

UNECE TIMBER FORECAST – September 2016

UK Timber Market Statement

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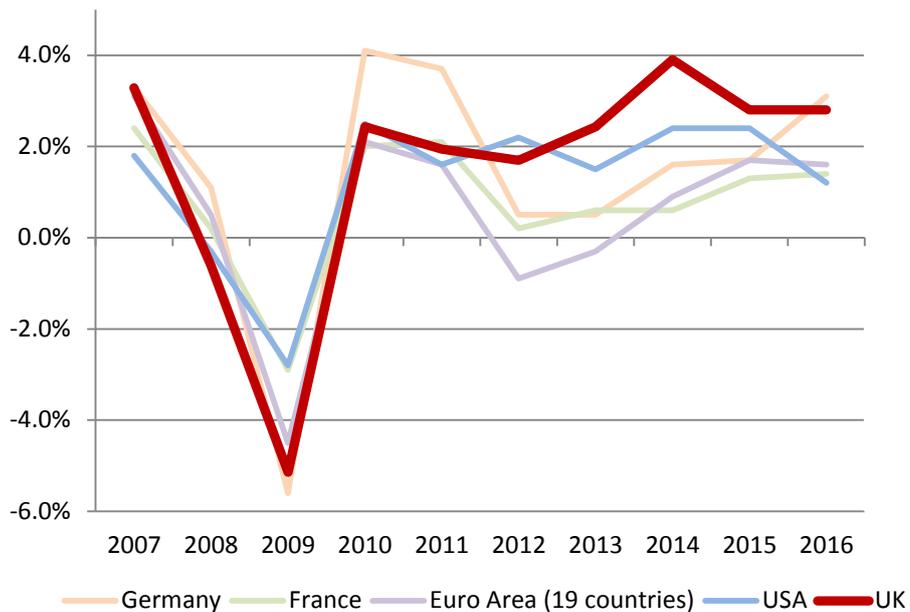
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1.0 General economic trends affecting forestry industries and timber market

1.1 Overview

In the year to Q2 2016 the UK economy was delivering solid, albeit below trend growth, coupled with record high employment and low unemployment rates. Chart 1 shows real growth of Gross Domestic Product (GDP) in the UK and other selected economies over the last nine years. The chart shows that in the first six months of 2016, the UK was the second fastest growing economy of those selected. However productivity growth has been consistently weak since 2008, which represents a drag on long term growth.

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



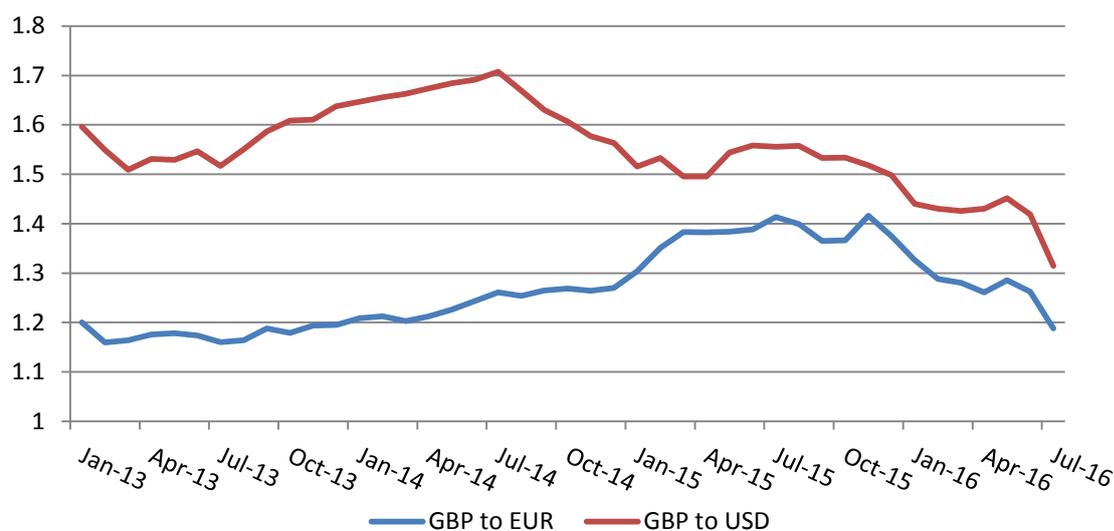
Source: World Bank, updated June 2016 (quarterly)

Following the United Kingdom's vote on 23 June 2016 to leave the European Union the Pound Sterling (GBP) has depreciated and the outlook for growth in the short to medium term has weakened markedly. Chart 2 shows the exchange rate of the Pound Sterling relative to the US dollar (USD) and the Euro (EUR) during 2013-2016. Whilst weaker Sterling may result in an increase in British exports, previous experience is not clear cut. A lower Sterling could reduce the UK trade gap but largely through reduced demand for imports, as the cost of imported goods increase.

The fall in Sterling is likely to push up the Consumer Price Index (CPI) inflation in the short term, hastening its return to the Bank of England's 2% target and likely causing it to rise above that target during 2017-2019, before the exchange rate effect dissipates thereafter.

Recent surveys of business activity, confidence and optimism suggest that the United Kingdom is likely to see little growth in GDP in the second half of 2016. The average forecast for UK GDP growth of 250 financial and economic forecasters surveyed by Consensus Economics has fallen to 1.6% for 2016 (down by 0.3 percentage points).

Chart 2: Exchange rate of GBP to EUR and USD, 2013-2016



Source: x-rates.com; updated 24th August 2016 (daily)

At its meeting on 3rd August 2016, the Bank of England's (BoE) Monetary Policy Committee (MPC) voted for a package of measures designed to provide additional support to growth and to achieve a sustainable return of inflation to the target. This package comprises: a cut in Bank Rate from 0.5% to 0.25%; a new Term Funding Scheme to encourage banks to pass on lower interest rates to borrowers; the purchase of up to £10 billion of UK corporate bonds; and an expansion of the asset purchase scheme, also known as quantitative easing, for UK government bonds of £60 billion, taking the total stock of these asset purchases to £435 billion. The last three elements will be financed by the issuance of central bank reserves.

As set out in its August Inflation Report¹, conditional on this package of measures, the Monetary Policy Committee expects that, by its three-year forecast horizon, unemployment will have begun to fall again and that much of the economy's spare capacity will have been re-absorbed, while inflation will be a little above the 2% target.

1.2 GDP Growth

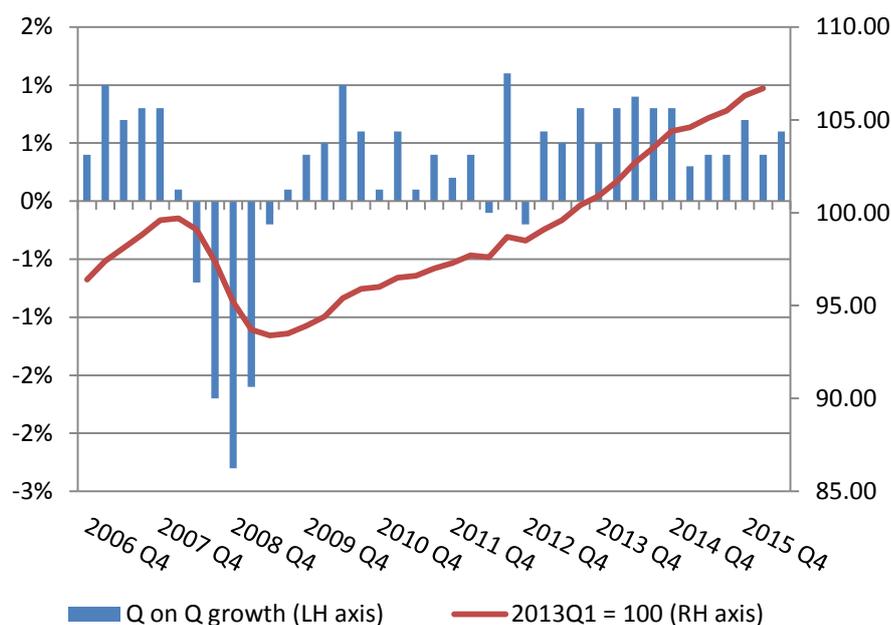
Change in GDP is the main indicator of economic growth. Up to Q2 2016, UK growth was solid, albeit below its pre-crisis levels. This continued the trend of stable but moderate GDP growth since 2013.

According to the Office for National Statistics (ONS) data, UK GDP was estimated to have increased by 0.6% in Q2 2016 and 0.4% in Q1 2016. GDP was 2.2% higher in Q2 2016 compared with the same quarter a year ago. In Q2 2016, GDP was estimated to be 7.7% higher than the pre-economic downturn peak of Q1 2008.

In recent years UK growth has been predominantly driven by services, with construction and manufacturing tending to make a weaker (or even negative) contribution. Growth in consumption has been relatively strong, but investment has been volatile and net trade has generally acted as a drag on growth.

¹ <http://www.bankofengland.co.uk/publications/Pages/inflationreport/2016/aug.aspx>

Chart 3: GDP growth by quarter, 2006-2016 (2013 prices, seasonally adjusted)



Source: Office for National Statistics (ONS) GDP; updated 30th June 2016 (quarterly)²

In July 2016 the IMF revised its forecasts of UK growth to 1.7% in 2016 (down by -0.2 percentage points) and 1.3% in 2017 (down by -0.9 percentage points)³. Some financial and economic forecasters are being more pessimistic. The average forecast for UK GDP growth of 250 financial and economic forecasters surveyed by Consensus Economics has fallen to 1.6% for 2016 (down by 0.3 percentage points) and 0.7% for 2017 (down by 1.4 percentage points).

In July 2016 the European Commission reviewed its forecast of UK growth and produced two scenarios⁴. In their ‘mild’ scenario UK GDP grows by 1.6% in 2016 and by 1.1% in 2017; in the ‘severe’ scenario, the forecasts for 2016 and 2017 are 1.3% and -0.3%. The ‘severe’ scenario incorporates a longer and more severe uncertainty shock, leading to a more prolonged period of reduced investment and consumption. Both scenarios assume a 15% depreciation of Sterling vis-à-vis the Euro.

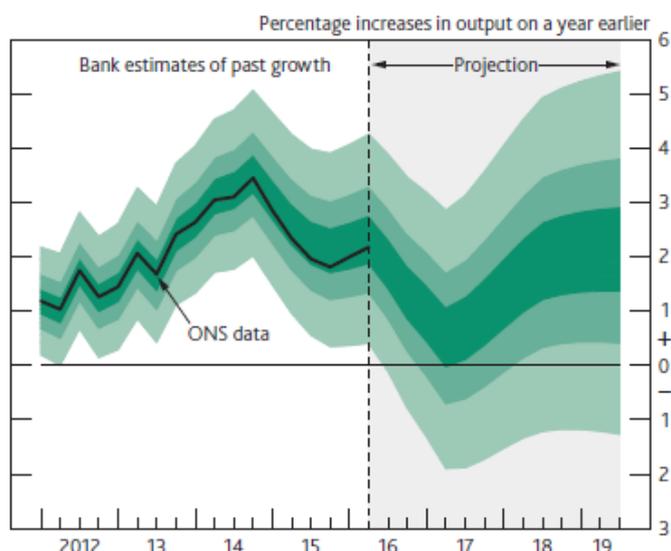
Chart 4 shows GDP projections for 2016-2019 as published by the Bank of England. It is evident from the chart that the bank expects UK GDP growth to decline to around 0-1% per year during 2016-2017 and then gradually come back to the long term trend of 2% per year.

² <https://www.ons.gov.uk/economy/grossdomesticproductgdp>

³ <https://www.imf.org/en/News/Articles/2016/07/18/18/11/NA07192016-IMF-Cuts-Global-Growth-Forecasts-on-Brexit-Warns-of-Risks-to-Outlook>

⁴ http://ec.europa.eu/economy_finance/publications/eeip/pdf/ip032_en.pdf

Chart 4: GDP 2016-2016, GDP projections 2016-201



Source: Bank of England Inflation Report; published August 2016 (quarterly)

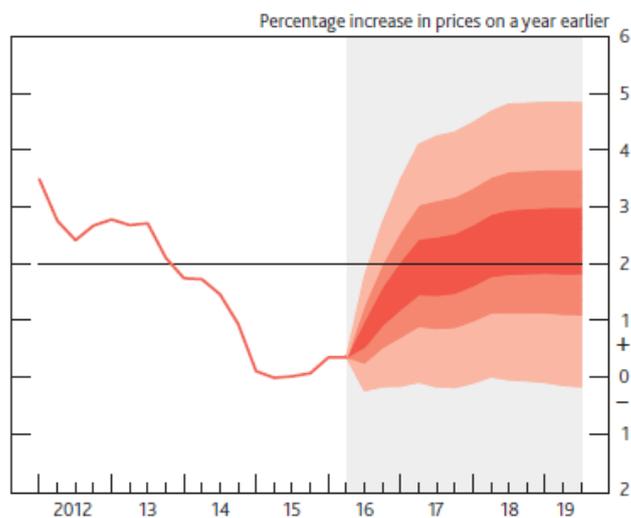
1.3 Inflation

The Consumer Price Index of inflation, which measures a 'typical' basket of household goods, stood at 0.6% in July 2016, up by 0.1 percentage points from the month before and 0.5 percentage points from the previous year. The rates for 2016 to date are relatively low but are generally above those experienced in 2015. 2015 was a year of historically low inflation, with the rate being at or around zero for much of the year.

