

UNECE TIMBER FORECAST – September 2017

UK Timber Market Statement

Contents

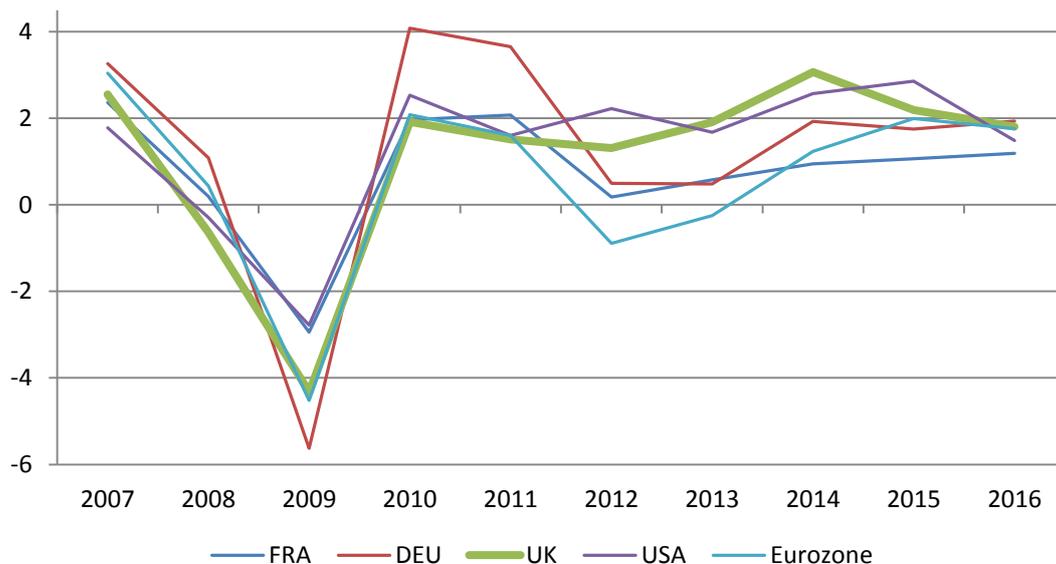
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1.0 General economic trends affecting forestry industries and timber market

1.1 Overview

In the year to Q2 2017, the UK economy was delivering low and sluggish growth with a quarter-on-quarter growth in Q1 2017 of 0.2% and Q2 2017 of 0.3%. Chart 1 shows real growth of Gross Domestic Product (GDP) in the UK and other selected economies over the last ten years; growth in the UK has been relatively stable since 2010.

Chart 1: Real GDP growth rate in 2007-2016, selected economies



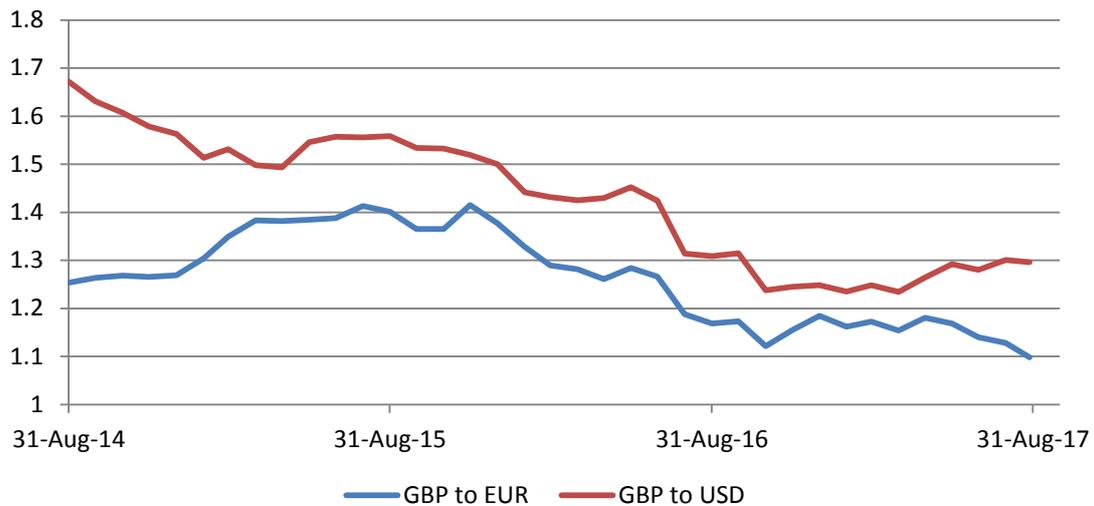
Source: OECD (2017), Quarterly GDP (indicator). doi: 10.1787/b86d1fc8-en; accessed 28 August 2017

The Pound Sterling has continued the trend of depreciation against the Euro, whilst the value against the US dollar has started to strengthen since March 2017, as shown in Chart 2. Some commentators believe that this recent strengthening against the US dollar is likely related to events in the USA rather than confidence in the UK economy. Although this lower Sterling makes UK exports relatively cheaper to Eurozone consumers, the UK's total trade deficit widened by £2.0 billion between May and June 2017 (Office for National Statistics). This reflects the rising prices, which UK consumers are seeing as they continue to import from relatively more expensive overseas producers.

The fall in Sterling, combined with increasing imports, have likely contributed to the rise in the Consumer Price Index (CPI) inflation, with inflation rising above the Bank of England's 2% target since February 2017.

Following a trough in 2016, the Business confidence index (BCI) has picked up to its highest point since 1988, demonstrating that business expectations for the immediate future are positive, although there is no clear reason why expectation has risen. Nevertheless, over this same period, the Consumer confidence index (CCI) has fallen, showing that consumers' expectations are less positive.

Chart 2: Exchange rate of GBP to EUR and USD, 2014-2017



Source: ofx.com; updated 28th August 2017 (daily)

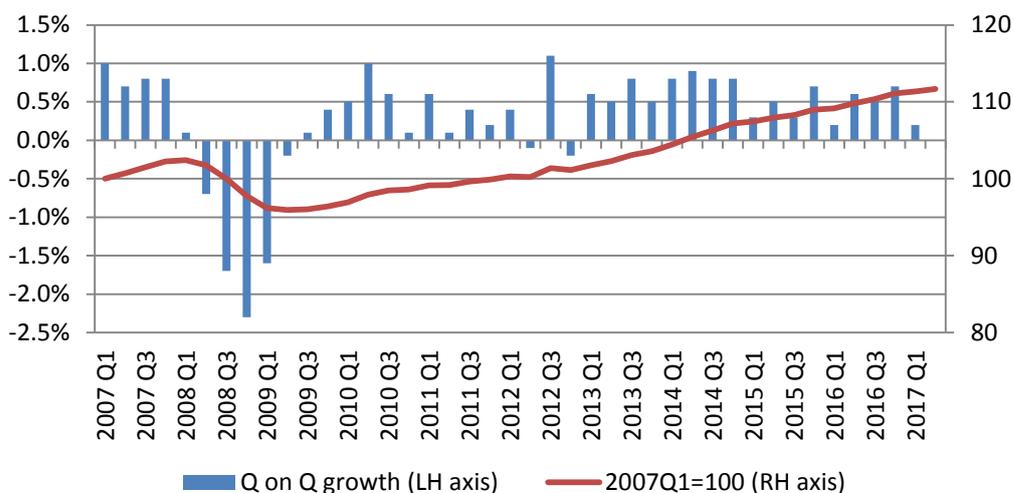
The August 3rd 2017 meeting of the Bank of England's (BoE) Monetary Policy Committee (MPC) determined that: the Bank Rate should be held at 0.25% for the next quarter in order to support economic growth; the stock purchase of £10 billion of corporate bonds and £435 billion of UK government bonds through issuance of central bank reserves should be maintained; and the drawdown period for the Term Funding Scheme (TFS), a scheme encouraging banks to pass on lower interest rates to borrowers, should be closed on 28 February 2018.

1.2 GDP Growth

Change in GDP is the main indicator of economic growth. Up to Q2 2017, UK growth was sluggish, especially in the first two quarters of 2017. This is a change from the previous trend of the stable, moderate GDP growth seen between 2013 and 2016 mentioned earlier.

The growth seen in Quarter 1 and Quarter 2 of 2017 was driven by services, which grew by 0.5% during this period. There was also relatively strong growth in government spending and investment, but a reduction in household spending and business investment resulted in 0.1% and 0.0% growth in the expenditure measure of GDP in Quarter 2.

Chart 3: GDP growth by quarter, 2007 - 2017 (2007 prices, seasonally adjusted)

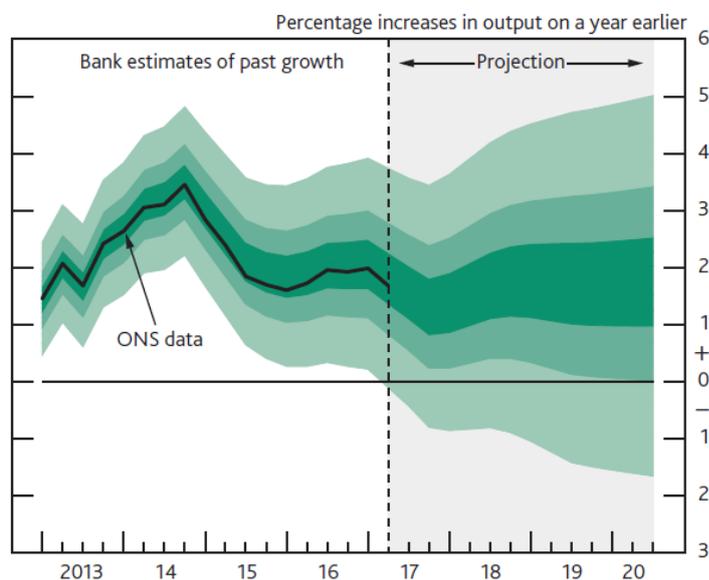


Source: Office for National Statistics (ONS) GSP; updated 30 June 2017 (quarterly)¹

In July 2017, the IMF revised its forecasts of UK growth to 1.7% in 2017 (down by -0.3 percentage points), but has remained at 1.5% for 2018. The average forecasts from independent institutions are marginally more pessimistic, with a forecasted UK GDP growth of 1.6% in 2017 and 1.4% in 2018².

The European Union’s forecasts for UK GDP growth differ only slightly with the aforementioned forecasts, with a 2017 forecast of 1.8% and 2018 forecast of 1.3%.

Chart 4: GDP 2013-2017, GDP projections 2017-2020



Source: Bank of England Inflation Report; published August 2017 (quarterly)

¹ www.ons.gov.uk/economy/grossdomesticproductgdp/bulletins/secondestimateofgdp/apriltojune2017

² www.gov.uk/government/uploads/system/uploads/attachment_data/file/638315/Forecast_for_the_UK_Economy_August_2017.pdf

1.3 Inflation

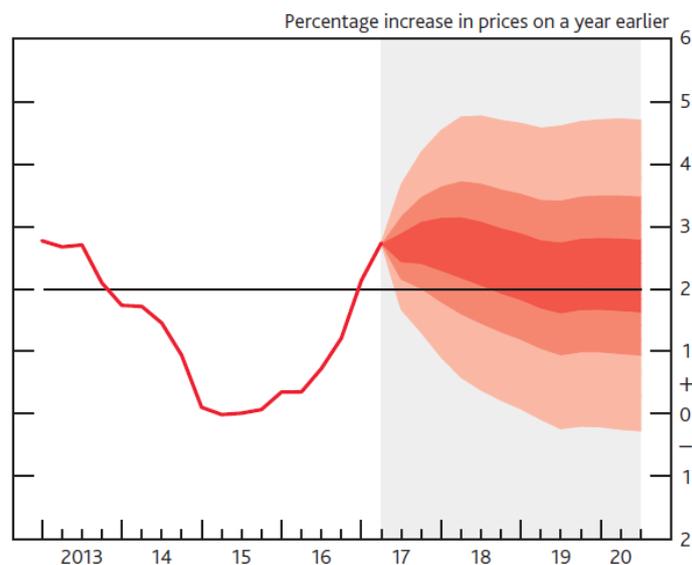
The Consumer Price Index of inflation, which measures a 'typical' basket of household goods, stood at 2.6% in July 2017, the same as the previous month, but up 2.0 percentage points from the previous year. The rate of inflation is now above the inflation target rate of 2% and as such, in time, may result in monetary policy changes, although for now the Bank Rate has been maintained, as discussed in the overview, section 1.1.

