report: UK Wood Production and Trade</u>.

Further quality information on our Official Statistics, are provided as separate reports for each of the industry surveys used in this release.

Revisions

Figures for 2021 are published for the first time in this release.

Figures shown for 2020 and earlier years have been previously published. They are, however, subject to revisions from those published in Forestry Statistics 2021 and previous publications, to reflect late updates to administrative or survey data.

The following revisions have been made to the data for 2017 to 2020 since they were previously published (in Forestry Statistics 2021):

- Table 1: Removals there has been an upward revision of 3.2 thousand green tonnes (0.1%) to private sector softwood removals in 2020. Revisions to hardwood deliveries and a correction to tonnes in 2020 have resulted in a net downward revision to total hardwood removals of 0.9 thousand green tonnes (0.1%).
- Table 2: Consumption of UK-grown softwood roundwood by sawmills in 2017-2020 has been revised up by up to 18 thousand green tonnes per year.
 Consumption by round fencing mills has increased by 1 thousand green tonnes.
- Table 3: Consumption of UK-grown hardwood roundwood by sawmills in 2017-2020 has been revised down by up to 0.9 thousand green tonnes per year.
- Table 4: Consumption of UK-grown roundwood by sawmills has been revised as noted for tables 2 and 3 above.
- Table 5: Sawnwood production figures have been revised up to reflect the revisions to consumption figures noted for tables 2 and 4. This has resulted in an increase of 8 thousand cubic metres for softwood per year.
- Table 9: Paper production for 2020 there has been an upward revision of 2 thousand tonnes applied to packaging materials and a corresponding

downward revision of 2 thousand tonnes applied to Other (including graphic papers).

- Table 11: Estimated quantities for total pulp and paper imports for 2020 have been revised down by 57 thousand tonnes. This reflects an upward revision of 116 thousand tonnes for paper and downwards revisions of 144 thousand tonnes for pulp and 29 thousand tonnes for recovered paper.
- Table 12: Estimated values for UK imports of pulp have been revised up by £3 million.

Our <u>Revisions Policy</u> sets out how revisions and errors to these statistics are dealt with.

Further information

Most of these statistics are used to compile data that are sent to international organisations in the Joint Forest Sector Questionnaires (JQ1 and JQ2), in some cases giving more detail than in this release. These returns are published as Official Statistics on the Forest Research website; provisional figures in May and final figures in September/October. The statistics are used by UNECE Timber Bulletins, and UN/FAO Forest Product Statistics and are published on the FAOSTAT database.

The definitions used in this release are consistent with the <u>FAO International</u> <u>Definitions</u>.

Most of the statistics in this release and in the international returns are only available as UK totals, but some statistics can also be broken down by country (England, Scotland, Wales and Northern Ireland). Accompanying tables to this release provide longer time series data for wood production (roundwood removals), UK roundwood deliveries, sawmills and round fencing manufacturers, showing additional breakdowns where possible.

Additional analyses are available on request (subject to disclosure constraints).

Figures in tables have been independently rounded, so may not add to the totals shown.

Figures for UK production and trade of sawn softwood have previously been used alongside data from other sources to assess consumption of sawn softwood in the main end-user markets in the UK.

The Department for Business, Energy and Industrial Strategy publishes <u>an annual Digest of UK Energy Statistics</u>. Chapter 7 of this digest covers renewable sources of energy including wood. Figures for wood use in renewable energy statistics take into account wood from all sources (including processed wood, recycled wood and imports), not just UK-grown roundwood.

Release schedule

Final figures for 2021 will be released in Forestry Statistics 2022 and Forestry Facts and Figures 2022 on 29 September 2022.

Provisional figures for 2022 will be released in UK Wood Production and Trade: 2022 provisional figures on 18 May 2023.

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