The main contributors to the increase were rising prices for motor fuels, alcoholic beverages and accommodation services, and a smaller fall in food prices than a year ago. The upward pressures were partially offset by falls in social housing rent, and prices for certain games and toys.

Chart 5 below shows the Bank of England inflation forecast until 2019. The Monetary Policy Committee's best collective judgement is that, conditional on the market path for interest rates and its package of additional stimulus measures introduced in August 2016, inflation is likely to return to the 2% target in late 2017 and then rise somewhat above it in 2018-2019.

Chart 5: CPI 2012-2016, CPI projections 2016-2019



Source: Bank of England Inflation Report; published August 2016 (quarterly)

1.4 Employment

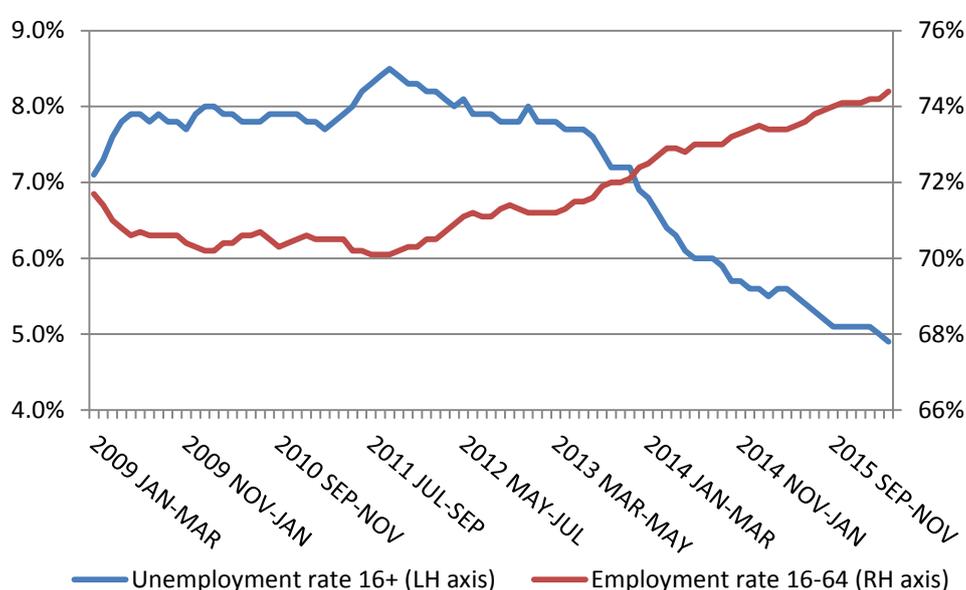
The year to Q2 2016 delivered solid, albeit below trend growth, coupled with record employment and low unemployment rates.

The employment rate was 74.5% in the three months to June 2016 – a record high since the ONS started to collect the data in 1971. The employment level stood at 31.75 million, 45,000 more than the previous three months and 606,000 more than the previous year.

The unemployment rate fell to 4.9% in the three months to June 2016 – a record low since 2005. The unemployment level stood at 1.64 million, 51,000 less than the previous three months and 207,000 less than the previous year.

Chart 6 below shows the 3 monthly employment and unemployment rates in the UK from Jan 2009-May 2016.

Chart 6: Employment and unemployment rates 2009-2016



Source: Office for National Statistics (ONS) Labour Market; updated 17th August 2016 (monthly)⁵

While most of the recent growth in employment has been from full time workers, overall since 2008 there has been a small shift towards more part time work and self-employment.

In contrast growth in productivity has been consistently weak since 2008. Productivity has increased by 1.9% since 2013. Productivity growth, a key determinant of long term growth, has been generally weak compared to pre-2008 trends. However, average weekly earnings have begun growing steadily at around 2% since 2015, coupled with near zero inflation this means that real wages grew by 1.7% in the year to 2016 Q1.

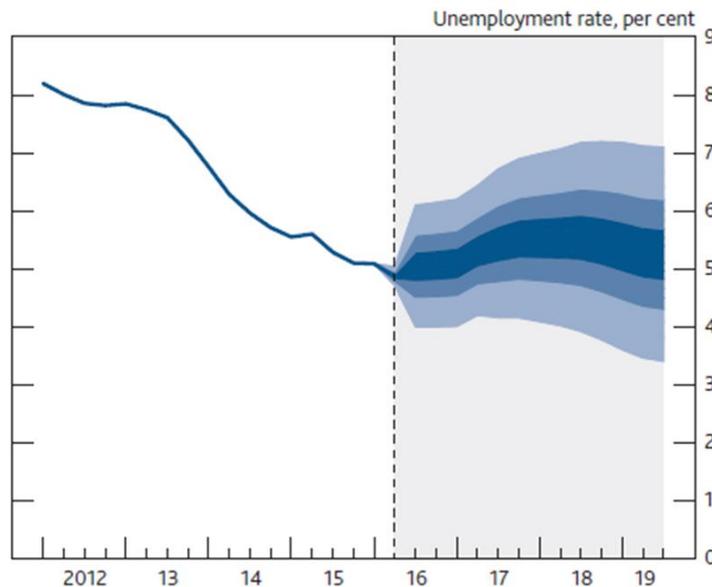
A REC/KPMG report on jobs⁶ (August 2016) showed that permanent staff appointments fell in July at the steepest rate since May 2009. Demand for staff continued to rise, but at the slowest pace since May 2013.

⁵<http://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/uklabourmarket/latest>

⁶<https://www.rec.uk.com/news-and-policy/research/report-on-jobs>

Chart 7 below shows the Bank of England unemployment projections until 2019. As can be seen, it is expected that the unemployment rate will remain relatively stable during 2016 and continue at around 5% in the next few years.

Chart 7: Unemployment 2012-2016, unemployment projections 2016-2019



Source: Bank of England Inflation Report; published August 2016 (quarterly)

2.0 Policy developments potentially affecting the timber products trade

2.1 Forestry policy in the United Kingdom

Forest ownership in the UK remains fairly stable as of March 2016 with roughly 27% state owned and 73% privately owned⁷.

Responsibility for forestry in the UK is divided between various parts of the government. Certain functions, such as international forestry, are reserved for the UK Government whilst further functions (known as cross-border functions) are currently done on a UK-wide basis by agreement. All the countries co-operate in commissioning forest 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. 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. Further changes in forestry governance are in progress as the Scottish Government intends to bring forestry entirely within its remit.

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

Both the UK Government and 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 (2011). This is currently being updated through a light-touch review with a view to having an e-publication in place by the end of the financial year (April 2017).

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 extensive areas of sanitation felling have been necessary. Work aimed at quantifying the risks associated with 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 assess the risks and undertake contingency planning.

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

2.2 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 be ensured to originate from areas free from *Ips amitinus*, *Ips typographus*, *Dendroctonus micans*, *Ips sexdentatus*, *Ips cembrae* and *Ips duplicatus*.

The Forestry Commission keeps an updated list of restrictions and conditions on timber and wood imports and exports on their website⁸.

Tree diseases

Phytophthora ramorum infection of Japanese larch (*Larix kaempferi*) trees continues to be the major plant health issue affecting the market in the UK. *P. ramorum* to a lesser extent also infects European larch (*Larix decidua*) and hybrid larch (*Larix x eurolepis*). The National Forest Inventory report on the 50 Year Forecast of Softwood Availability gives a total of 126 thousand hectares in Great Britain for all larches at March 2012. *P. ramorum* is a fungus-like pathogen that kills many of the trees that it infects. It was first found on Japanese larch trees in south west England in 2009, and further outbreaks were identified in south Wales, the Peak District, Lancashire, Cumbria, Northern Ireland and south and west Scotland in 2010, with widespread infection in all ages of Japanese larch. The number of new confirmed findings of *P. ramorum* in larch during 2015 remained at the similar

⁸ <http://www.forestry.gov.uk/planthealth>

low level as detected in 2014. The indications are that this is a second year of respite most likely to be due to the weather patterns experienced last year.

2.3 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 2016 a preliminary NFI report on the changes in canopy cover of British woodlands between 2006 and 2015 was published. This firmly establishes a long-term woodland canopy cover monitoring process based on the use of satellite imagery and fieldwork. Through this temporary changes in canopy cover arising from clearfelling and restocking, alongside permanent changes in canopy cover that lead to woodland loss and gain can be identified and quantified. This monitoring capability enables assessment of the levels of habitat restoration and increased broadleaved cover arising from the implementation of the UK Forestry Standard, but further reports will be required to assess the full impact of this. The report highlights the continuing need for further evidence on canopy cover change over time, from which all the evolving benefits and consequences of woodland management can be assessed alongside the impacts of nature. Further details are available at www.forestry.gov.uk/inventory

2.4 Carbon reduction initiatives

Private sector investment in woodland creation is continuing to increase via the Woodland Carbon Code. 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. Documentation is revised annually: The following developments have occurred since the last Market Statement:

- The 'monitoring and verification' process has been finalised. This is where projects are checked for the carbon they have sequestered. The first two projects have now completed this process.
- The first 'small woods' group of projects under 5 hectares has been successfully validated (initial project check).

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

2.5 Carbon markets in the forest sector

The Woodland Carbon Code has generated much interest among landowners and investors alike. As of 30 June 2016, 238 projects were registered with the Code; together they will create almost 16,000 hectares of new woodland and are predicted to sequester over 5.8 million tonnes of carbon dioxide equivalent over their lifetime (up to 100 years). Of these projects, over half (125) are now validated (checked by an independent certification body), representing 30% of the area and 40% of the predicted carbon sequestration.

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. The first two projects have been monitored and carbon sequestration to date verified, meaning that the first few verified 'Woodland Carbon Units' are now available. We will soon start to understand the market for 'sequestered carbon' rather than carbon purchased in advance.

The Forest Trends initiative, Ecosystem Marketplace, is set to publish their update report 'State of the Forest Carbon Markets 2015' in November 2016 which will contain further developments in this area¹⁰.

2.6 UK grown timber initiatives

Since 2013 the not-for-profit, government backed 'Grown in Britain' campaign has helped develop and promote the case for increasing British grown timber. The programme combines efforts to increase private sector forest/woodland creation and management; grow the British timber processing sector and encourage the brand promotion of 'Grown in Britain' products in the eyes of retailers and consumers in the UK. The latter aspect has been helped by the creation of the 'Grown in Britain' licensing and labelling scheme which proves assurances that timber has been grown in the UK to standards of legality and sustainability.

In September 2016 the Grown in Britain Woodstock project published a research report¹¹ suggesting that UK grown hardwood sawlog supply has the potential to double to 2050 with moderate investment in processing capacity. It recommends focusing on the key species of: ash, beech, oak, sweet chestnut and sycamore. There is a demand for sawn hardwood timber in the UK market, however currently less than 10% is from UK sources.

3.0 Market Drivers

3.1 Construction, manufacturing and distributive trades

With reasonable levels of GDP growth sustained from 2014 into 2015, the recovery from the 2011/12 economic dip was sustained into Q1 of 2016. That said, the rate of growth in 2015 was less pronounced than 2014 and suggests a potential economic slowdown.

Reflecting this decrease in growth rate, UK manufacturing contracted by 0.2% for the year in 2015, compared to a (revised) increase of 2.9% in 2014.

In contrast, total construction output grew by 4.2% in 2015 from 2014 compared to a (revised) increase of 8.1% from 2013 to 2014.

Housing starts in the UK were around 4.2% higher in 2015 compared to 2014, a significant drop in growth rate since 2014 which saw a 13.3% increase from 2013. The volume of repair, maintenance and improvement (RMI) work remained similar to 2014 levels for public and private housing which increased by only 0.8% and 1.9% respectively. This contrasts to the rise in 2014 over 2013 which was 1.6% for public and 8.2% for private housing RMI.

Public housing saw a steep decline in output (-16.9%), whilst private sector housing saw growth in 2015 (+8.3%). These dynamics were also reflected in housing starts figures.

⁹ www.forestry.gov.uk/carboncode

¹⁰ <http://www.ecosystemmarketplace.com/publications/>

¹¹ <http://www.growninbritain.org/2915-2/>

The ONS statistics provide data on the value and volume of sales output by manufacturers of wooden pallets and this was reported to have increased by 1.8% following a (revised) fall of 23.5% in 2014.