The depreciation in the Pound Sterling will have had an impact on the CPI through increased import prices, which may have started to be passed onto the consumer by this stage (July 2017). There were rises in costs associated with a range of goods and services, (mostly from food and non-alcoholic beverages; clothing and footwear; miscellaneous goods and services; furniture and household goods), although some of these increases have been linked to good weather and summer holidays.

Between June and July 2017, fuel prices fell by 1.3%, the fifth successive month of reductions in fuel prices. This contrasts with the previous year's fuel price increase of 0.7%. Nevertheless, this price reduction does not negate the price increases seen in other sectors.

Chart 5 below shows the Bank of England inflation forecast until 2020. The Monetary Policy Committee's best collective judgement is that inflation will continue to stay above the 2% target until at least 2020, but will start to slowly fall from the end of 2017.

Chart 5: CPI 2013-2017, CPI projections 2017-2020



Source: Bank of England Inflation Report; published August 2017 (quarterly)

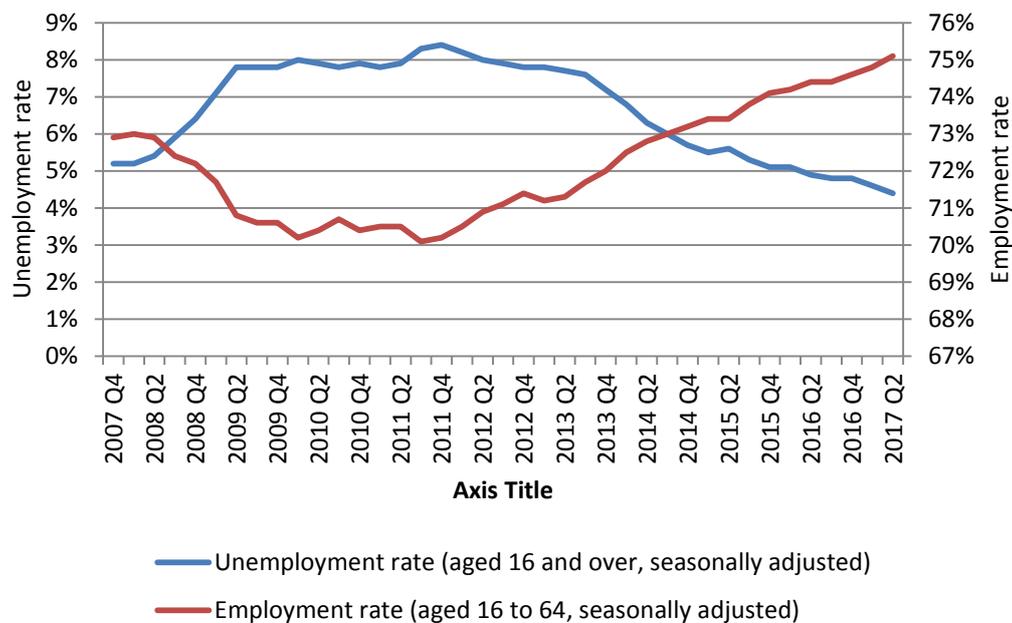
1.4 Employment

The year to Q2 2017 delivered continued increases in employment rates. Since Q3 2014, the employment rate has been at a record high, with either quarter-on-quarter stability or increases since then. The current record high of employment rate at Q2 2017 is 75.1%. The employment level stood at 32.07 million between April and June 2017, 60,000 more than the previous three months and up 335,000 from the previous year.

The unemployment rate fell to 4.4% in the three months to June 2017, a record low since 1975. The unemployment level stood at 1.48 million, 11,000 less than the previous three months and 156,000 less than the previous year.

Chart 6 below shows the quarterly employment and unemployment rates in the UK for the last ten years.

Chart 6: Employment and unemployment rates, 2007 - 2017



Source: Office for National Statistics (ONS) Labour Market; updated 16 August 2017

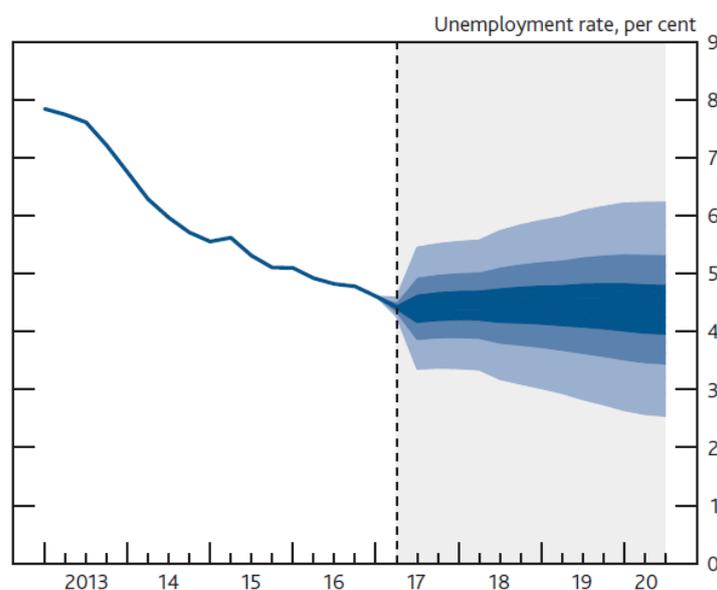
Labour productivity in the UK, as measured by output per hour is estimated to have fallen by 0.5% from Q4 2016 to Q1 2017. This fall is primarily due to a fall in services productivity of 0.6%, whilst manufacturing productivity continued to grow by 0.2% on the previous quarter. This is the first fall in labour productivity since Q4 2015.

The growth in employment has been from full time employees, with an increase from the previous year of 380,000 additional workers in full time employment. In the last year there has actually been a fall in the number of part time employees of 43,000 workers. A similar trend was seen in self-employment, with an increase of 27,000 additional full time self-employed workers since last year, and a 4,000 fall in part time self-employed workers over the same time period.

Although the number of people in employment has risen, wages have not risen. In real terms, the average weekly earnings for employees in Great Britain have fallen by 0.5% compared with the previous year.

Chart 7 shows the Bank of England unemployment projections until 2019. As can be seen, it is expected that the unemployment rate will remain relatively stable throughout 2017 and continue at around 4.5% in the following 3 years.

Chart 7: Unemployment 2013-2017, unemployment projections 2017-2020



Source: Bank of England Inflation Report; published August 2017 (quarterly)

2.0 Policy developments potentially affecting the timber products trade

Forestry policy in the United Kingdom 2017

Forest ownership in the UK remains fairly stable as of March 2017 with around 27% state owned and 73% privately owned³.

Responsibility for forestry in the UK is devolved to the four nations. Certain functions, such as international forestry policy, are reserved for the UK Government whilst further functions (known as cross-border functions) are currently undertaken on a UK-wide basis by agreement. These cross border functions are currently being fully devolved to the countries (England, Scotland and Wales) by April 2019. Northern Ireland has always managed its own arrangements, but works closely with the devolved administrations. All the countries collaborate in commissioning forestry research, and to a varying extent in the supply of technical advice and the provision of various other services such as economics and international reporting. However, for the most part forestry policy is developed and implemented at country level in England, Scotland, Wales and Northern Ireland.

The Forestry Commission is the non-Ministerial government department responsible for advising on and implementing forestry policy in England and Scotland. It does this directly by serving as the forestry department for the UK Government, for England, and for the Scottish Government in Scotland. This arrangement will end in April 2019 when the functions have been passed to the countries, and forestry in Scotland will be undertaken directly by the Scottish Government. In Wales, forestry was passed to the Welsh Government in 2013 where the state forests are managed by a single environment body called Natural Resources Wales. Forestry in Northern Ireland is undertaken by the Forest Service, an agency within the Department of Agriculture, Environment and Rural Affairs. The UK Government's Department for the Environment, Food and Rural Affairs (DEFRA)

³ Forestry Commission (2017), "Woodland Area, Planting and Publicly Funded Restocking: 2017 Edition"

has responsibility for international forestry policy with technical assistance from the Forestry Commission. From April 2018 this responsibility will continue with new arrangements for technical assistance.

Both the UK Government and the devolved administrations are committed to sustainable forest management, as articulated in the Forest Europe Ministerial agreements. Sustainable forest management serves as an overarching concept and framework and the UK approach to delivery is set out in the UK Forestry Standard. A new edition of this was produced in July 2017 (the fourth edition).

Priorities for the current UK government include the importance of forestry as a business, increased tree cover and greater use of domestically produced wood and wood products. Over recent years, increased attention has been focused on pests and diseases. Due to disease and pest outbreaks, the use of some important commercial forestry species has been curtailed and significant areas of sanitation felling have been necessary. Work aimed at quantifying the impact on the forest resource has been undertaken through the National Forest Inventory (NFI). The results of this work are being utilised across the forest sector, particularly in relation to bio-security, to inform contingency planning.

The UK's plans and commitments to energy sustainability mean that the use of woody biomass for renewable energy has risen sharply. Much of the woody material used is currently being imported, particularly from the southern United States. The UK has been pro-active in ensuring that all material used for renewable energy comes with appropriate evidence of sustainability.

2.1 Plant health issues

Import/export restrictions

Sweet chestnut (*Castanea*) imports into the UK from the EU require a plant passport, confirming that they originate from areas free from *Cryphonectria parasitica* and that the wood has been kiln dried to a moisture content (m/c) below 20% and is appropriately marked as such. This also applies to Plane (*Platanus*) however it must be ensured that this wood originates from areas free from *Ceratocystis platani*.

Similar import restrictions apply to coniferous wood and isolated bark of conifers requiring wood to be kiln dried to <20% m/c, wood shall be bark-free, isolated bark shall be treated against bark beetles and all require a plant passport. The wood must also originate from areas free from *Ips amitinus*, *Ips duplicatus*, *Ips typographus*, *Dendroctonus micans*, *Ips sexdentatus* and *Ips cembrae*.

The Forestry Commission keeps an updated list of restrictions and conditions on timber and wood imports and exports on their website⁴. There have been two recent publications updating the import requirements for wood and wood products from EU⁵ and non-EU countries⁶.

⁴ <http://www.forestry.gov.uk/planthealth>

⁵ [https://www.forestry.gov.uk/pdf/Regulated-EU-trade-and-Passporting-Guidance.pdf/\\$FILE/Regulated-EU-trade-and-Passporting-Guidance.pdf](https://www.forestry.gov.uk/pdf/Regulated-EU-trade-and-Passporting-Guidance.pdf/$FILE/Regulated-EU-trade-and-Passporting-Guidance.pdf)

⁶ [https://www.forestry.gov.uk/pdf/fcph001.pdf/\\$FILE/fcph001.pdf](https://www.forestry.gov.uk/pdf/fcph001.pdf/$FILE/fcph001.pdf)

Tree diseases

Phytophthora ramorum has continued to be a major plant health issue affecting Japanese larch (*Larix kaempferi*) trees and to a lesser extent European larch (*Larix decidua*) and hybrid larch (*Larix x eurolepis*).

In England, there have been no significant areas of new infection, suggesting that the felling programme (in place since 2010) and a raised biosecurity awareness security campaign are having a positive effect on disease spread. A number of Statutory Plant Health Notices were issued in 2016 on suspect sites and investigations suggest that *P. ramorum* can remain viable and continue to cause damage for at least 5 years. No significant new areas of *P. ramorum* were found in Scotland or Wales, but some patches of the disease were found in infected/previously infected areas. In Northern Ireland, limited spread evidence was recorded.

Of the 10.7 million green tonnes of softwood removed from UK woodland in 2016, approximately 360 thousand green tonnes were removed as required by plant health legislation, which was a 59% decrease from the 2015 estimate. Removals were carried out both from public and private sector woodland, and are expected to consist mainly of Japanese larch as a result of *P. ramorum*⁷.