Production data from surveys of softwood sawmills in the UK suggests the product market breakdown has remained fairly stable over the past 10 years. In 2015, construction products represented 26% of output, fencing 38%, packaging 30%, other including furniture was 6%. These percentages were similar to the previous year.

In summary 2015 was a mixed year of relative growth and contraction in certain markets affecting timber with this mix also reflected in first half data for 2016.

3.1.1 Construction

Since the majority of UK timber is for end-use products in construction applications, the timber market is intrinsically linked to the fortunes of the construction sector, particularly house-building.

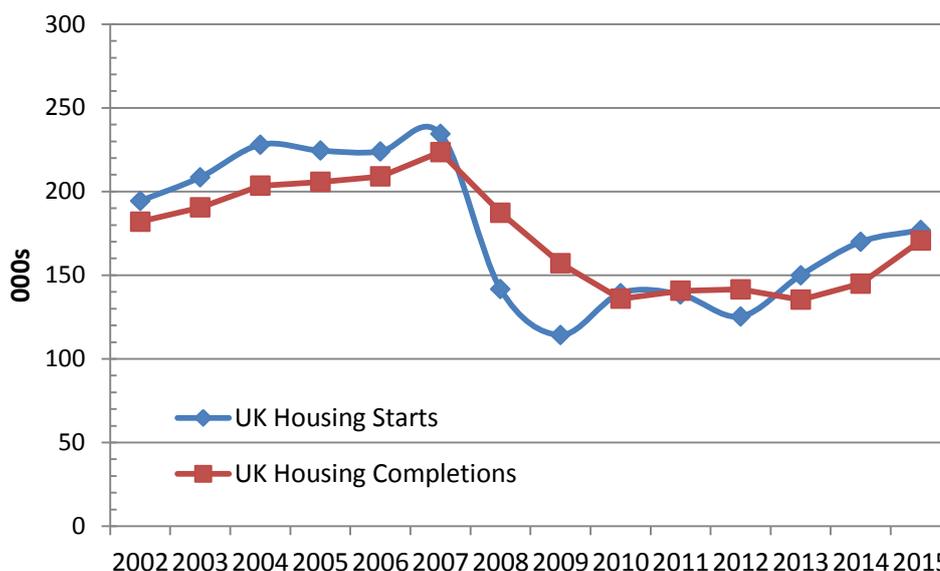
In contrast to 2014, in which growth in construction by value was dominated by housing output, it appears that in 2015, the highest percentage change in construction output growth in 2015 was in infrastructure projects. Public Housing output in fact saw the first contraction since 2012. Overall, total construction output for 2015 grew by only 4.2% compared to 2014's growth of 8.1%.

Housing starts rose again in 2015, following a trend of growth since 2012 after dips in 2009 and 2012, reaching the highest point since before the recession in 2008. The rate of growth has however slowed from the past two years. 2015 saw a 4.2% increase in housing starts to 176,960, however 2014 saw a more dramatic 13.3% growth and 2013 a 19.6% increase. Similarly the rate of increase in value of total housing output slowed from 25.0% in 2014 to just over 3.2% in 2015.

Individual breakdowns by tenure for housing starts are available for each country except Wales which stopped providing this data in 2011. This means that a full UK breakdown is not possible, but one with the exception of Wales can be calculated. Since Wales's housing starts only represent around 4% of the UK figures, any wider trends can still be inferred.

Total UK housing starts and completions can be seen in chart 8 below.

Chart 8: UK housing starts and completions, 2002 - 2015



Source: Department of Communities and Local Government (DCLG); updated 25 August 2016¹²

UK housing completions roughly mirror UK housing starts with a lag of around 1 year.

Data for the first half of 2016 is only available for England but with England accounting for around 80% (82.5% in 2015) of new home building in the UK, this is a good indication of performance generally in the UK.

Housing starts in England in the first half of 2016 were slightly lower (-2.3%) than in the first half of 2015.

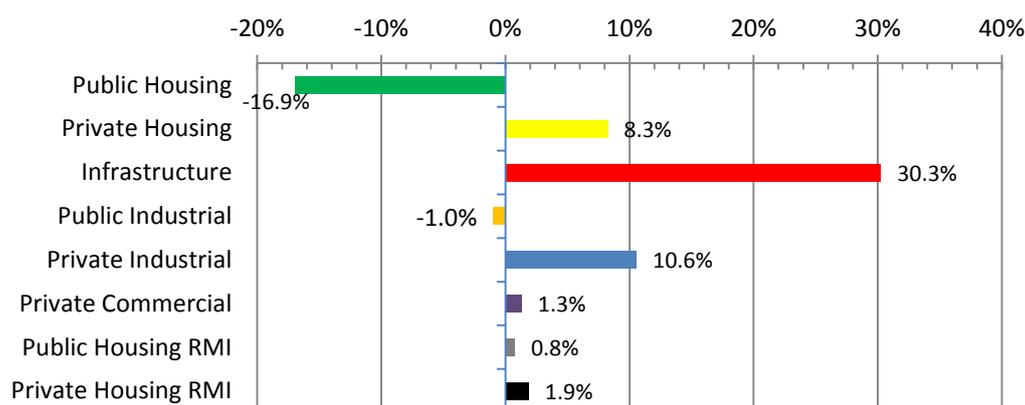
The moderate growth in construction and housing in 2015 and the first half of 2016 falls in line with the general UK trend of an economic slow-down.

The National Affordable Homes Programme (NAHP) closed in 2015. This scheme aimed to provide funding for homes with affordable rent and mortgages and ran from 2008. The decrease in public sector housing output growth may be due to the closure of these schemes in early 2015.

The growth in infrastructure construction is most likely due to an increase in energy and transport related projects both of which are unlikely to use much timber. The strength of private versus public construction is also reflected in industrial construction, where private industrial construction grew by 10.6% and public industrial construction contracted by 1%. Output percentage changes from 2014 to 2015 can be seen in chart 9.

¹² <https://www.gov.uk/government/statistical-data-sets/live-tables-on-house-building>

Chart 9: Construction sector output, 2014/2015 @ 2013 constant prices

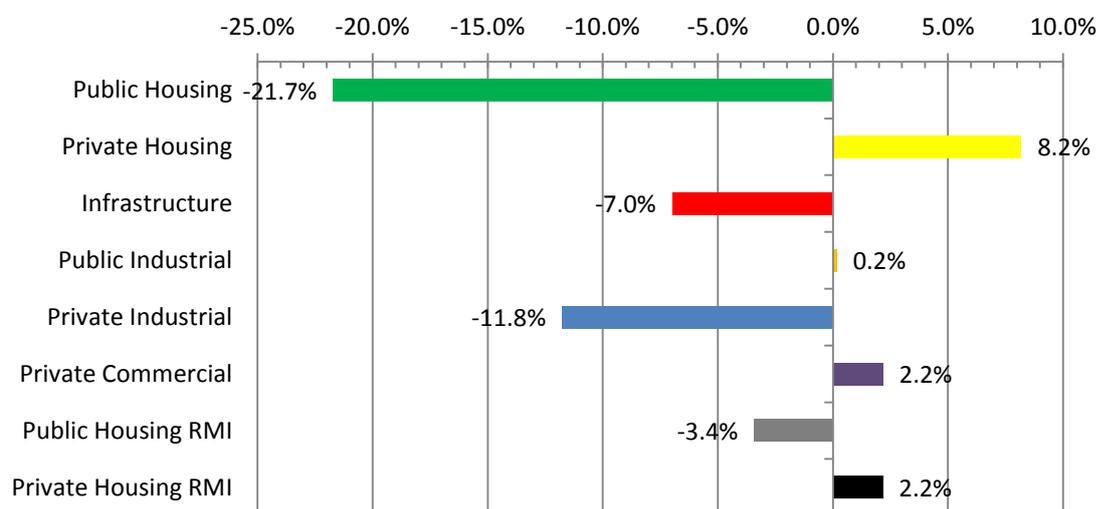


Source: Office for National Statistics (ONS) Output in the Construction Industry; 12 August 2016¹³

There was a general consensus that UK construction and infrastructure reached a recession in the first half of 2016 in line with the general weakening output and economic situation. There was sustained contraction in the sector in the first two quarters of the year which contributed to the overall output being -0.6% smaller than the same time in 2015. This is not on track with the CPA's spring estimates of 3% growth in construction output for 2016. Their summer forecast however, predicts more modest growth of 0.4% for 2016.

In comparison to Q1 and Q2 of 2015, construction saw negative growth in the Public Housing (-21.7%), Infrastructure (-7.0%) and Private Industrial (-11.8%) sectors. Private housing output maintained good performance levels of 8.2%.

Chart 10: Construction sector output, 1st Half 2016/ 1st Half 2015 @ 2013 constant prices



Source: Office for National Statistics (ONS)

The construction industry faced its sharpest downturn for 7 years in June/July 2016 after sliding during the first two quarters. The Markit/CIPS UK Construction Purchasing Managers' Index which measures construction sector confidence was slightly down to 45.9 in July from 46.0 in June¹⁴. This

¹³ <https://www.ons.gov.uk/businessindustryandtrade/constructionindustry/datasets/outputintheconstructionindustry>

¹⁴ <http://www.cips.org/en/supply-management/news/2016/august/uk-construction-contracts-post-brexit/>

follows highs of around 60 in 2015 and 64 in 2014. Results below 50 generally suggest a contraction in the sector and this is the lowest point since June 2009, however subsequently this index has risen.

Timber fits into the construction product category of 'light side' products. In their July 16 state of trade survey¹⁵, the Construction Products Association (CPA) reported that 38% of light side firms reported sales rose in Q2 of 2016, the thirteenth quarter of growth. In their spring forecast they predicted an expected decline in sales which would produce the first negative balance in 6 years.

In July 2016 the Department for Business, Energy and Industrial Strategy reported that the construction material price index fell 0.5% in a year and among the materials reporting the largest decrease in price was imported plywood (-11.6%)¹⁶.

Forecast

The CPA's delayed summer forecast, published in September, predicts a rise of 0.4% in construction output in 2016 and a fall by 0.6% in 2017¹⁷.

Experian, the global information services group, have downgraded their summer construction growth forecasts for the second half of 2016 from 2% to 0.3%¹⁸. They have also downgraded their growth figures for 2017 from 2.9% to 1.7%. These forecasts were formulated in July and likely reflect a global economic stagnation. The Bank of England cut national growth forecasts in August for 2017 from a predicted 2.3% in May to 0.8% in August. Figures for 2016 remain at 2%.

It is expected that growth in the next 18 months will slow as many firms will be adopting a policy of caution in their spending given the current economic uncertainty. The Bank of England's August fiscal stimulus package hopes to stimulate more private sector spending on construction as the government attempts to decrease public expenditure and increase private borrowing.

The National Affordable Housing Programme (NAHP) scheme is set to be replaced by the new Shared ownership & Affordable Homes Programme which will run from April 2016 – 2021¹⁹. It aims to make £4.7 billion of capital grants available in order to deliver at least:

- 135,000 homes for 'help to buy': shared ownership
- 10,000 homes for 'rent to buy'
- 8,000 homes for specialised housing

There will also be a separate programme for London delivered by the Greater London Authority.

¹⁵ <http://www.constructionproducts.org.uk/publications/economics/construction-trade-survey-quarterly/construction-trade-survey-2016-q2/>

¹⁶ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/542069/15-P125t_-_Construction_Building_Materials_-_Commentary_July_2016.pdf

¹⁷ <http://www.constructionproducts.org.uk/publications/economics/construction-industry-scenarios-summer-edition-2016/construction-industry-scenarios-summer-2016/>

¹⁸ <http://www.building.co.uk/news/construction-growth-prospects-downgraded-again-by-experian/5082605.article#>

¹⁹ <https://www.gov.uk/government/collections/shared-ownership-and-affordable-homes-programme-2016-to-2021-guidance>

Green building initiatives/ “Built with wood” incentives:

The Department for Communities and Local Government (DCLG) figures from August 2016 project an increase in households of 210,000 a year up to 2039 giving a total rise of 5.3 million²⁰. Timber frame construction and the use of engineered timber construction materials including i-joists, CLT etc. typically lead to shorter construction periods and involve less time for on-site labour compared to traditional building types. This frees up labour hours for skilled tradesmen and also builds the capacity of timber product factories in the UK. This chronic demand and the rapid response needed may require increased use of engineered timber products.

The Structural Timber Association has predicted the timber frame market to grow and account for 27% of new housing by 2017 in a report published in November 2015²¹. The Communities and Local Government (CLG) Committee has also launched an inquiry into the capacity of the house-building industry to meet demand for new homes which hopes to consider innovative ways to overcome constraints in the industry such as long on-site builds.

A report from MTW Research published in early 2015 using data from 80% of the timber frame market in the UK has found that the sector is growing faster than the UK economy²². This is strengthening sector profitability due to high house building and commercial construction demand. A slight slow down is predicted in 2016, but 2017 and beyond has a positive forecast at the time of publication. Sales growth in 2020 was predicted to reach 30%. The growth in the markets for engineered wood products and modern methods of construction (MMC) products is leading this confident projection in the timber framing and construction sector. The benefits of these materials, being comparably lower energy intensive and emission producing in their manufacture and possessing greater thermal efficiency in their use, is helping to support their specification in the timber frame market. This is supported by schemes such as Building Research Establishment Environmental Assessment Method (BREEAM) which has been in place since 1990.

Since the late 1980’s the ‘Wood for Good’ promotion campaign has been advocating for the increased use of timber for construction in the UK. Throughout 2016 they aim to engage with key stakeholders in the construction industry to advocate for the increased use of timber. They have also highlighted the Housing Development Funds release of £5bn of lower interest loans in 2015 to support custom builds which may increase the take up of timber construction products.

The UK government’s Timber Procurement Policy (TPP) stipulates that all public sector departments, agencies and associated bodies must procure legal and sustainable timber. From 2004 up until 31st March 2016, the Central Point of Expertise on Timber (CPET) existed as a sub-contracted body financed by DEFRA to provide advice and support on the TPP and the sale and purchase of sustainable wood fuel under the UK Timber Standard for Heat and Electricity. Funding was cut earlier this year; however the TPP remains in place. In light of this, the Timber Trade Federation (TTF) is developing a Royal Institute of British Architects (RIBA) accredited training module on legal and sustainable timber procurement.

In 2016, the Forestry Commission released a research report into the sourcing and specifying of sustainable construction timber²³. This focused on technical aspects of sourcing, specifying and drying local timber as well as introducing the low carbon benefits of timber and various legality and sustainability standards including EUTR, FSC, PEFC and TPP.

²⁰ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/536702/Household_Projections_-_2014_-_2039.pdf

²¹ <http://www.structuraltimber.co.uk/information-centre/information-centre/downloads/general-information/>

²² <http://www.marketresearchreports.co.uk/Timber-Frame-Market-2016/Timber-Frame-Market-Size.htm>

²³ <http://www.forestryscotland.com/media/319379/sustainable%20construction%20timber.pdf>

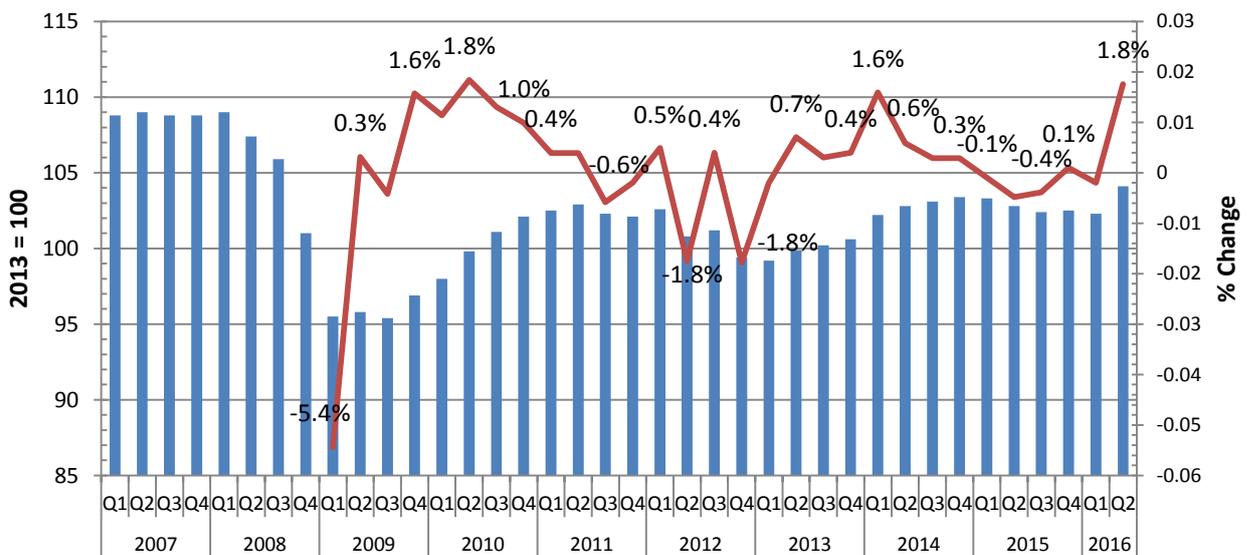
3.1.2 Manufacturing and distributive trades

UK manufacturing output contracted by 0.2% for the year in 2015, compared to a rise of 2.9% in 2014.

After the modest recovery in manufacturing output in 2013/14 following the 'mini-recession' of 2011/12, output for 2015 plateaued. Despite this, there was a sharp rise of 1.8% in manufacturing output in Q2 2016 to a level not seen since 2008. This increase fit with a wider growth trend in UK production in Q2 2016.

The growth in the CC sector (Wood, paper and printing) was 2.5% on June 2016 vs June 2015, and up 2% in Q2 from Q1 of 2016.

Chart 11: Index of UK manufacturing, Q1 2007 to Q2 2016



Source: Office for National Statistics (ONS) manufacturing statistics; 9 August 2016²⁴

Forecast:

The recent decline in the value of the GBP Sterling may lead to an increase in UK exports which could stimulate the manufacturing and distributive sector. However the moderate risk of a UK recession and greater importance of the domestic and import market to UK manufacturing means it is more likely that demand for all goods including wood products will decline.

Wooden pallets and packaging

Growth in manufacturing and distributive trades has traditionally translated into improved performance in the wooden pallets and packaging industry, a significant market for UK timber.

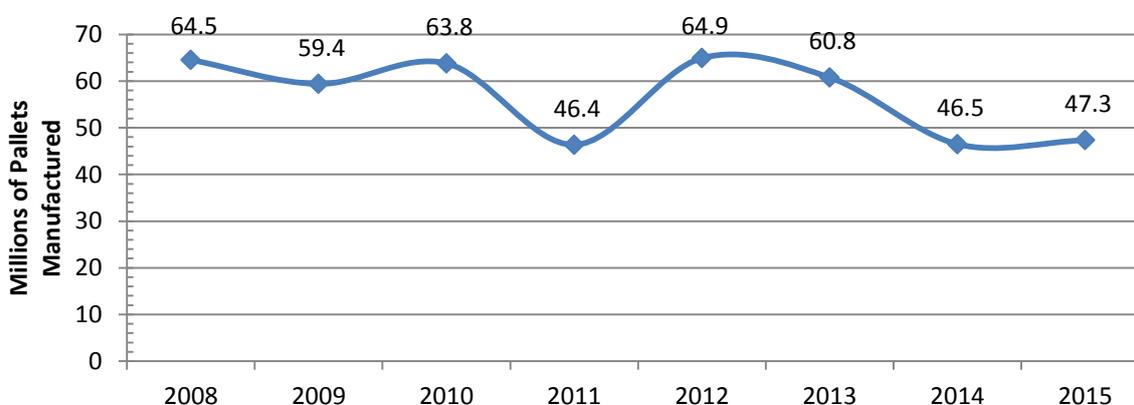
From analysis of the PRODCOM 2016 publication²⁵ of the sales volume figures for 2015 and prior, there appears to have been significant revisions in the data from 2013 onwards. This is most likely due to the results of The Wood Packaging Study conducted for TIMCON and the Forestry Commission, which looked into creating a methodology for obtaining more realistic production estimates. According to this study, since 2008, pallet repairs have been more common than

²⁴ <https://www.ons.gov.uk/economy/economicoutputandproductivity/output/timeseries/k22a/diop>

²⁵ <http://www.ons.gov.uk/businessindustryandtrade/manufacturingandproductionindustry/datasets/ukmanufaturerssalesbyproductprodcom>

previously imagined as companies sought to reduce purchasing costs, leading to a reduction in demand for wood and production of new pallets.

Chart 12: Wooden pallet sales in the UK



Source: PRODCOM

Figures for 2015 show that UK pallet sales stabilised/marginally increased following the downward trend since the 2012 peak. This may reflect either an overall increase in manufactured and transported goods and/or potentially a decrease in the use of refurbished and recycled pallets. According to this data, sales increased by 1.8% in 2015 compared to 2014. This follows a 23.5% decrease from 2013 to 2014.

UK production of packaging related paper and paperboard materials grew to 1.894 million tonnes in 2015 (+5.2% from 2014). Packaging product output from major UK sawmills using softwood was around 30% in 2015, a relatively stable percentage for the last few years.

3.2 Energy markets

Key facts for 2015 and Q1 2016:

- Total final energy consumption in the UK was 1.9% higher in 2015 from 2014. On a seasonal and temperature corrected basis this rise was only 0.3%²⁶.
- The rise in consumption was primarily due to increased transport demand arising from lower petroleum prices resulting from a major slump in global oil prices since late 2014. Final domestic consumption fell by 0.4% on a seasonal adjusted basis.
- Low carbon electricity's share of generation increased from 37.9% in 2014 to 45.5% in 2015 due to increases in nuclear utilisation and renewables capacity.
- Renewable electricity generation was 83.3 TWh in 2015, an increase of 28.9% from 2014. Bioenergy was up by 27.8%. Bioenergy and waste generated energy consumption rose by 19.2% due to higher generation.
- Consumption of coal fell by 23.0% to a record low and consumption of oil and gas rose by 1.4% and 0.6% respectively.
- Total renewable energy consumption, as measured by the 2009 EU Renewables Directive, accounted for 8.3% of energy consumption in 2015 up from 7.1% in 2014²⁷.
- Final energy consumption in Q1 2016 was 0.4% lower than Q1 2015. Domestic consumption fell 3.4%, industrial by 6% and other final users by 1.2%, whilst transport continued to rise by 4.3%.

²⁶https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/513244/Press_Notice_March_2016.pdf

²⁷ <https://www.gov.uk/government/statistics/energy-trends-june-2016>

- Coal's share of generation continues to decrease to 15.8%, a record low, whilst the share of gas rose.
- Renewables' share of electricity generation increased to 25.1% compared to 22.8% of Q1 2015 due to increased capacity.

With haulage and transport a key aspect of the timber trade, the decrease in fuel prices is particularly relevant as this will pass on savings in the transport of goods.

Since 2014, UK energy production has been increasing with a small dip in growth rate in Q1 2016.

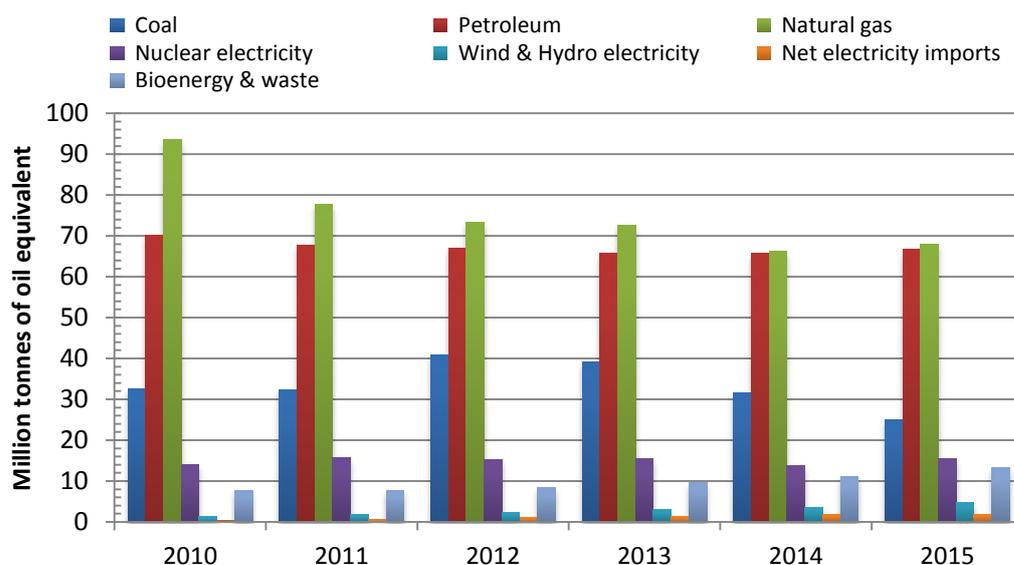
In 2015, 6% of renewable energy generation was for transport, 73% for electricity and 21% for heat²⁸.

In 2015, energy consumption by final user was 39.9% for transport, 28.8% for domestic, 17.2% for industry and 14.1% for other unspecified²⁹.

Coal is experiencing a steady decrease in consumption from a 2012 peak. Petroleum experienced a small increase over the last year in part probably due to cheaper prices. Natural gas experienced a small increase in 2015.