2.2 National Forest Inventory (NFI)

The National Forest Inventory of Great Britain (NFI) provides a record of the size and distribution of forests and woodlands in Great Britain and information on key forest attributes. This information, together with Forestry Commission growth and yield models, is used to forecast softwood and hardwood timber availability.

In 2017 a report on tree cover outside woodland in Great Britain (woodland being defined as having a minimum size of 0.5 hectares and a minimum width of 20 metres) was published. This report showed that there are 742 thousand hectares of tree cover outside woodland in total, representing 19.4% of all tree cover (both woodland and outside woodland) and 3.2% of land area. The findings in this report are relevant to policy and practice in a number of areas including tree health, ecological networks, woodfuel, carbon accounting and urban planning. Further details are available at www.forestry.gov.uk/inventory.

2.3 Carbon reduction initiatives

Private sector investment in woodland creation under the Woodland Carbon Code is continuing to increase. The Woodland Carbon Code, launched in July 2011, sets out requirements of voluntary woodland creation projects in the UK wishing to make claims about the carbon they sequester. A new version of the Standard and Guidance is due later in 2017.

Companies are able to report verified Woodland Carbon Units to compensate for their gross emissions following the Department for Environment, Food and Rural Affairs' Environmental Reporting Guidelines and use them in claims of 'Carbon Neutrality' as set out in the British Standards Institute's PAS2060: 2014 Specification for the Demonstration of Carbon Neutrality.

⁷ Forestry Commission; www.forestry.gov.uk/statistics

2.4 Carbon markets in the forest sector

The Woodland Carbon Code has generated much interest among landowners and investors alike. As of 30 June 2017, 242 projects were registered with the Code; together they will create around 16,220 hectares of new woodland and are predicted to sequester around 6.0 million tonnes of carbon dioxide equivalent over their lifetime (up to 100 years)⁸. Of these projects, around 60% (143) are now validated (checked by an independent certification body), representing around 30% of the area and around 40% of the predicted carbon sequestration. 3 projects are now 'verified' at year 5, confirming the carbon sequestration that has occurred to date in these projects. More are expected to follow.

A proportion of the revenue of each project comes from private sector investment, mainly from companies considering their Corporate and Social Responsibility. Up to now, companies have paid 'in advance' for carbon to be sequestered; well over half of the validated carbon has been sold in this manner. Case studies of buyers are available on the Woodland Carbon Code website⁹. As there are now 3 projects which are verified, with more to follow soon, the first verified 'Woodland Carbon Units' are starting to be seen in the system; this should aid understanding of the market for 'sequestered carbon' rather than carbon purchased in advance.

2.5 UK grown timber initiatives

Since 2013 the not-for-profit, government backed 'Grown in Britain' campaign has developed and promoted the case for increasing British grown timber. The GiB programme combines efforts to increase private sector forest/woodland creation and management; grow the British timber processing sector and encourage the promotion of 'Grown in Britain' branded products in the eyes of merchants, retailers and consumers in the UK. The 'Grown in Britain' brand is now on 1.3 million tonnes of products, all with the assurance that the timber, woodfuel, charcoal, Christmas trees and plants have been grown in the UK to standards of legality and sustainability.

Following on from the 2016 Grown in Britain Woodstock report that found that UK grown hardwood sawlog supply has the potential to double to 2050, Grown in Britain has launched an online portal, aimed at the non-professional owner, that contains a video on valuing hardwoods along with the first ever up to date guidance of potential prices for a range of UK grown hardwoods¹⁰.

3.0 Market Drivers

3.1 Construction, manufacturing and distributive trades

The value of UK manufacturers' product sales increased in 2016 by 1.9% compared to 2015, this was a shift from the fall in value of 1.3% observed from 2014 to 2015¹¹.

There has been a steady increase in the construction material price index within the UK since late 2015. Imported sawn and planed wood and imported plywood were among the construction materials showing the greatest price increase from June 2016 – June 2017, with an increase of 13.1%

⁸ Forestry Commission (2017), "Woodland Carbon Code Statistics: Data to June 2017"

⁹ <https://forestry.gov.uk/carboncode>

¹⁰ <https://www.growninbritain.org/selling-hardwood-trees-2/>

¹¹ <https://www.ons.gov.uk/businessindustryandtrade/manufacturingandproductionindustry>

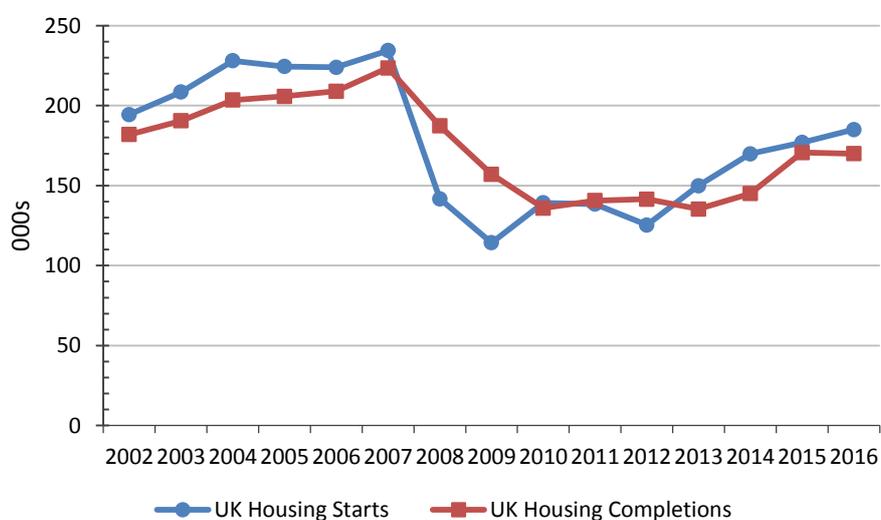
for sawn/planed wood and 6.7% for plywood. Sawn wood (> 6mm thick) was within the top five imported construction materials in 2016, with costs to the UK of £839 million¹².

Construction output showed a continual rise in 2016, with an increase in average yearly total construction output of 2.4% from 2015, although this followed a more significant increase from 2014 to 2015 of 4.9%¹³.

3.1.1 Construction

The growth in construction through housing in 2016 showed similarity with that shown over the last few years, with moderate growth in the number of housing starts in comparison to 2015 (up 4.9%). Chart 8 shows total UK housing starts and completions for 2002-2016.

Chart 8: UK housing starts and completions, 2002 - 2016



Source: Department of Communities and Local Government (DCLG); updated 24 August 2017¹⁴

Available data for the first half of 2017 show that housing starts in England have continued to increase by 13.9%, in comparison to the first half of 2016, with private enterprise a major driver of this rise between years (up 17.3%).

Similar data for house starts of all dwellings are not currently available for the rest of the UK for the first half of 2017; however, given that England accounts for over 80% of housing construction in the UK (83.1% in 2016), this current indicator suggests that this industry may show a greater total annual increase than observed in previous years.

Changes in other construction industry sectors have also been observed (percentage changes from 2015 to 2016 are shown in chart 9), with the private housing and private commercial sectors showing increased outputs between 2015 and 2016 (13.2% and 8.5%, respectively). Many other

¹² [https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/634382/17-cs8 -
Construction Building Materials - Commentary July 2017.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/634382/17-cs8_-_Construction_Building_Materials_-_Commentary_July_2017.pdf)

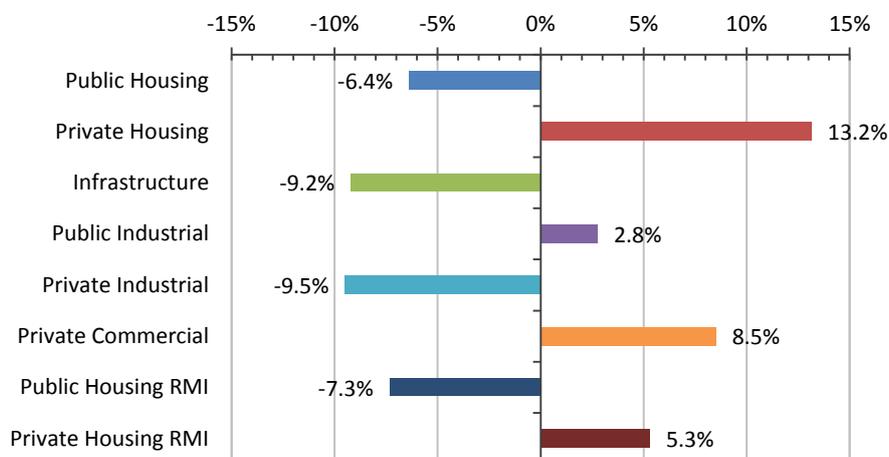
¹³

<https://www.ons.gov.uk/businessindustryandtrade/constructionindustry/bulletins/constructionoutputingreatbritain/june2017>

¹⁴ <https://www.gov.uk/government/statistical-data-sets/live-tables-on-house-building>

sectors however, showed a decline in outputs from 2015 to 2016, with a decrease in public housing (6.4%), infrastructure (9.2%) and private industrial (9.5%) sectors.

Chart 9: Construction Industry Sector Output, 2015/2016

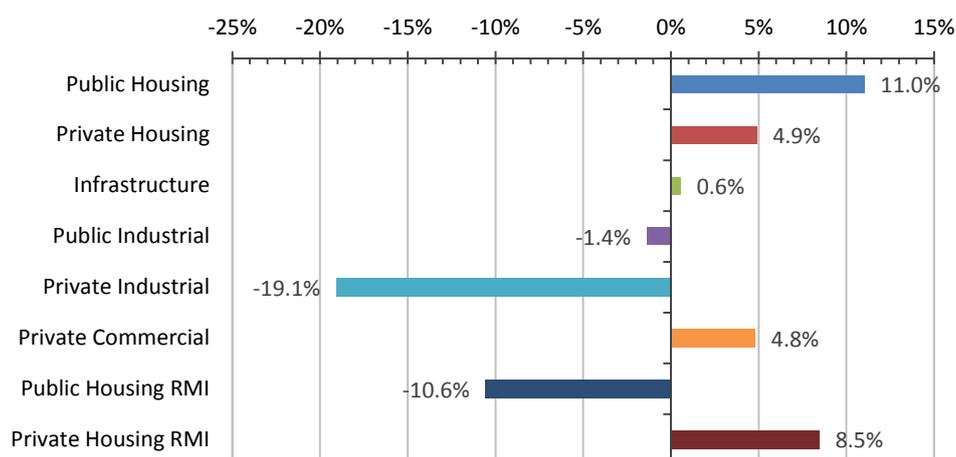


Source: Office for National Statistics (ONS) Output in the Construction Industry; 10 August 2017¹⁵

A comparison of construction output between the first half of 2016 and 2017 is shown in chart 10 and highlights a number of changes.

Between the first half of 2016 and the first half of 2017 there has been an increase in several construction sectors, with public housing showing the greatest growth (11%). There has also been a rise in private housing (4.9%), infrastructure (0.6%) and private commercial (4.8%) sectors. There has been a continued decrease in private industrial outputs (-19.1%).

Chart 10: Construction Industry Sector Output, 1st Half 2017/1st Half 2016



Source: Office for National Statistics (ONS) Output in the Construction Industry; 10 August 2017¹⁵

There is some recent evidence however to suggest that the UK construction sector has experienced a slowdown over summer 2017, likely linked to a lack of new projects resulting in a seeming

¹⁵ <https://www.ons.gov.uk/businessindustryandtrade/constructionindustry/datasets/outputintheconstructionindustry>

stagnation in commercial activity¹⁶. In Q2 of 2017, weak growth of GDP and construction cost inflation are suggested to have resulted in a decline in construction output by 1.3%, the worst result in the last five years¹⁷.

Forecast

The Construction Product Association's (CPA) summer forecast (2017) predicts a growth in construction output by 1.6% in 2017 and 0.7% in 2018; this 2017 forecast is an upward revision on previous predictions, which is suggested to have been driven by growth in new infrastructure activity (set to rise by 7.4% in 2017) and private house building¹⁸.

This winter (2016), Experian published their construction sector forecasts for 2017-2019, showing a predicted increase in output by 1.3% in 2017, 0.9% in 2018 and a further 1.8% in 2019. There is variation in predictions within the construction sector; while public and private housing are forecast to rise until 2019, non-residential building is expected to decline in 2018 and 2019¹².