The changes in consumption of energy by fuel type over the last 5 years can be seen in Chart 13.

Chart 13: Inland consumption of primary fuels and equivalents for energy use, 2010-2015



Source: Department of Energy and Climate Change (DECC) (now Department for Business, Energy and Industrial Strategy)³⁰

Consumption of natural gas has shown an overall decrease with the exception of 2015 when it rose by 2.7% and coal consumption continued to decrease from a 2012 peak, falling by 20.7% from 2014.

Petroleum consumption increased in 2015 probably in part owing to cheaper prices. Renewable energy is experiencing the strongest increases with Wind & Hydro and Bioenergy & waste

²⁸https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/532963/Renewable_energy_in_2015.pdf

²⁹<http://visual.ons.gov.uk/uk-perspectives-2016-energy-and-emissions-in-the-uk/>

³⁰https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/541324/DUKES_2016_INT_ERNET_FINAL.pdf

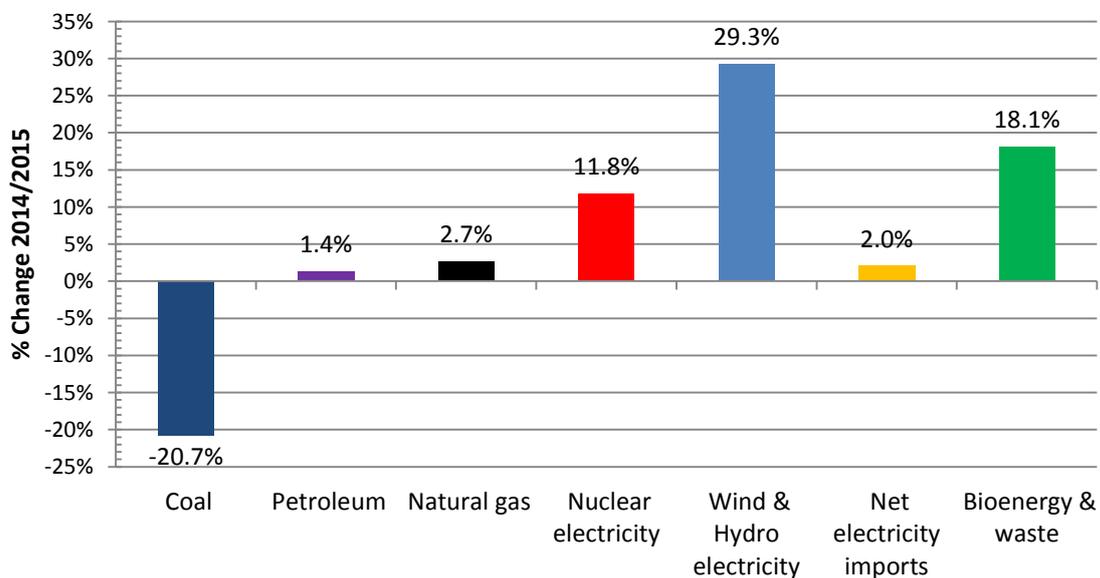
experiencing consistent rises over the past 5 years as they replace fuels like natural gas and coal. Particularly relevant to the wood products sector is the rise in the use of wood briquettes and pellets in large electricity power stations that were formerly reliant on coal. In the last few years they have also been increasingly used in domestic and industrial heat or combined heat and power (CHP) technologies subsidised by the domestic and non-domestic renewables heat incentive (DRHI and NDRHI) and the Renewables Obligation (RO) schemes.

The increase in capacity from Biomass in 2015 was also in part due to the conversion of a third unit at Drax power station to high co-firing capacity (85-100%) biomass.

Petroleum and natural gas continue to account for around two thirds of total energy consumption with natural gas having seen a fall in its share of consumption from 43% in 2010 to 35% in 2015.

Chart 14 shows the overall change in consumption by primary fuel type from 2014.

Chart 14: Percentage change in use of primary fuels for energy consumption 2014/2015



Source: DECC (now Department for Business, Energy and Industrial Strategy)

The share of bioenergy & waste (which will include wood pellets and briquettes) has risen from 5.8% in 2014 to 6.8% 2015.

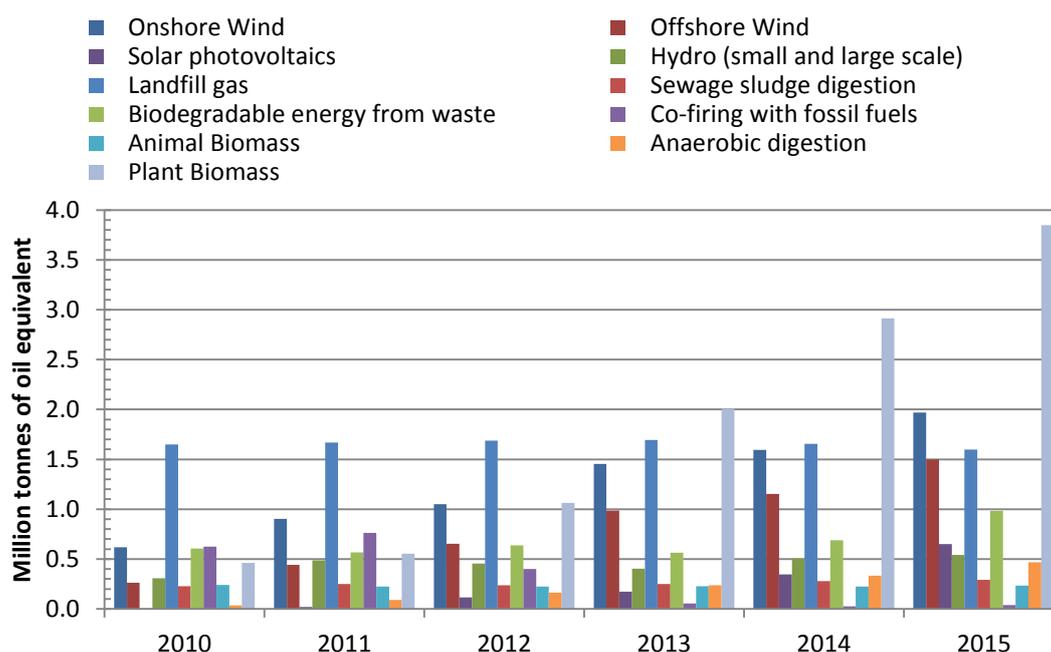
Nuclear energy, which was formerly experiencing a decline in energy consumption, in 2015 experienced a substantial increase of 11.8% compared to 2014.

With the rise in total energy consumption in 2015, total electricity supplied to all sectors was higher by 0.2% on 2014.

Coal is no longer the largest fuel used for generating electricity, having reduced by 24.3% since 2014, and has now been overtaken by gas. Conversely generation by renewables rose by 28.9%. This is due to significant increases in solar, energy from waste, plant biomass and co-firing plant biomass and fossil fuel capacity and generation.

This can be seen in the breakdown of renewable electricity generation by technology type in chart 15.

Chart 15: Renewable sources used to generate electricity, 2010 - 2015



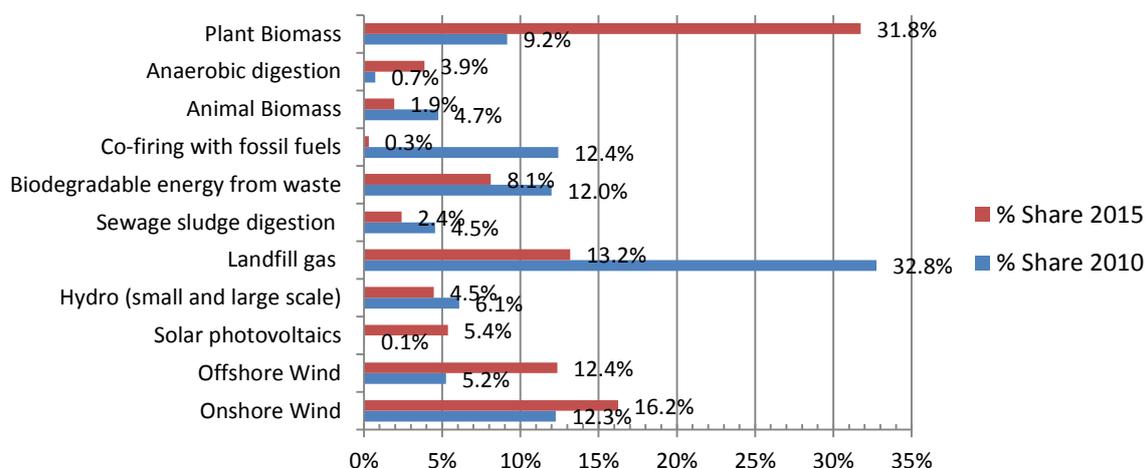
Source: DECC (now Department for Business, Energy and Industrial Strategy)

Plant biomass continues to show strong growth; up by 32% from 2014 to 2015, and by far represents the largest share of renewable fuel at 32%. The highest growing renewable fuel types in the last year were solar (87%), energy from waste (42%) and co-firing with fossil fuel (50%). The only renewable source to experience a decrease in usage was landfill gas with a decrease of 3%.

In comparing the % share of renewable fuels from 2010 to 2015, the most significant increases appear to be in plant biomass, anaerobic digestion and solar. The most significant decreases appear to be in co-firing with fossil fuel and landfill gas. In the case of co-firing stations, this probably reflects a gradual move from co-firing to dedicated biomass. Many of these changes are likely to be related to subsidy schemes such as the RO and the Climate Change Levy (CCL) (abolished in 2015).

The total annual growth in the supply of renewable fuel for electricity generation was 24.6% in 2015, greater than 2014's (revised) increase of 20.7%.

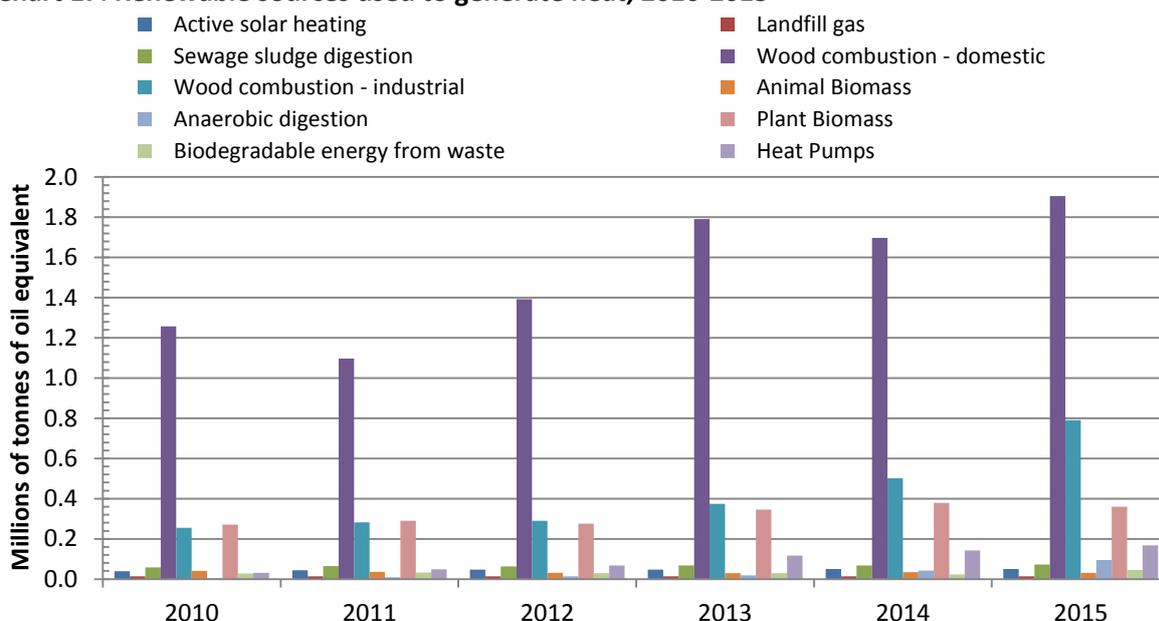
Chart 16: Changes in the share of renewable electricity generation by source, 2010 and 2015



Source: DECC (now Department for Business, Energy and Industrial Strategy)

Onshore wind subsidy cuts have been highlighted as a continued priority of the government in 2016.