The UK is currently committed to its Shared Ownership and Affordable Homes Programme (SOAHP), running from 2016 to 2021. This programme aims to make available £4.7 billion of capital grant to deliver at least: 135,000 homes for Help to Buy: Shared Ownership; 10,000 homes for Rent to Buy and 8,000 homes for supported and older people's rental accommodation.

The Homes and Communities Agency will be responsible for allocating funds outside London, whilst within London the Greater London Authority will hold responsibility¹⁹. Initial allocations of capital grant were announced in January 2017, with much of the budget remaining available (£1.3 billion)²⁰.

Green building incentives

Since the closure of the zero-carbon housing plan there has been little new input regarding schemes, policies or incentives geared towards low carbon. There has, however, been continued interest in promoting increased energy efficiency of housing, in which timber and wood products are likely to play a vital role.

There were previously a number of schemes in place within the UK, such as the Green Deal and the Energy Company Obligation (ECO), which helped fund and promote green building and energy efficient retrofit work and have since been cancelled or ended under the current government¹⁸. These schemes were responsible for making 50,000 homes more energy-efficient (worth £170 million), resulting in predicted combined savings of 34.1 million tonnes of carbon dioxide expected over the lifetime of these improved measures²¹. There is upcoming legislation in the form of Minimum Energy Efficiency Standards, due to start in April 2018, requiring properties to have a

¹⁶ <https://www.markiteconomics.com/Survey/PressRelease.mvc/6f309877a6bb48249674b76204ae6b30>

¹⁷ <http://www.constructionproducts.org.uk/publications/economics/construction-trade-survey-quarterly/construction-trade-survey-2017-q2/>

¹⁸ <http://www.constructionproducts.org.uk/publications/economics/construction-industry-detailed-forecast-summer-edition/construction-industry-forecast-summer-2017/>

¹⁹

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/517678/SO_and_AHP_prospectus_13_04_16.pdf

²⁰ <https://www.gov.uk/government/collections/shared-ownership-and-affordable-homes-programme-2016-to-2021-guidance#history>

²¹ <https://www.nao.org.uk/wp-content/uploads/2016/04/Green-Deal-and-Energy-Company-Obligation-Summary.pdf>

minimum EPC rating of E²². Such regulations may increase investment in timber insulation as a measure of increasing energy efficiency²³.

The use of timber in construction has multiple benefits, both environmentally and commercially. Timber frame and the use of timber engineered construction provides a carbon saving alternative (low embodied carbon dioxide compared to other available building materials), whilst enabling faster construction time (less on-site labour days) and offers value for money products²⁴.

A report from MTW Research on the state of the Timber Frame Market, suggested that this industry has continued to outperform the UK economy, with profitability in 2016 strengthened by the continued rise in demand from housing and commercial construction. This market has also been boosted by the rising demand for timber frame homes, a key feature of current methods of construction²⁵. The MTW report forecasts sales growth of more than 30% by 2020, as timber continues to play a vital role as a material for energy efficient homes, even with the recent loss of government zero carbon home targets²⁶.

Campaigns such as 'Wood for Good' act to promote the use of wood within design and construction. 'Wood for Good' champions the use of wood in its ability to deliver on innovative design, speed, cost and resource efficiency, health and wellbeing, as well as its role in the low carbon economy and as a sustainable material²⁷.

3.1.2 Manufacturing and distributive trades

UK manufacturing output rose by 0.8% for the year in 2016, compared to a slight decline of -0.2% in 2015. The CC sector (wood, paper and printing) has benefitted from this manufacturing rise, with a growth of 1.4% from June 2016 to June 2017²⁸. Chart 11 shows UK manufacturing output for each quarter since 2007.

²² <https://www.gov.uk/government/publications/the-non-domestic-private-rented-property-minimum-standard-landlord-guidance>

²³ <http://newsletter-woodforgood.com/2562983/one-in-five-commercial-buildings-at-risk-due-to-energy-efficiency-legislation/>

²⁴ <http://www.uktfa.com/why-timber-frame/the-benefits-of-timber-frame/>

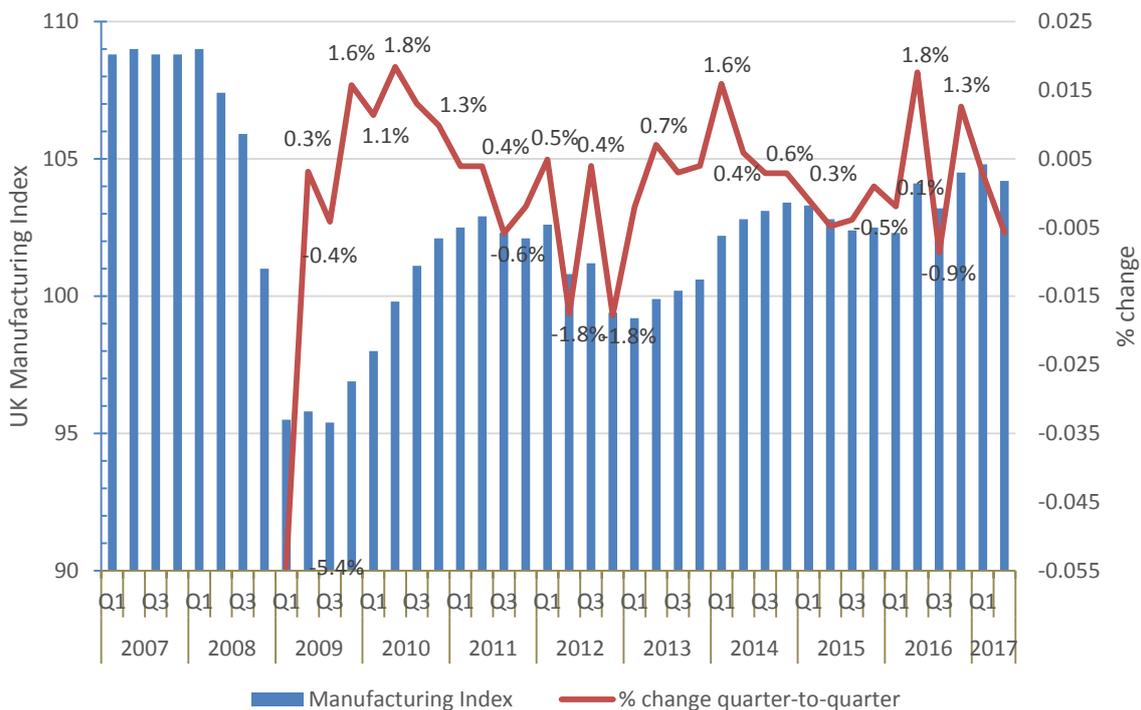
²⁵ <http://www.cti-timber.org/content/housebuilding-boost-timber-frame-market-2016-mtw-research-shows>

²⁶ <http://sigs.cim.co.uk/construction-industry-group/news/2016/may/housebuilding-boosts-timber-frame-market-in-2016/>

²⁷ <https://woodforgood.com/why-choose-wood/>

²⁸ <https://www.ons.gov.uk/economy/economicoutputandproductivity/output/bulletins/indexofproduction/june2017>

Chart 11: Index of UK Manufacturing, Q1 2007 to Q2 2017



Source: Office for National Statistics (ONS) manufacturing statistics; 10 August 2017²⁹

In comparison to the relatively stable trend in manufacturing output during 2015, 2016 showed a more changeable pattern with peaks and troughs in output throughout the year; there was an output rise of 1.8% in Q2, the highest quarterly increase since 2008. By comparison, current manufacturing outputs for 2017 have been less variable, with output growth changing by 0.3% and -0.6% for Q1 and Q2.

A 12-month comparison of softwood import prices (for TR26 landed stock) showed a 13.9% increase from December 2015 to December 2016 for UK distributors³⁰. This increase is likely the result of a varied pattern in prices over this timeframe, with a significant price fall from early 2016 (January-July), followed by a period of rapid and strong price inflation (Q4 2016), which has since softened (as of February 2017)³¹. One major factor influencing import costs of timber has been the change in GBP to SEK rates, which showed a consistent decline during 2016, starting at a high of 12.61 in January and falling to the lowest rate of 10.68 in November³². Timber Price Indices in the UK for Coniferous Standing Sales and Softwood Sawlog Prices were both higher in the period to March 2017, compared with the previous year³³.

²⁹ <https://www.ons.gov.uk/economy/economicoutputandproductivity/output/timeseries/k22a/diop>

³⁰ Södra Wood Ltd

³¹ <http://www.ttf.co.uk/resources/focus-on-softwood-hardwood-plywood-price-development-feb17.aspx>

³² <https://aibgb.co.uk/fxcentre>

³³ Forestry Commission (2017), "Timber Price Indices: Data to March 2017"

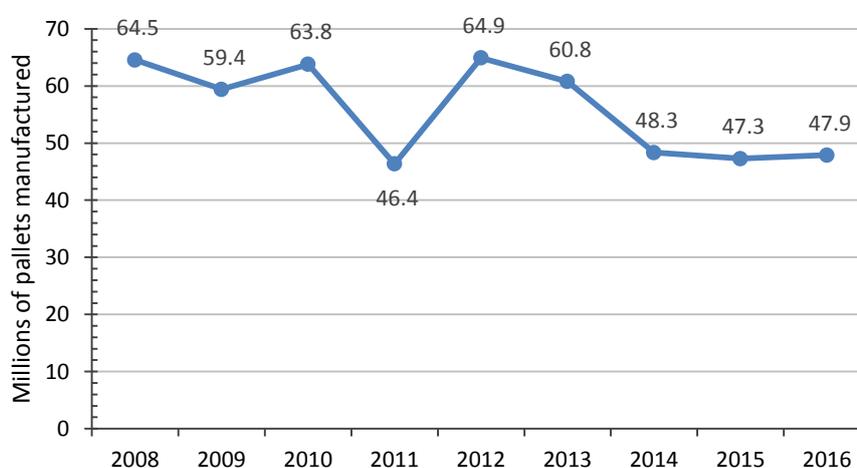
Forecast

If the recent declines in the value of the GBP Sterling continue, this could encourage an increase in UK exports to the benefit of the manufacturing and distributive sector, whilst adding to increased import prices.

Wooden pallets

Figures for UK pallet sales in 2016 (chart 12) showed a similar trend to those observed since 2014, with stability in annual sales of just below 50 million pallets. The overall stabilisation of pallet manufacturing is believed to be linked with the increased use of refurbished and recycled pallets. There was, however, some shift in trend with a rise in UK pallet sales of 1.3% from 2015, the first rise since 2010.