Chart 17: Renewable sources used to generate heat, 2010-2015



Source: DECC (now Department for Business, Energy and Industrial Strategy)

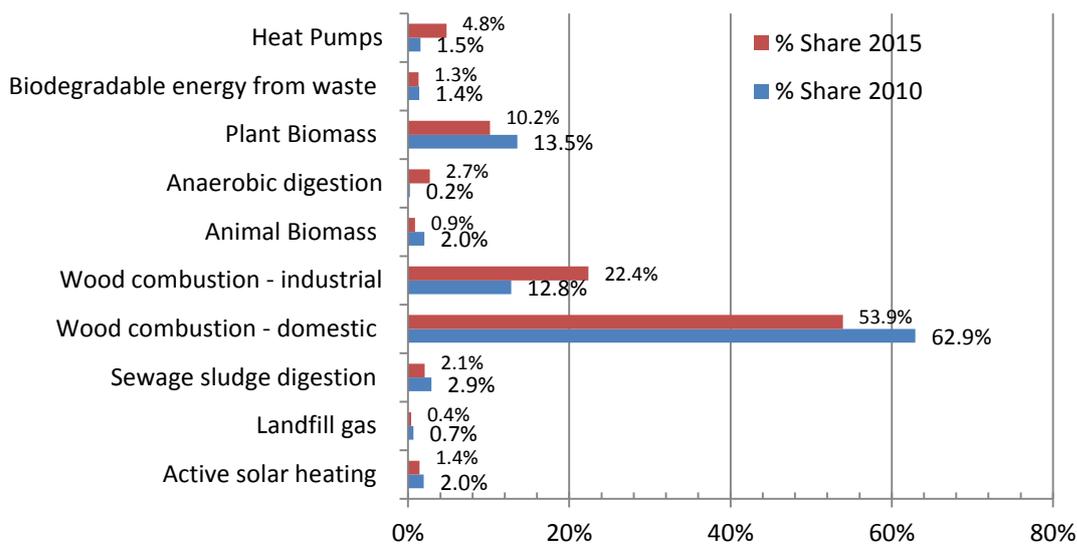
All heat generated from renewables grew by 20% in 2015, returning to the higher levels of growth seen prior to 2013/14. The largest technology increases in 2015 were energy from waste (96%) and anaerobic digestion (122%) with the largest fuel type by share, domestic wood, increasing by a modest 12%. Plant and animal biomass both saw a moderate decrease from 2014.

Wood for non-domestic (industrial) heating continued to rise in 2015, by 57.7% as wood burning grows in popularity, especially as a form of space heating in both smaller scale industrial and commercial premises. The non-domestic Renewable Heat Incentive scheme, introduced in 2011 has helped to stimulate this growth, leading to an increase in the share of non-domestic wood burning to 22.4% of all renewable forms of heating in 2015.

Non-domestic wood and domestic wood make up a total of 76% of the total share of renewable heat generation in 2015.

Following on from the introduction of sustainability requirements for solid and liquid biomass, including wood fuel for the Renewables Obligation for electricity generation, sustainability criteria were included for existing and new participants to the RHI on 5 October 2015. These sustainability criteria are published in the 'Timber Standard for Heat & Electricity' as made available by the Department of Energy and Climate Change (now part of the Department for Business, Energy and Industrial Strategy) and first published in November 2014.

Chart 18: Changes in the share of renewable heat generation by fuel, 2010-2015



Source: DECC (now Department for Business, Energy and Industrial Strategy)

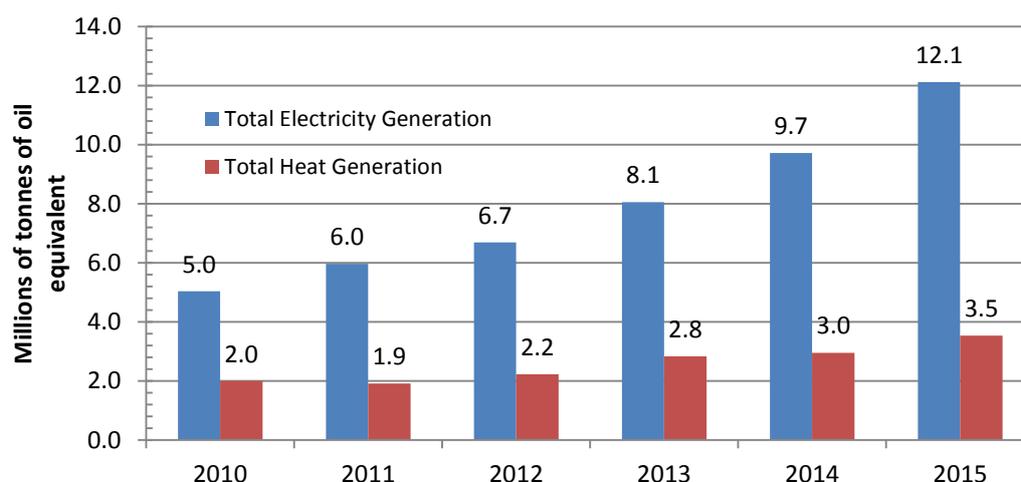
The use of plant biomass for heating declined by 5% in 2015 which marginally decreased its share of the total with all forms of renewable heat generation representing a low level of contribution to the overall total.

Wood for all forms of renewable energy consists of cut logs, brash, wood chips, off-cuts, recycled wood waste, charcoal and imported wood.

Anaerobic digestion saw the largest increase from 2014 of 122%. This may reflect a rise in the number of anaerobic digestion CHP stations.

In total, the use of renewables for both electricity and heat generation has more than doubled in the case of electricity and has risen by over a third in the case of heat reaching a combined replacement of fossil fuels to the equivalent of nearly 16 million tonnes of oil equivalent as shown in chart 19 below.

Chart 19: Renewables used for electricity and heat generation, 2010-2015



Source: DECC (now Department for Business, Energy and Industrial Strategy)

Forecasts:

Following the formation of a new UK government under Prime Minister Theresa May in mid 2016, the Department for Business, Innovation and Skills (BIS) and the Department of Energy and Climate Change (DECC) were merged into the new Department for Business, Energy and Industrial Strategy (DBEIS).

In anticipation of the closure of the Renewables Obligation (RO) in March 2017 and some early technology closures in 2016 there may be a rush of applications for new generating stations. The RO is set to be replaced by the Contracts for Difference (CfD) scheme which may lead to a stabilisation or slowdown in new large scale renewable projects since there is a limit on contracts awarded. This will be the case for coal to biomass conversion power stations which are excluded from the auction process.

In January of 2016, the European Commission launched an investigation into whether Drax's use of state subsidies to convert from coal to biomass may be giving them an unfair advantage over competitors.

Tillhill's Timber Bulletin³¹ points out that large biomass projects are still under development including two Chinese backed CHP plants in Port Talbot and Holyhead in Wales. These are predicted to consume 3.3 million tonnes of imported wood pellets per year.

There has been a continued surge in the use of Plant Biomass for renewable electricity production since 2010, which now represents 32% of renewable electricity production and has replaced landfill gas as the dominant technology type.

Following a consultation by the Department of Energy and Climate Change early in 2016, the RHI is to be reformed in order to try to maximise savings within the subsidy scheme including a degression to the biomass CHP tariff. Biomass boilers constitute 85% of the schemes generation, however under these reforms, both DECC and other outside analysis, have predicted new biomass boiler installations to fall by roughly 98% by 2021³².

³¹ [http://www.tillhill.com/file-bank/Timber%20Bulletin%202016%20\(LR\).pdf](http://www.tillhill.com/file-bank/Timber%20Bulletin%202016%20(LR).pdf)

³² <http://www.r-e-a.net/news/government-proposes-a-98-fall-in-the-deployment-of-one-of-the-most-cost-effective-renew-heat-system>

These policy developments suggest that the use of biomass/wood pellets in the UK energy market may begin to slow down in growth and perhaps stabilise.

Anecdotal evidence suggests that domestically produced wood fuel demand is set to rise for both domestic and industrial purposes.

4.0 Developments in forest product markets sectors

4.1 Wood raw materials (softwood and hardwood)

“Public sector removals” relates to the removal of timber from woodlands owned or managed by the Forestry Commission in England and Scotland, 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 woodlands.

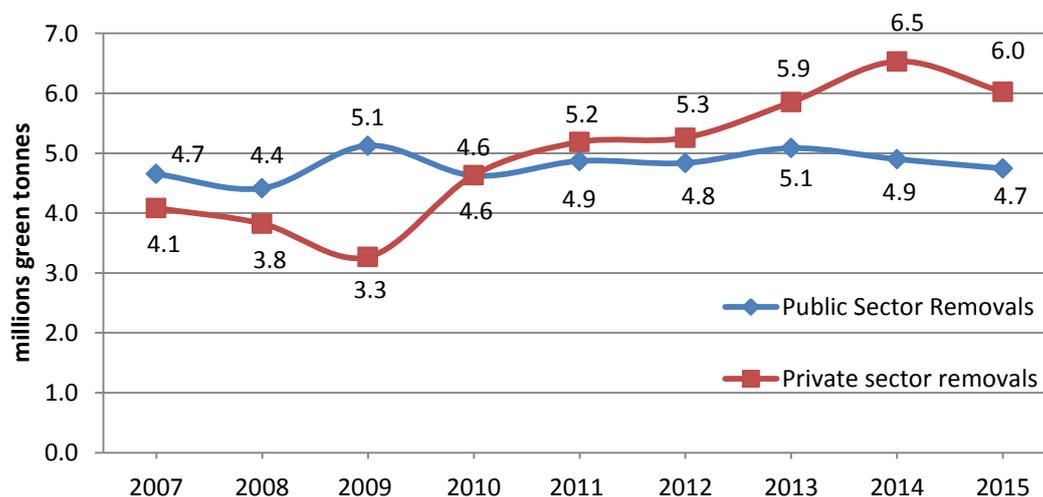
In 2015, 10.8 million green tonnes of softwood were removed from UK forests, a decrease of 5.7% over 2014. This follows a period of year on year increases in softwood removal since 2009 and both private and public sector removals have decreased.

A 7.7% decrease in private sector removals lowered the total to 6.0 million green tonnes from this source and a 3.1% reduction in public sector removals reduced the total removed from this source to 4.7 million green tonnes.

In 2015, private sector removals accounted for 56% of removals whilst public sector was 44%.

These changes in the source supply from UK forests over the last eight years are shown in chart 20 below.

Chart 20: Softwood removals from UK forests by the private and public sectors, 2007-2015

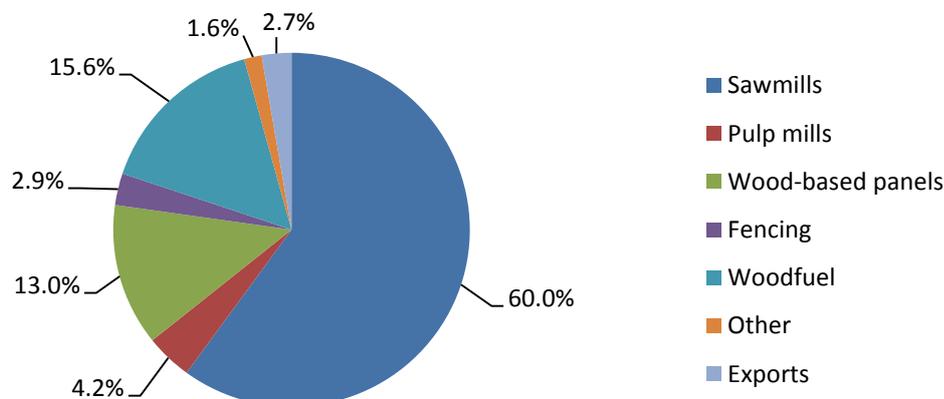


Source: Forestry Commission, Natural Resources Wales, Forest Service, industry surveys

Due to this decline in UK softwood removals, decreased deliveries of coniferous roundwood were made to sawmills (-8%), pulp mills (-6%) and fencing manufacturers (-6%). There were however, increases in deliveries to wood based panel manufactures (4%) and for wood fuel (7%). This increase in woodfuel deliveries follows a historical trend of growth since 2006, deliveries having grown by 1,500% since then.

The relative size of the various markets for UK produced coniferous roundwood is shown in chart 21.

Chart 21: Deliveries of coniferous roundwood from UK forests to user industries, 2015



Source: Forestry commission; industry surveys; industry associations

Total hardwood removals from UK forests stood at 528,000 green tonnes, a slight decrease of 0.8% from 2014 which was 532,000 tonnes. This follows a general trend of decreased hardwood production since at least the mid 1990's. Of this figure, 74,000 tonnes were from public forests and 454,000 were from private woodlands meaning that public sector hardwood represents 14% and private sector 86% of production.

Following the trend of the past 10 years around 14% of this hardwood went to sawmills, 76% for woodfuel and around 10% for other uses (including round fencing and roundwood exports).

4.2 Wood energy

Wood used for energy generation includes sawmill products, such as wood chips and sawdust, bark, recycled wood and wood pellets. UK production of wood pellets declined marginally in 2015 by 3% to reach a total of 0.34 million tonnes. This is the first decline in production in at least 6 years.

Wood pellet imports to the UK stood at 6.5 million tonnes for 2015 a rise on 2014's 4.8 million of 38%³³. The vast majority of this was imported from the USA (53.7%), the EU (27.4%) of which Latvia comprised the largest proportion, and Canada (18.3%). This follows the general trend of the last 5 years, with the exception of Latvia overtaking Portugal as the primary EU supplier.