Chart 12: Wooden pallet sales in the UK



Source: Office for National Statistics (ONS) PRODCOM; 29 June 2017³⁴

3.2 Energy markets

Key facts for 2016 and Q1 2017:

- Total final energy consumption in the UK rose by 1.6% in 2016, whilst on a temperature corrected basis this rise was 0.9%. The main drivers for this increase were gas use in the domestic sector (accounting for 42% of the change) and petroleum in the transport sector (accounting for 35%)³⁵.
- Electricity generation was fuelled predominantly by gas (an increase of 13% on 2015), low carbon share of generation showed relative stability between 2015 and 2016.
- Renewables' share of electricity generation declined in 2016, by 1.0% in generation, however, capacity increased by 13.7%³⁶. Q1 2017 showed some variation to this trend with an increased share of electricity generation by renewables from 25.6 % in 2016 Q1 to 26.6%;

³⁴

<https://www.ons.gov.uk/businessindustryandtrade/manufacturingandproductionindustry/bulletins/ukmanufacturerssales/byproductprodcom/provisionalestimates2016/relateddata>

³⁵ <https://www.gov.uk/government/statistics/energy-consumption-in-the-uk>

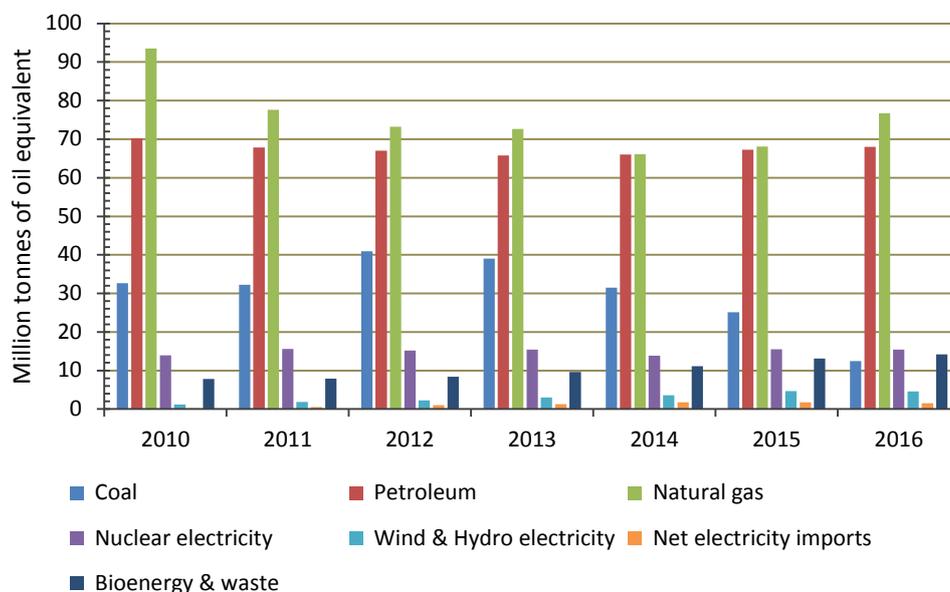
³⁶

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/604695/Press_Note_March_2017.pdf

the total electricity generated from renewable increasing by 5.1%. This increase from 2016 is suggested to reflect increased capacity³⁷.

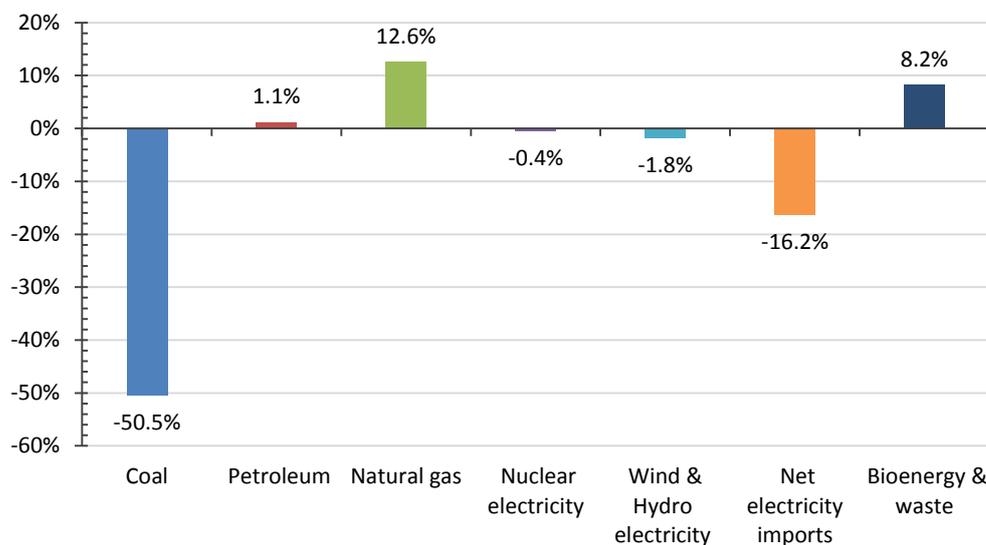
Changes in energy consumption by fuel type over the last six years are shown in chart 13, with percentage change in the use of primary fuels for energy consumption between 2015 and 2016 presented in chart 14.

Chart 13: Inland consumption of primary fuels and equivalents for energy use, 2010-2016



Source: Department for Business, Energy and Industrial Strategy; 27 July 2017³⁸

Chart 14: Percentage change in use of primary fuels for energy consumption 2015/2016



Source: Department for Business, Energy and Industrial Strategy; 27 July 2017³⁸

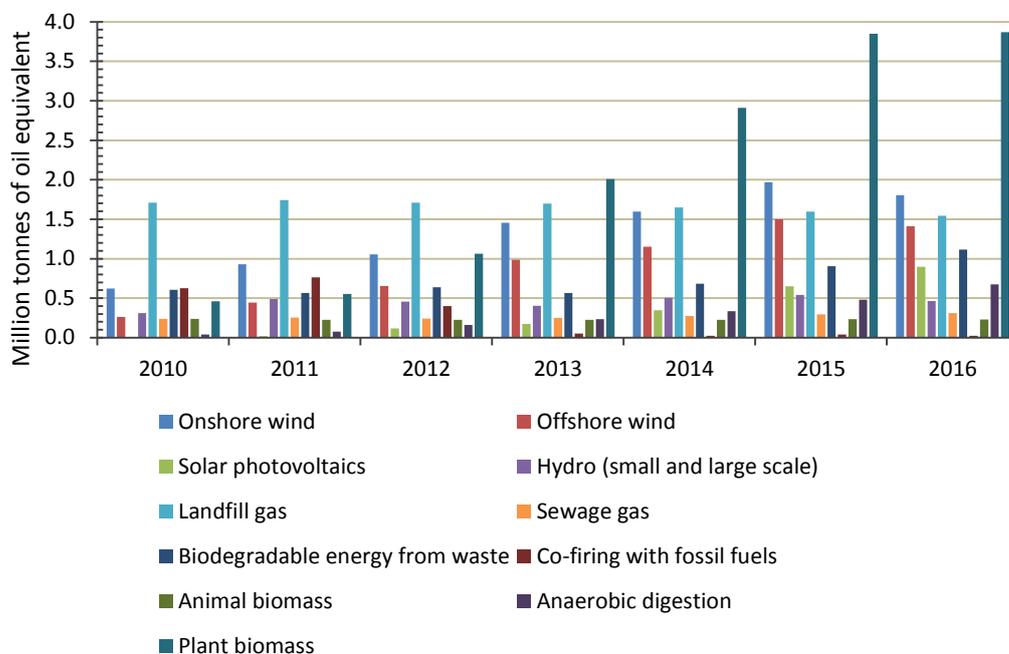
³⁷ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/622799/Renewables.pdf

³⁸ <https://www.gov.uk/government/statistics/energy-chapter-1-digest-of-united-kingdom-energy-statistics-dukes>

Consumption of bioenergy and waste has shown a continual increase over the last six years rising by 8.2% in 2016, with interest in the use of wood fuel likely to have increased with the introduction of the Renewable Heat Incentive (RHI) in 2011. A significant proportion of the bioenergy fuels consumed by the UK in 2016 were imported (27%), with wood pellets for electricity generation making up a dominant portion of these imports. Wood products also provide a share of other renewable energy sectors, such as heating, with domestic wood combustion retaining a 50% share in renewable heat³⁹.

In 2016, the UK continued to exceed its interim targets for progress against the Renewable Energy Directive (RED); renewable energy accounted for 8.9% of final energy consumption, an increase of 0.7% from 2015. Renewables accounted for 24.6% of total electricity generation, an increase of 2.3% from 2015⁴⁰. A breakdown of renewable electricity generation by technology type can be seen in chart 15.

Chart 15: Renewable sources used to generate electricity, 2010-2016



Source: Department for Business, Energy and Industrial Strategy; 27 July 2017⁴¹

Plant biomass remained the largest renewable source for electricity generation, accounting for 31.4%.

A comparison of the percentage share of renewable fuels used to generate electricity from 2010 to 2016 (chart 16) highlights that the most significant increases over this time have been in plant biomass, anaerobic digestion, solar and on and offshore wind. Whereas, the use of landfill gas and co-firing with fossil fuels have shown the greatest decline.

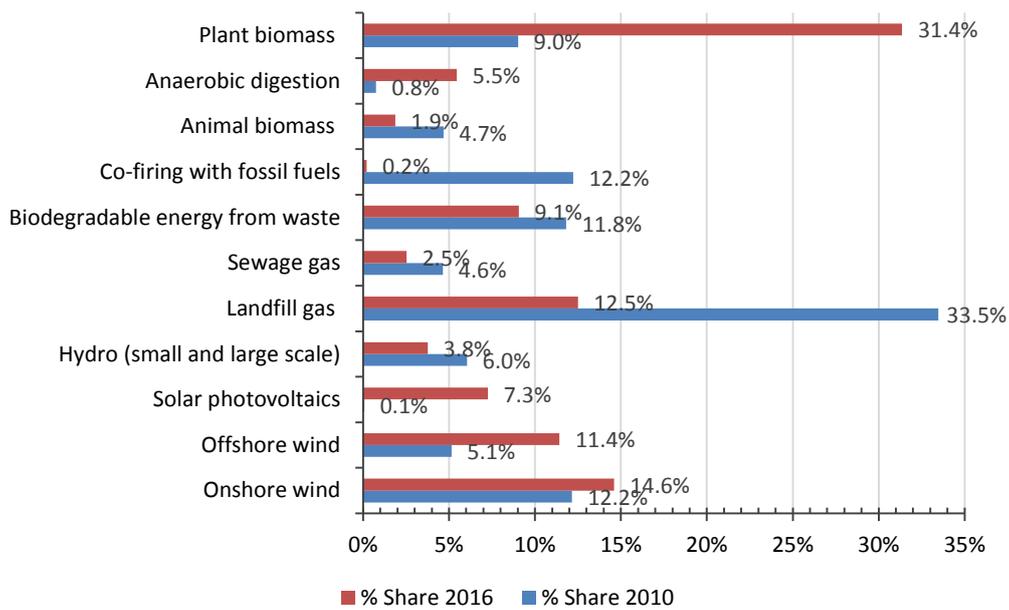
³⁹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/633782/Chapter_6.pdf

⁴⁰

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/622815/Renewable_energy_in_2016.pdf

⁴¹ <https://www.gov.uk/government/statistics/renewable-sources-of-energy-chapter-6-digest-of-united-kingdom-energy-statistics-dukes>

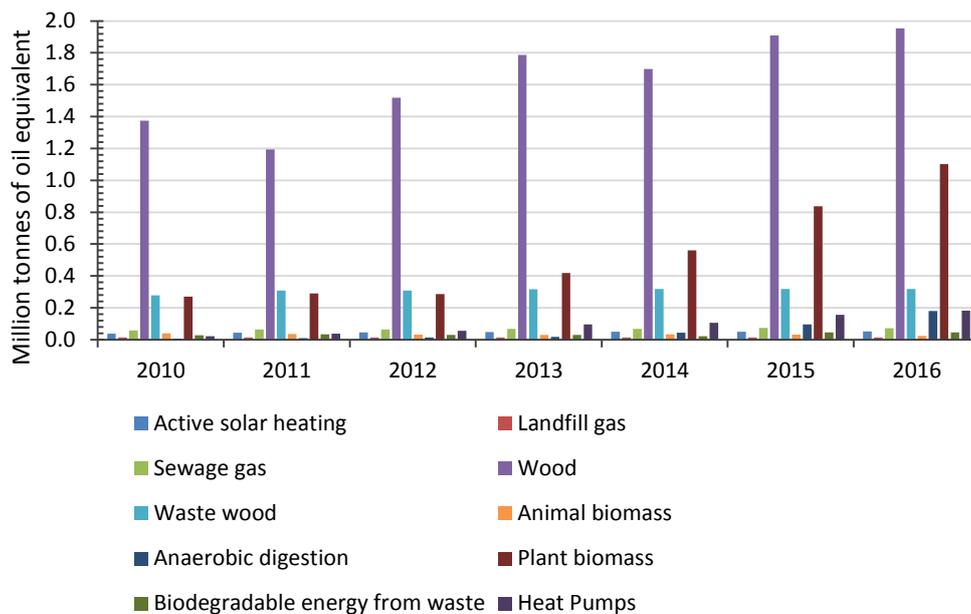
Chart 16: Changes in the share of renewable electricity generation by source, 2010 and 2016



Source: Department for Business, Energy and Industrial Strategy; 27 July 2017⁴¹

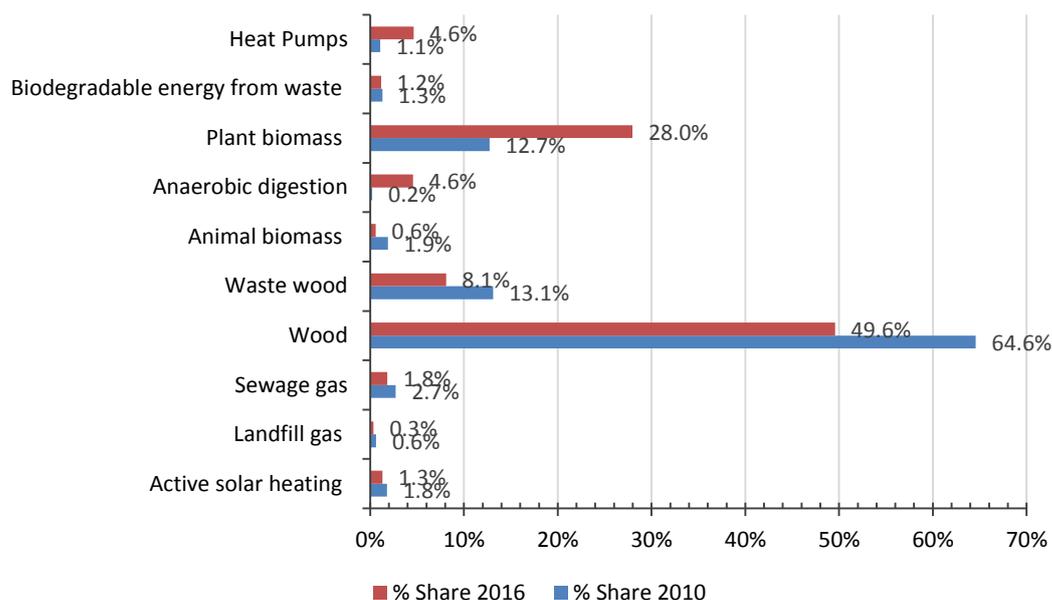
UK consumption of renewable sources generating heat also experienced growth in 2016 (by 0.7% from 2015), with 23% of renewables sources used to generate heat, accounting for 6.2% of total heat consumption. The Renewable Heat Incentive (RHI) or Renewable Heat Premium Payment (RHPP) helped play a vital role in encouraging this growth, with 15% of renewable heat generation supported by this scheme in 2016⁴⁰. The contributions of renewables sources and the changes in share of renewable heat generation are shown in charts 17 and 18.

Chart 17: Renewable sources used to generate heat, 2010-2016



Source: Department for Business, Energy and Industrial Strategy; 27 July 2017⁴¹

Chart 18: Changes in the share of renewable heat generation by source, 2010-2016



Source: Department for Business, Energy and Industrial Strategy; 27 July 2017⁴¹

Wood combustion remained the primary source of renewable energy for heating in 2016, with wood and waste wood combustion accounting for 77.7% of renewable heat generation; an increase from 2015 of 2.4% for wood and 0.1% for waste wood.

Plant biomass showed the greatest increase in use as a renewable source for heat generation in 2016, a growth of 31.6% from 2015, making it the second largest renewable input. Increases in use of plant biomass have also been supported by the RHI.

Since 2010, the use of renewables for both electricity and heat generation has continued to increase. With the use of renewables more than doubling for electricity generation and having nearly doubled for heat also. In 2016, renewables reached a combined replacement of fossil fuels for heating and electricity to the equivalent of more than 16 million tonnes of oil equivalent (12.3 million tonnes of oil equivalent for electricity and 3.9 million tonnes for heat).

Forecast

There are incentives available to promote the use of renewables in the UK. The domestic Renewable Heat Incentive (Domestic RHI)⁴², introduced in April 2014, is one such government financial incentive, with homeowners receiving payment for producing clean, green renewable heat. There is also a non-domestic RHI running since November 2011. The main renewable sources employed by individuals within these schemes are: air and ground source heat pumps, solar thermal and biomass; wood pellets form a large component of this biomass sector. The number of installations receiving payment since the introduction of these schemes was 16,548 non-domestic and 57,164 domestic⁴³.

⁴² <https://www.ofgem.gov.uk/environmental-programmes/domestic-rhi>

⁴³ <https://www.gov.uk/government/collections/renewable-heat-incentive-statistics>

The Energy Company Obligation (ECO) provides funding to improve energy efficiency in difficult to treat housing and the homes of those most in need. The first phase ran from 2012 – March 2015, the second phase ended in March 2017 and the third phase will run until September 2018, with a planned fourth and final phase running until 2022. In this third phase (ECO3), the ECO plans to dedicate 70% of the funds towards the Affordable Warmth Obligation group; end Carbon Saving Communities Obligation; simplify the eligibility criteria and include funding for social housing in Energy Performance Certificate bands E, F and G⁴⁴.

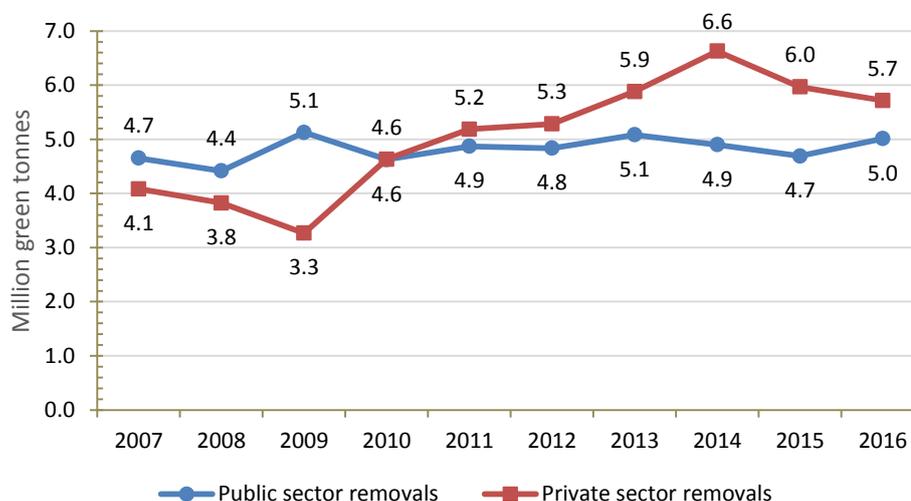
Analysis of future investment in renewables showed that substantial cuts were made in 2016, reducing by £1.1 billion over the course of the year⁴⁵. These cuts will impact wind, solar, biomass power and waste-to-energy projects, which are now predicted to decrease by 95% from 2017-2020. Many of the current renewable energy subsidy schemes and projects are dependent on EU emissions target legislation.

4.0 Developments in forest product market sectors

4.1 Wood raw materials

“Public sector removals”, as referred to in chart 19, relates to the removal of timber from woodland owned or managed by the Forestry Commission (FC) in England and Scotland and (until March 2013) Wales, Natural Resources Wales (from April 2013), and the Forest Service in Northern Ireland. “Private sector removals” relates to the removal of timber from all other woodland.

Chart 19: Softwood removal from UK forests by the private and public sectors, 2007-2016



Source: Forestry Commission; 18 May 2017⁴⁶

In 2016, a total of 10.7 million green tonnes of softwood were removed from UK forests, with almost no change in total softwood removal compared with 2015 (0.6% increase). There was some variation in softwood removal trends between sectors, with a 6.8% increase in public sector removals

⁴⁴ researchbriefings.files.parliament.uk/documents/SN06814/SN06814.pdf

⁴⁵ <https://www.theguardian.com/environment/2017/jan/04/renewables-investment-uk-fall-95-percent-three-years-study-subsidy-cuts-emissions-targets>

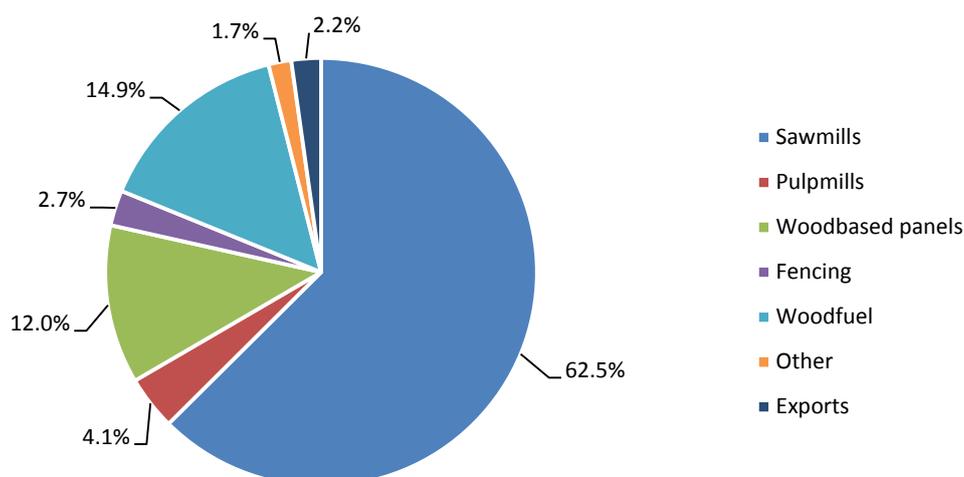
⁴⁶ Forestry Commission, 2017

compared to a decline in the private sector by 4.2%. Regardless of this decline, removals from the private sector still accounted for around 700,000 green tonnes of softwood more than the public sector.

UK grown softwood deliveries increased by 2% in 2016; deliveries to sawmills increased (5.6%) whilst there was a decline in deliveries to pulpmills (2.8%), wood based panel (6.4%) and fencing manufacturers (3.7%), as well as woodfuel (3.1%).

The relative size of the various markets for UK produced coniferous roundwood is shown in chart 20.

Chart 20: Deliveries of coniferous roundwood from UK forests to user industries, 2016



*Source: Forestry Commission; industry surveys; industry associations*⁴⁶

Removal of hardwood from UK forests in 2016 stood at 597,000 green tonnes, an increase (6.0%) from 2015. Privately owned woodland accounted for most of this hardwood supply, with 529,000 green tonnes removed from the private sector, representing 88.6% of total hardwood removals.

In keeping with the trend of the last decade, the majority of UK produced hardwood went for woodfuel (67.0%), with the remainder either delivered to sawmills (12.6%) or for other industries, such as: round fencing and roundwood exports (20.4%).

4.2 Wood energy

Wood used for energy generation includes sawmill products (including wood chips, sawdust and bark), recycled wood and wood pellets.

UK production of wood pellets declined from 2015 to 2016 by nearly 4%, reaching a total of 0.33 million tonnes, this decline continues the decrease in production seen from 2014 to 2015.

Consumption of wood pellets has continued to increase (3.8% from 2015 to 2016) with over 7 million tonnes of wood pellets consumed in 2016⁴⁷. Imports of wood pellets have thus risen accordingly to accommodate this increased consumption. Wood pellet imports to the UK rose by 3.2% from 2015 to 2016 and stood at nearly 6.8 million tonnes. The majority of these imports came

⁴⁷ Forestry Commission

from the USA (58%), Canada (20%) and the EU (21%). Within the EU, Latvia provided the largest proportion of these imports (14% of total wood pellet imports)⁴⁸. There were not any significant changes in the main supply countries to the UK for wood pellets in 2016. Recent reports have shown some stagnation in UK imports of wood pellets from the USA, although for the period of January to March there was no change (0%) between 2016 and 2017 in the volume of wood pellets imported from the USA⁴⁹.

The UK also exports wood pellets. Figures for 2016 showed a large decline in wood pellet exports, with exports falling to 21,000 tonnes (a decrease of 77% from 2015)⁴⁸.

4.3 Certified forest products

The UK Government has changed its Timber Procurement Policy (TPP); under this new policy all Central Government Departments, their executive agencies and non-departmental public bodies are required to purchase legal and sustainable timber or Forest Law Enforcement, Governance Trade (FLEGT) - licensed timber. In order to achieve this, a process has been agreed between the Forestry Commission and DEFRA to aid woodland owners in meeting this updated TPP⁵⁰.