Eurostat figures³⁴ also show that the UK is by far the greatest importer of wood pellets in the EU since overtaking Denmark in 2012. DECC states that on average, 95% of wood pellets used by major power stations are imported, not UK produced. The dual decrease in subsidies for biomass and the slump in the value of the pound may in the future lead to a decrease in this import share and a switch to using more UK grown biomass. However, this will be limited by the availability and production capacity of the UK forestry and milling sectors.

4.3 Certified forest products

Nearly all softwood removals from publicly owned forests are certified and since 2003, the majority of privately owned forest softwood removals have been certified. In 2015, 83% of all softwood

³³ <https://www.gov.uk/government/statistics/dukes-foreign-trade-statistics>

³⁴ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/462361/Trade_of_wood_pellets.pdf

(public and private) removals volume was certified (same as 2014) and 69% of privately owned woodland softwood removals were certified, a slight decrease from 71% in 2014.

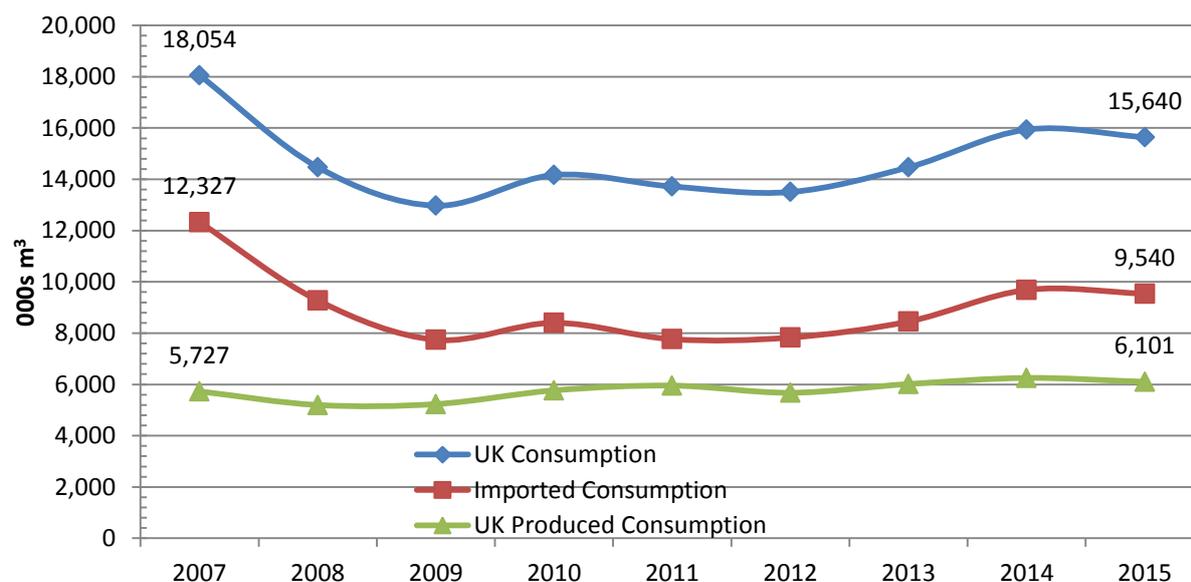
In terms of consumption of certified wood, UK sawmills consumed 80% certified wood (both softwood and hardwood) in 2014 and in 2015. Round fencing manufacturers consumed 71% certified material (softwood only) in 2015 and 69% in 2014. For sawmills this is a 53% increase in the use of certified material since 2002 and a more than four-fold increase for round fencing manufacturers since the same period. This data is derived from industry surveys.

4.4 Consumption of timber and panel products in the UK

UK consumption of timber and panel products saw a plateauing or decline across both imported and domestically produced products in 2015. Exports remained low, despite an 18.3% drop, and so these results are not down to changes in this. Total consumption fell by 1.9%, whilst imported consumption fell by 1.5% and UK produced consumption fell by 2.4%. The development of UK consumption of the main timber and panel products since 2007 is shown in chart 22. Sawnwood figures constitute both softwood and hardwood and panel products constitute veneer sheets, plywood, particleboard and fibreboard.

Significantly, domestically produced consumption is the only consumption category to have increased above pre-recessionary (2007) levels reflecting a favouring of UK production over imports.

Chart 22: Consumption of UK timber and panel products, by source 2007-2015



Source: Forestry Commission; TTF; Wood Panel Industries Federation; timber trends

This overall decline for 2015, follows two years of consistent growth in consumption. The decline in imports is surprising for 2015 considering the strength of Sterling vs the Euro and the Swedish Krona, both of which are factors in the trade with Europe. The Sterling was slightly weaker than the US Dollar in 2015 vs 2014 which would be expected to impact on plywood import since this is traded in dollars; however plywood imports increased in 2015. This slight decline in consumption may reflect the decline in housing construction output for 2015.

4.5 Value-added forest products and engineered wood products

Volumes of all imported and sawn and planed softwood were lower by around 0.7% in 2015.

A drop in rough sawn varieties by 3.6% was exclusively to account for this drop as further processed (value-added) softwood imports, such as planed, square-edged and finger-jointed products grew by 5% in 2015.

The volume of imported planed goods increased from 2 million m³ (revised) in 2014 to 2.1 million m³ in 2015. Rough sawn volumes declined from 3.93 million m³ in 2014 to 3.79 million m³ in 2015.

Further processed goods, as a proportion of all imported sawn softwood, rose from 34% in 2014 to 36% in 2015.

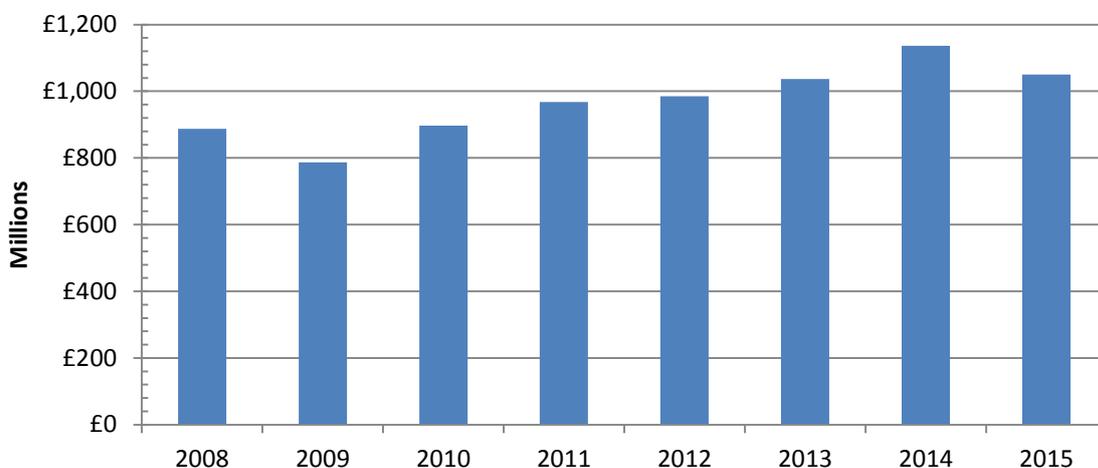
More specific data on imports of wood products from different regions can be seen by value under the Chapter 44 customs codes section of the HMRC UK trade info website³⁵.

Sales information for UK manufactured wooden furniture under various product codes can be found in Division 31 of the ONS PRODCOM provisional estimates which equates to Chapter 94 of the customs commodity codes.

Division 16 of the PRODCOM estimates includes figures relating to the 'Manufacture of Wood and of Products of Wood and Cork, except furniture...' This includes figures on the sawmilling and planning of wood products, manufacture of veneer sheets and wood-based panels and manufacture of other builder's carpentry and joinery.

Total UK manufacturer sales of milled and planed wood by value since 2008 can be seen in chart 23. Despite a general rise in sales since 2009-2014, there was a decrease of 7.6% in 2015 giving sales a value of £1.05 billion.

Chart 23: Total UK manufacturer sales of milled and planed wood



Source: PRODCOM

Further discussion of value added wood products in the area of innovative/engineered wood products appears in section 4.10 of this statement.

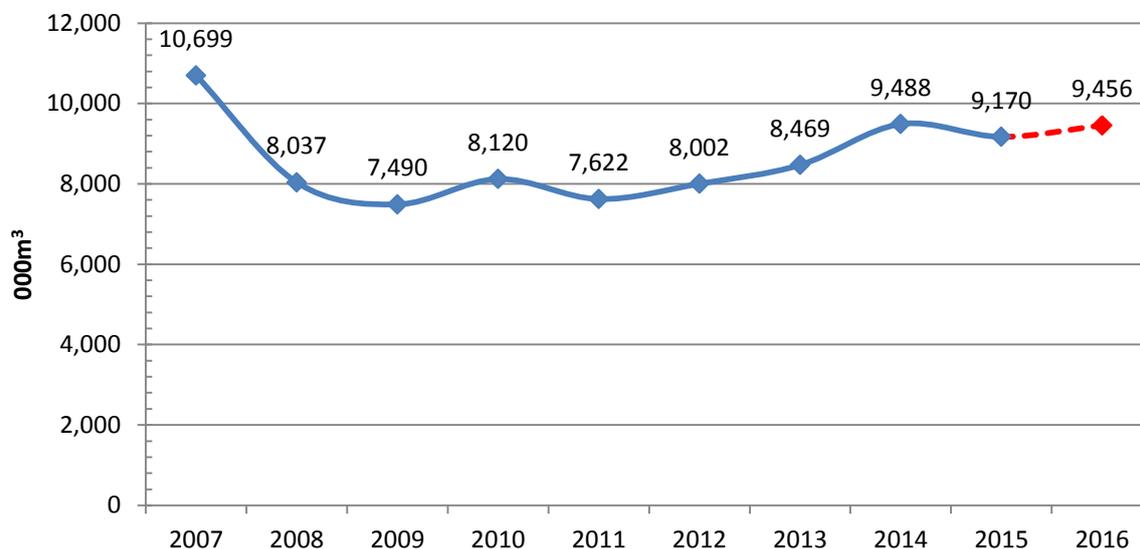
4.6 Sawn softwood

The construction industry was particularly affected by the recession and with this market frequently accounting for the majority of all softwood consumption, demand remained suppressed between 2008 until around 2013. A high proportion of softwood consumed by construction is imported and before the most recent recession in 2007, imported softwood provided around 75% of total

³⁵ <https://www.uktradeinfo.com/Statistics/BuildYourOwnTables/Pages/Table.aspx>

softwood consumption in the UK. By 2015, this proportion had fallen to about 64%. As the housing construction figures for 2015 show, there has been a relative plateauing of output and this is reflected in the sawn softwood consumption figures which have fallen by 3.4% in 2015.

Chart 24: UK sawn softwood consumption



Source: Forestry Commission; TTF; timbertrends

The National Softwood Division (NSD) of the Timber Trade Federation produce an estimate of softwood imports mid-way through each year for the second half of the year and a forecast for the following year. The forecast for 2016 indicates an increase in imports of 2.6% compared to 2015 giving a value of 6.04 million m³.

A forecast of UK production for 2016 based on the advice of the Forestry Commission’s Expert Group on Timber and Trade Statistics indicates that output from UK sawmills will likely rise by 3.9% in 2016 to around 3.58 million m³.

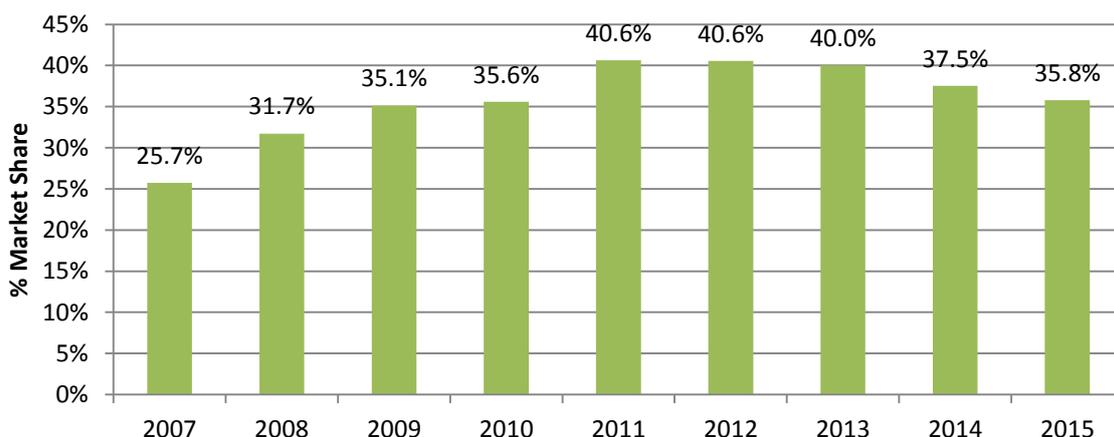
From these forecasts, the consumption of softwood in the UK for 2016 is projected to rise by 3.1% to 9.46 million m³ can be seen in chart 24. This would bring softwood consumption close to the 2014 level.