As of March 2017, the total area of certified woodland in the UK stood at 1.39 million hectares, with 44% of all woodland area certified; including all public sector (Forestry Commission/Natural Resources Wales/Forest Service) woodland⁵¹.

In terms of consumption of certified wood, 80% of the wood (both softwood and hardwood) consumed by UK sawmills was certified in 2016; this showed no change from 2014 and 2015. 70% of the roundwood (softwood only) consumed by round fencing manufacturers was certified in 2016, similar to the levels in the last 2 years⁵².

There are a number of UK Government policies and EU legislation in place to promote sustainable forestry (as discussed in section 4.7), especially in areas of the world where current schemes are expensive and complex. The incorporation of multiple schemes aims to strengthen existing policy and ensure greater areas of woodland can be certified and protected, whilst strengthening demand for sustainably sourced timber.

4.4 Consumption of timber and panels products in the UK

UK consumption of timber and panel products increased in 2016. Total consumption grew by 3.9%, with the volume of UK timber consumption standing at over 16 million m³ for 2016. Chart 21 shows the change in total UK consumption, resulting from imported and UK grown wood and wood products. These figures are summed values for sawnwood (soft and hardwood) and wood-based products, which includes: veneer sheets, plywood, particleboard and fibreboard. Consumption of imported and homegrown timber both rose in 2016, by 5.4% for imported and 1.6% for UK produced products (production less exports).

The increase in consumption and production in 2016 suggested some recovery within the market compared to 2015 figures, which showed a decline in consumption. From 2012, UK consumption has

⁴⁸ Forestry Commission, 2017

⁴⁹ <https://www.globalwoodmarketsinfo.com/uk-imports-of-us-wood-pellets-stagnate-after-years-of-growth/>

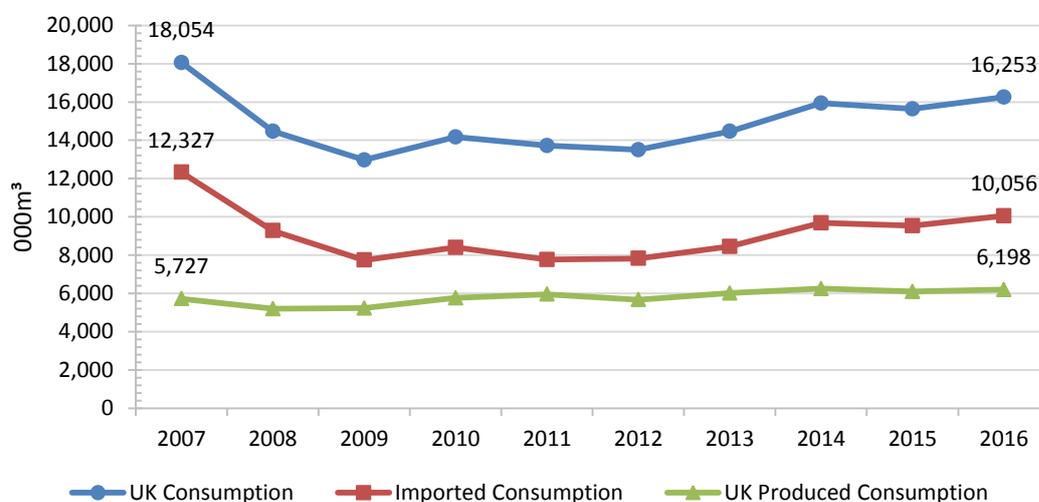
⁵⁰ <https://www.forestry.gov.uk/forestry/infd-9asj8n>

⁵¹ <https://www.forestry.gov.uk/forestry/infd-7aqknx>

⁵² Forestry Commission, 2017

steadily increased (with the exception of 2015), with total consumption increasing by 20% from 2012 to 2016, although still significantly below 2007 levels.

Chart 21: Consumption of UK timber and panel products, by source 2007-2016



Source: Forestry Commission

4.5 Value-added forest products and engineered wood products

Volumes of all imported and planed softwood grew in 2016, by 5.6%, to stand at 6.22 million m³.

This was on account of an increase in imports of both rough sawn varieties and planed goods. In 2016, the volume of imported planed goods (including square-edged and finger-jointed products) rose by 4.8%, to 2.2 million m³. Rough sawn volumes stood at 4.01 million m³, an increase of 6.1% from 2015.

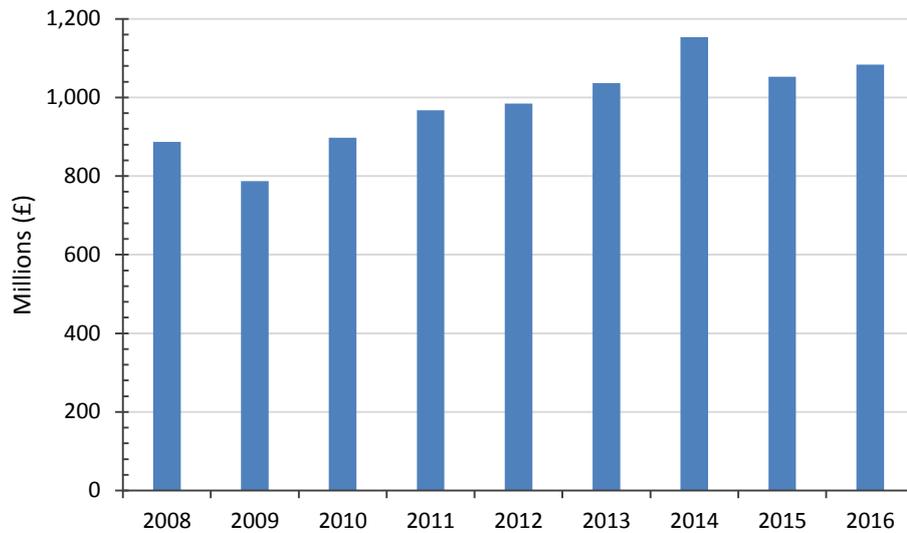
More specific data on imports of wood products from different regions can be seen by value under the Chapter 44 customs code section of the HMRC UK trade info website⁵³.

Sales information for UK manufactured wood products is available online through ONS PRODCOM and includes various divisions in which wood type products are sub-divided. Division 16 relates to the 'manufacture of wood and of products of wood and cork, except furniture...' This includes figures on sawmilling and planing of wood products, manufacture of veneer sheets and wood-based panels and manufacture of other builder's carpentry and joinery.

Total sales figures of milled and planed wood by value since 2008 are shown in chart 22. Sales of these products showed some recovery in 2016, increasing by 3% to give a sales value of £1.08 billion.

⁵³ <https://www.uktradeinfo.com/Statistics/BuildYourOwnTables/Pages/Table.aspx>

Chart 22: Total UK manufacturer sales of milled and planed wood



Source: PRODCOM; 29 June 2017⁵⁴

4.6 Sawn softwood

The construction sector was heavily affected by the recession, with this market acting as a major contributor of softwood consumption. As a result, consumption slumped between 2007 and 2008. While softwood consumption has remained at suppressed levels, in comparison to pre-recession, this market has been steadily recovering over this time. Softwood consumption in 2016 followed this trend of increased consumption; annual consumption rose by 5.5% and stood at 9.68 million m³.

The National Softwood Division (NSD) of the Timber Trade Federation produces an annual estimate of softwood imports, production and consumption, mid-way through each year for the second half of the year and the following year.

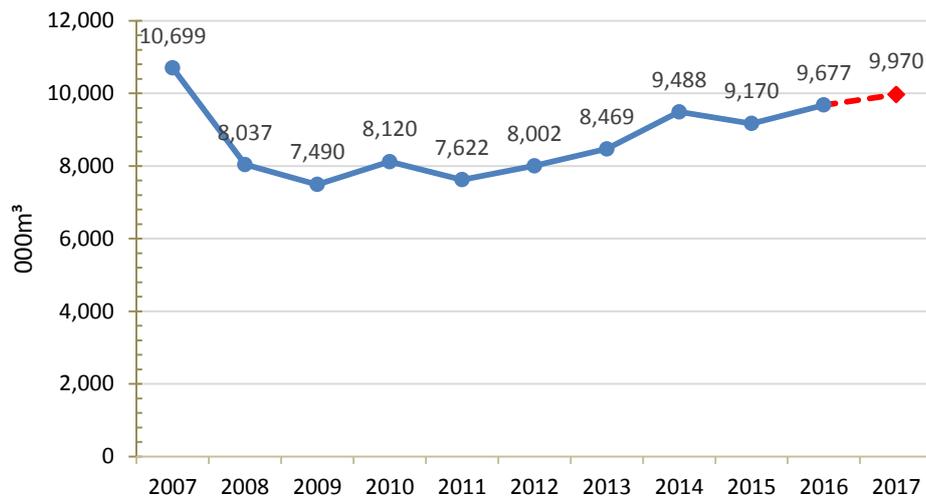
The forecast for 2017 indicates an increase in imports, production and consumption of 3.7%, compared to 2016 figures. This predicts import volumes of nearly 6.5 million m³, UK production of 3.7 million m³ and raised total softwood consumption to just below 10 million m³ for 2017 (shown in chart 23).

If actual consumption reaches the forecast levels then softwood consumption will exceed all previous years since 2008, suggesting that this market is continuing to recover. The sustained increase in consumption is likely to have been driven by the continued increase in housing starts, given that the UK Government has stated the need for a further 300,000 new homes a year this market is likely to experience continued growth.

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<https://www.ons.gov.uk/businessindustryandtrade/manufacturingandproductionindustry/datasets/ukmanufacturerssalesbyproductprodcom>

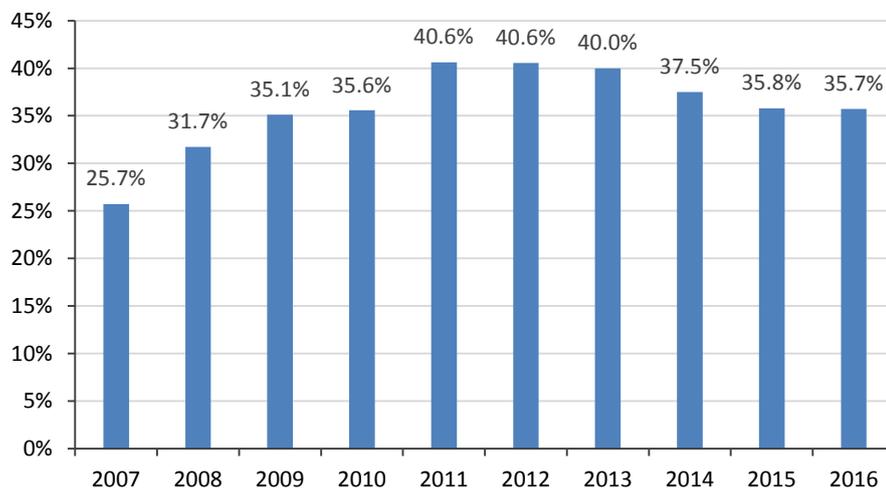
Chart 23: UK softwood consumption



Source: TTF; timbertrends

Whilst the construction industry plays a vital role in driving sawn softwood consumption and imports, domestic producers play a dominant role in the pallets, packaging, fencing and outdoor products markets. Pallet production increased in 2016 by 1.3% from 2015, with 47.9 million pallets manufactured, although production remains lower than the 2012 peak of 64.9 million pallets³⁴. The UK producer share of softwood consumption in 2016 remained at a similar level to 2015 (see chart 24).

Chart 24: UK producers share of softwood consumption, 2007-2016

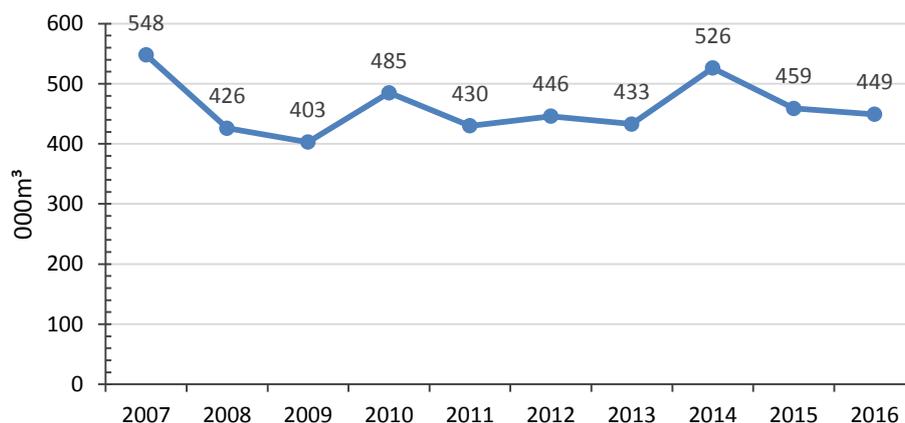


Source: Forestry Commission

4.7 Sawn hardwood

Unlike sawn softwood, which showed an increase in consumption in 2016, sawn hardwood consumption decreased by 2% to 0.45 million m³ (as shown in chart 25).

Chart 25: UK sawn hardwood consumption



Source: Forestry Commission

UK production and export volumes of hardwood continued to be relatively low; in 2016 production stood at 0.047 million m³ and exports at 0.025 million m³. Changes in consumption are therefore very much dominated by imports. There was an overall decrease in hardwood imports from 2015 to 2016 (down 1.9% to 0.427 million m³). Imports in tropical hardwood showed some increase from 2015 (up 11.7%), but remained below the level observed in previous years.

Illegal logging is a subject of great concern especially with regards to hardwood production. FLEGT (Forest Law Enforcement, Governance and Trade) plays a core role in aiming to reduce illegal logging by strengthening sustainable and legal forest management, improving governance and promoting trade in legally produced timber, with the Action Plan first established in 2003. FLEGT now has projects operating in Africa, Asia, Central and South America, and has been instrumental in setting up Voluntary Partnership Agreements (VPA), which are legally binding trade agreements between the EU and external timber-producing countries. By signing up to these agreements the EU can ensure that purchased timber products are legal sourced; it also helps timber producing countries by improving regulation and governance of the forest sector and enabling sales of these timber products within the EU⁵⁵.

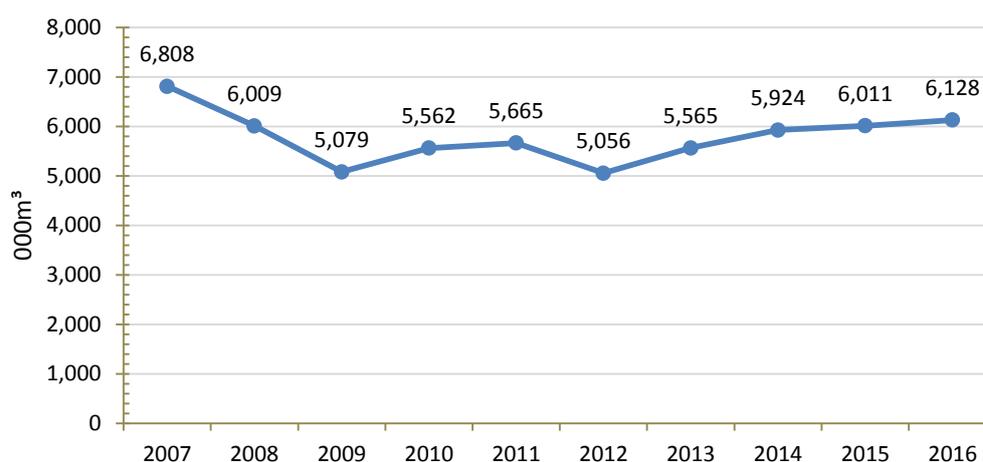
4.8 Wood-based panels

Particleboard (including OSB) and MDF are produced in the UK and imported, but all veneer sheets, plywood and other hardboards are imported.

UK consumption of panel products rose by 2% in 2016, compared to 2015, following a continual increase in consumption since 2012 (as shown in chart 26).

⁵⁵ <http://www.euflegt.efi.int/home>

Chart 26: UK Panel Products Consumption



Source: Forestry Commission

This increased consumption of panel products was not supported by UK production, which declined by 1.5% in 2016, whereas imports rose by 6.1%. Consumption of UK produced panel products, after accounting for exports and re-exports, was 2.718 million m³, a decrease of 2.7% from 2015. Total imported panel products in 2016 stood at 3.4 million m³. Production and imports of particleboard, including OSB, both rose in 2016 (by 12.2% for imports and 1.1% for UK production). UK imports of MDF also increased (by 9.1%), but UK production fell by 9.5%.

Exports of panel products from the UK rose by 10.2% in 2016 to 0.315 million m³, but remained lower than those in 2014 and previous years.

4.9 Pulp and paper

Imports of wood pulp declined in 2016, by 5.7%, to stand at 1.1 million tonnes. Current forecasts predict an increase in imports over 2017 and 2018, rising by approximately 2% each year⁵⁶.

UK consumption of paper and paperboard declined in 2016 by 3.6%, to stand at 8.86 million tonnes. UK production fell by 7.4% and imports also decreased, by 1.4%.

4.10 Innovative wood products

Cross laminated timber (CLT), parallel strand lumber (PSL), glued laminated timber (glulam), i-joists and prefabricated panelling systems are among the products contributing to growth in a wider range of wood construction products.

There have been a number of developments in recent years in the field of engineered wood products. The primary aim of many of these materials is to decrease on-site construction time, reduce the material to strength ratio and to give increased durability to non-durable timbers.

In the first two categories are products such as i-joists, CLT, glulam, PSL and prefabricated panelling systems. In the second category are products such as chemically modified wood e.g. acetylated Accoya and thermally modified wood products such as the British-grown, Jartek kiln-heated Brimstone wood range released in 2016.

⁵⁶ Forestry Commission, 2017

The first category of products are in direct competition with steel, concrete and sawn wood products however have an advantage in quicker build time, lower embodied energy and greater carbon saving. The rise in demand for these products is also driving manufacturing factory capacity in the UK.

There are a number of organisations within the UK promoting the use of innovative wood products. 'Wood for Good' ran a series of conferences in 2016 aiming to influence current thinking about the use of timber and timber products/systems, in order to achieve the ambitious housing targets set by UK and Scottish Governments⁵⁷.

Likewise competitions such as 'The Wood Awards' acts to promote the use of wood and innovative wood products within architecture and product design, many of the designs featured in this competition in recent years have incorporated innovative wood products in their designs⁵⁸. 'The Structural Timber Awards' also acts to demonstrate the growing use of engineered timber within the construction industry⁵⁹. Showcasing the highest quality work by such awards aims to encourage an even wider use of innovative wood products, both for commercial (reduced construction time, cost effective) and environmental benefit (low carbon, sustainable).

A report released in 2016 forecast the global engineered wood products market to grow at a compound annual growth rate of 26.5% up to 2020⁶⁰. Much of this development is in resin based glues for new products with an emphasis on a rising demand for more environmentally friendly flooring with better durability. This global trend forecast could well be reflected on a smaller scale in the UK.

4.11 Housing and construction products

There is a continual need for new homes within the UK, with Parliament stating a need for at least 300,000 homes a year to meet demand⁶¹. At present the demands for housing outstrip the current levels of supply.

One possible solution to meet existing demand is the use of modular buildings, which require less onsite construction time and provide an innovative, robust alternative to traditional construction. There is an EU/UK procurement regulation-compliant framework due to launch in 2018 that will enable local authorities easier access to necessary suppliers, without the need for individual tender processes⁶². Timber and timber products are commonly incorporated within this method of construction, which could lead to an increase in sales if modular building is adopted as a popular method of building to meet housing demands.

Many of the key construction industries in the UK have adopted modular building and offsite construction as means of providing necessary housing supplies. Legal and General Homes promotes the use of CLT homes, requiring less energy to build and heat, as well as proving quicker, cheaper

⁵⁷ <https://woodforgood.com/assets/Downloads/Education/Innovative%20Timber%20House.pdf>

⁵⁸ <http://woodawards.com/shortlist-2017/>

⁵⁹ <https://www.structuraltimberawards.co.uk/>

⁶⁰ http://www.researchandmarkets.com/research/p2tvc6/global_engineered

⁶¹ <https://publications.parliament.uk/pa/ld201617/ldselect/ldconaf/20/20.pdf>

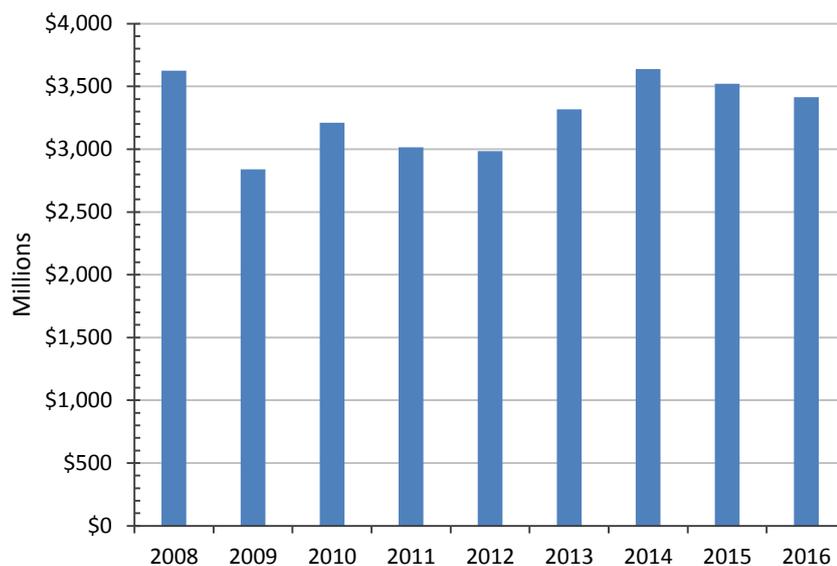
⁶² <http://www.psbj.co.uk/features/from-the-magazine/product-innovation/1276-espo-could-modular-housing-be-the-answer-to-our-housing-crisis>

and easier to build than other traditional methods⁶³. Willmott Dixon are also advocates of the use of offsite manufacturing, having delivered over 7,000 units to date, with projects of this nature programmed and constructed around 20-30% faster than traditional construction⁶⁴.

Offsite manufacturing is also set to play a large role in future infrastructure projects, with clients such as HS2 specifying the use of offsite construction methods⁶⁵.

Total UK manufacturer sales of builder's carpentry and joinery by value (since 2008) can be seen in chart 27. The large sales shown in 2008, compared to subsequent years, reflects the impact of the recession on the market.

Chart 27: Total UK manufacturer sales of builder's carpentry and joinery



Source: PRODCOM; 29 June 2017⁵⁴

In 2016, manufacturer sales of these products declined by 3% from 2015 to around £3.4 billion, following a decline the previous year from 2014 to 2015 of 3.2%. This decrease in sales could reflect the current state and confidence of Sterling.

⁶³ <http://www.legalandgeneral.com/modular/>

⁶⁴ <https://www.willmottdixon.co.uk/expertise/off-site-manufacturing>

⁶⁵ <http://www.offsitehub.co.uk>

5.0 UK economic indicators

(All Figures % unless otherwise indicated)

	2011	2012	2013	2014	2015	2016	2017
GDP growth	1.97	1.18	2.16	2.85	2.33	1.62	1.60 ²
Interest Rate (Base Rate at year end)	0.5	0.5	0.5	0.5	0.5	0.25	0.25 ⁶⁶
Consumer Price Index	4.5	2.8	2.6	1.5	0	1.32	2.9 ²
Unemployment	8.1	8	7.6	6.2	5.4	5.32	4.6 ²
UK Housebuilding Starts (000s)	138.5	125.4	149.9	169.9	177	151.9	164.6 ⁶⁷

²HM Treasury, Forecast for the UK Economy: A comparison of Independent Forecasts, August 2017

⁶⁶Bank of England revised interest rates on 03/08/2017

⁶⁷Trading Economics Forecasts

⁶⁶ <http://www.bankofengland.co.uk/boeapps/iadb/Repo.asp>

⁶⁷ <https://tradingeconomics.com/united-kingdom/housing-starts/forecast>