Whilst the health of the construction industry is instrumental in the development of imported softwood, domestic producers have significantly higher shares of the pallets, packaging, fencing and outdoor products markets.

Despite decreases in pallet production since 2012, figures in 2015 show a slight increase. The fencing and outdoors markets have by contrast seen a decrease in production this year. This can be seen in the fact that the UK producers share of softwood consumption has decreased for the second year in a row to stand at 35.8%. This share since 2007 can be seen in chart 25 below.

Softwood imports saw a decrease of 0.7% in 2015 which may reflect the decrease in housing construction in the year. This is in line with the overall plateauing and minor contraction of overall timber and panel product consumption for the year.

Chart 25: UK producers share of softwood consumption, 2007 - 2015



Source: Forestry Commission; TTF; timbertrends

2015 was a particularly strong year for the pound and consequently this had a positive impact on overall imports. However due to a slowdown in European timber production and in UK demand, the currency advantage was mitigated and limited timber imports. Sweden retained its place as the number one exporter of softwood to the UK in 2015 as the pound was also up against the Krona.

Tillhill's 'standard log' forecast³⁶ which is used to track the change in price of all products converted from round logs accurately forecast a decline in prices for 2015 of 14.2% which was closely matched by an actual decrease of 13.4%. In their 2016 Timber Bulletin they predicted a best case forecast of a return to price growth of 11% for 2016 and 5% year-on-year after and a worst case scenario predicting a continued 2016 growth of 3.5% with a 2017 fall to 2%. A continued weakness of the pound could lead to less timber being imported and more UK grown timber being utilised.

4.7 Sawn hardwood

In line with the drop in consumption of sawn softwood, sawn hardwood consumption also decreased in 2015 by 12.7% to 0.46 million m³.

Hardwood only represented 4.8% of UK timber product consumption, but 7.9% by value³⁷ in 2015. The great majority of sawn hardwood consumed in the UK is imported, accounting for over 90% of all hardwood consumed, with a wide variety of products demanded for many different uses.

UK production of sawn hardwood decreased in 2015 to 0.044 million m³, a decrease of 7.0% over 2014, as hardwood imports decreased by 12.4% to 0.435 million m³.

The 2015 12.4% decline in imports of hardwood was disproportionately impacted by a decline in tropical sawn hardwood which fell by 32.7%. This could be related to the strengthening of implementation of the European Union Timber Regulation (EUTR) in 2013.

UK exports of hardwood remained relatively stable at around 0.02 million m³.

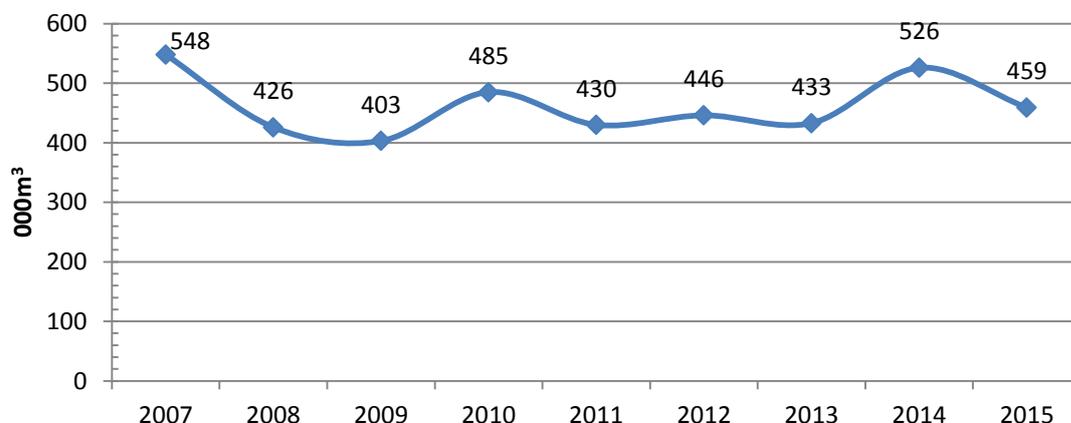
The culmination of many years work with various tropical hardwood exporting nations and the EU under the FLEGT Voluntary Partnership Agreement (VPA) is beginning to come to fruition in Indonesia. The country is set to have fully implemented their FLEGT licensing system by the end of 2016/early 2017 and will begin to start exporting legal timber through this scheme. This is a process set to be followed up on by numerous other countries currently undergoing VPA negotiations.

³⁶ [http://www.tillhill.com/file-bank/Timber%20Bulletin%202016%20\(LR\).pdf](http://www.tillhill.com/file-bank/Timber%20Bulletin%202016%20(LR).pdf)

³⁷ TTF Statistical Review 2016

The development of sawn hardwood consumption since 2007 is shown in chart 26 below.

Chart 26: UK Sawn hardwood consumption



Source: Forestry Commission; Timber Trade Federation; timbertrends

4.8 Wood-based panels

Particleboard, fibreboard, OSB and MDF are produced in the UK and imported, but all veneer sheets and plywood are imported.

UK production of panel products rose by around 0.4% in 2015 while imports fell by around 1.3%.

Particleboard and OSB imports were only around 1.0% lower and UK production was only 0.2% higher, whereas Fibreboard imports dropped by 10.8% and production (MDF only) rose by 0.9%.

There was a consistent drop in panel product exports from the UK in 2015 with a total decrease of 29.1% of which Plywood re-exports fell by 36.5%, Particleboard by 23.2% and Fibreboard by 36.5%.

MDF imports decreased by 16.3% and so UK produced MDF again constituted a higher market share than imported MDF.

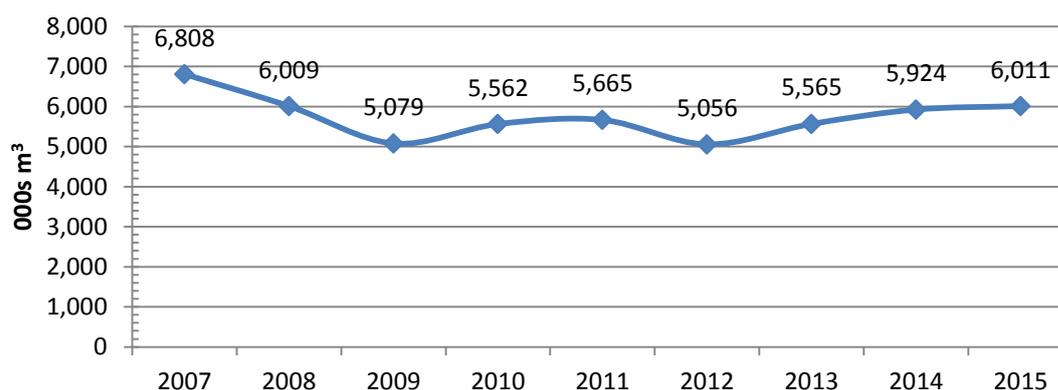
Plywood imports grew in 2015 by around 4.9% to 1.47 million m³.

Consumption of imported panel products fell by 1.3% to around 3.217 million m³ in 2015 from a (revised) 2014 volume of 3.26 million m³ which is still below the pre-recessionary level of 3.86 million m³.

Consumption of UK produced panel products, after taking into account exports and re-exports, was 2.794 million m³, an increase of around 4.9% from 2014's revised figure of 2.664 million m³.

Volumes of exports and re-exports of panel products were 0.286 million m³ in 2015, down from 0.404 m³ in 2014.

Chart 27: UK Panel Products Consumption



Source: Forestry Commission; Timber Trade Federation; Wood Panel Industries Federation; timbertrends

4.9 Pulp and paper

Consumption of wood pulp in the UK in 2015 was 1.41 million tonnes, down from 1.43 million tonnes in 2014. This was a decrease of 2.0% on 2014.

The Confederation of Paper Industries estimates that paper and board consumption in 2015 was 9.08 million tonnes down 1.9% from 9.26 million tonnes in 2014.

UK production of paper and paperboard in 2015 declined by 9.7% to 3.97 million tonnes from 4.40 million tonnes in 2014. 1.05 million tonnes of this was in the form of graphic papers (including newsprint) (-31.8% from 2014), 0.77 million tonnes of sanitary and household papers (+0.5% from 2014) 1.89 million tonnes of packaging materials (+5.2% from 2014) and 0.25 million tonnes on unspecified products.

UK imports of paper and paperboard in 2015 stood at 5.92 million tonnes. This was a 0.9% increase on the revised 2014 total 5.87 million tonnes.

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.

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.

A large proportion of the building projects shortlisted in The 2016 Wood Awards³⁸ incorporate these products into their build design.

A report released earlier this year has forecasted the global engineered wood products market to grow at a compound annual growth rate of 26.5% up to 2020³⁹. 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

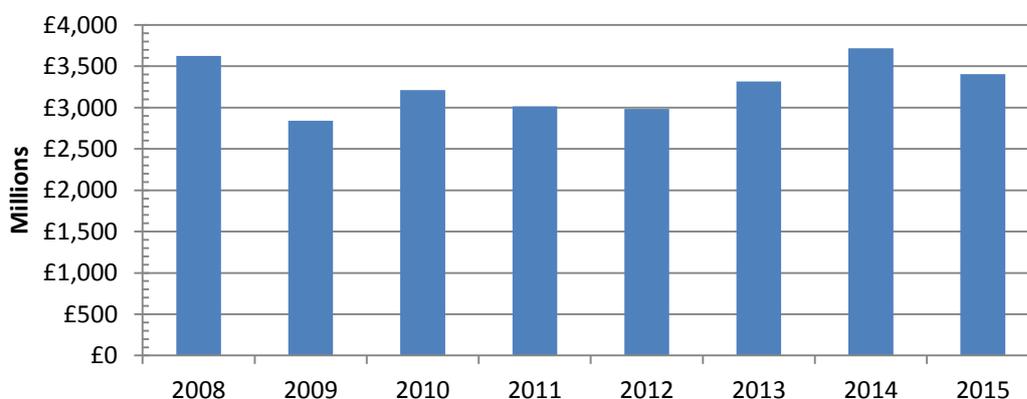
There is an increasing trend towards growing the housing construction sector in a direction towards rapid on-site build times, modular design and low carbon and engineered construction and timber products. Much of this emphasis has been stimulated by the UK's chronic housing production problem. There are a range of new initiatives to combat this including the creation of a housing branch of Legal & General, Legal & General Homes, which aims to help bring the UK's current building capacity up from 130,000 a year to the required 250,000 through the use of modular housing factory production which will heavily rely on cross laminated timber (CLT) methods. In 2016 they signed a long term lease for a construction factory space near Leeds. This is a novel development in the field of investment funds branching into real estate since, until this point, it has been uncommon for them to actually own the means of production.

Willmott Dixon also launched a similar tactic in 2016 by planning to build up to 1,000 homes a year using offsite construction methods for timber frame building. From anecdotal discussions, there are also developments in the refurbishments market with regards to offsite production of timber products that can be installed whilst the residents remain in the property.

The Wood for Good campaign continues to push the agenda for increasing timber construction in the UK and in 2016 launched a series of conferences covering the areas of innovative, prefabricated, self-build, custom build and solid timber houses.

Total UK manufacturer sales of builder's carpentry and joinery by value since 2008 can be seen in chart 28. The decline in sales in 2009 reflect the impact of the 2008/09 recession and show a small recovery in 2010 before again contracting in 2011/12 before rising again to reach peak, pre-recessionary figures before declining by around 8.5% in 2015 to around £3.4 billion.

Chart 28: Total UK manufacturer sales of builders' carpentry and joinery



Source: PRODCOM

³⁸ <http://woodawards.com/shortlist-2016/>

³⁹ http://www.researchandmarkets.com/research/p2tvc6/global_engineered

5.0 UK economic indicators

(All figures % unless otherwise indicated)

	2011	2012	2013	2014	2015	2016
GDP growth ¹	1.97	1.18	2.16	2.85	2.33	1.6 ²
Interest Rate (Base Rate at year end)	0.5	0.5	0.5	0.5	0.5	0.25 ³
Consumer Price Index	4.5	2.8	2.6	1.5	0	1.3 ²
Unemployment	8.1	8.0	7.6	6.2	5.4	5.3 ²
UK Housebuilding Starts (000s)	138.5	125.4	149.9	169.9	177.0	149.5 ⁴

¹The World Bank

²HM Treasury, Forecast for the UK Economy: A comparison of Independent Forecasts, August 2016

³Bank of England revised interest rates on 03/08/2016

⁴ www.tradingeconomics.com forecasts